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Nelson H. F. Beebe
University of Utah
Department of Mathematics, 110 LCB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA

Tel: +1 801 581 5254

FAX: +1 801 581 4148

E-mail: beebe@math.utah.edu, beebe@acm.org,
beebe@computer.org (Internet)

WWW URL: <https://www.math.utah.edu/~beebe/>

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X [6, 915]. **X-cell** [915]. **X-ray** [6]. **xanthums** [1073]. **xanthurus** [412, 899]. **Xenotilapia** [1719]. **Xiphias** [73, 361]. **Xiphophorus** [2257, 868]. **Xyrichthys** [1305]. **Xystreuris** [1292].

Yakima [393]. **Yangtze** [2251]. **Year** [350, 514, 400, 709, 278, 285, 169, 107, 2408, 1930, 1416, 902, 1006, 455, 880, 1231]. **Year-class** [350, 1416]. **yearling** [863, 373]. **Years** [700, 635, 1401, 1570, 852, 474]. **yellow** [913, 2414, 1515, 2271, 828, 79, 1918, 1114]. **yellowfin** [1220, 830, 1210, 286, 984, 1217]. **yellowfish** [118]. **yellowtail** [1840, 2152, 2173, 2128, 1350, 1431, 2352, 1415]. **Yersinia** [691]. **yield** [382, 1171]. **yields** [800]. **Yin** [448]. **yolk** [1325, 2076, 2479, 969, 2141, 589, 1965, 2295, 408, 1087, 1726, 1262, 968, 1454, 1533, 375]. **yolk-sac** [2479, 589, 1965, 408, 1087, 1726, 968, 375]. **young** [854, 2079, 907, 971, 613, 52, 2271, 285, 2442, 83, 1930, 889, 2018, 86, 1287, 446, 1231]. **young-of-the-year** [1930, 1231]. **Yucatan** [1002]. **Yugoslavia** [251]. **Yugoslavian** [254].

Zacco [652]. **Zambezi** [422, 1646, 1062]. **Zambia** [437, 678]. **Zambian** [1332]. **zander** [2179]. **Zealand** [1946, 1947, 1679, 679, 394, 365, 2017, 511, 217, 593, 658, 242, 1657]. **zebrafish** [2450, 608, 43, 318]. **zebratus** [2276]. **Zeeschelde** [2016, 2356]. **Zeus** [418]. **zillii** [2113, 1988, 67, 2164, 2301]. **Zimbabwe** [2193, 1975]. **Zinc** [135, 2065, 447, 1057, 308]. **Zoarces** [1003]. **Zoarcoidei** [150]. **Zoega** [330]. **zone** [2462, 672, 2422, 1831, 38, 1936]. **zones** [1060, 521, 293]. **zonope** [109]. **zooplankton** [1346, 94, 1869, 996, 271]. **zooplanktophagy** [788]. **zucius** [395]. **zymogen** [1196].

References

Anonymous:1990:Aa

- [1] Anonymous. Announcement. *Journal of Fish Biology*, 36(1):i, January 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bauer:1990:PPI

- [2] O. N. Bauer and S. B. Karimov. Patterns of parasitic infections of fishes in a water body with constant temperature. *Journal of Fish Biology*, 36(1):1–8, January 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Singh:1990:CSE

- [3] S. K. Singh and A. K. Mittal. A comparative study of the epidermis of the common carp and the three Indian major carp. *Journal of Fish Biology*, 36(1):9–19, January 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kundu:1990:GDM

- [4] R. Kundu and A. P. Mansuri. Growth dynamics of myotomal muscle fibres in a carangid, *Caranx malabaricus* (Cuv. et Val.). *Journal of Fish Biology*, 36(1):21–27, January 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Treasurer:1990:ARC

- [5] J. W. Treasurer. The annual reproductive cycle of pike, *Esox lucius* L., in two Scottish lakes. *Journal of Fish Biology*, 36(1):29–46, January 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hoogenboezem:1990:XRM

- [6] W. Hoogenboezem, F. A. Sibbing, J. W. M. Osse, J. G. M. v.d. Boogaart, E. H. R. R. Lammens, and A. Terlouw. X-ray measurements of gill-arch movements in filter-feeding bream, *Abramis brama* (Cyprinidae). *Journal of Fish Biology*, 36(1):47–58, January 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Strussmann:1990:HNS

- [7] C. A. Strüssmann and F. Takashima. Hepatocyte nuclear size and nutritional condition of larval pejerrey, *Odontesthes bonariensis* (Cuvier et Valenciennes). *Journal of Fish Biology*, 36(1):59–65, January 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ponton:1990:SPI

- [8] D. Ponton and R. Müller. Size of prey ingested by whitefish, *Coregonus* sp., larvae. Are *Coregonus* larvae gape-limited predators? *Journal of Fish Biology*, 36(1):67–72, January 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Shoesmith:1990:CME

- [9] E. Shoesmith. A comparison of methods for estimating mean fecundity. *Journal of Fish Biology*, 36(1):73–84, January 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Renno:1990:IGD

- [10] J.-F. Renno, P. Berreb, T. Boujard, and R. Guyomard. Intraspecific genetic differentiation of *Leporinus friderici* (Anostomidae, Pisces) in French Guiana and Brazil: a genetic approach to the refuge theory. *Journal of Fish Biology*, 36(1):85–95, January 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Iwaszkiw:1990:FRT

- [11] J. M. Iwaszkiw and O. H. Padin. Fecundity of rainbow trout, *Salmo gairdneri* Richardson, from Buenos Aires Lake (Santa Cruz Province, Argentina). *Journal of Fish Biology*, 36(1):97–98, January 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Herbinger:1990:IMA

- [12] C. M. Herbinger, G. F. Newkirk, and S. T. Lanes. Individual marking of Atlantic salmon: evaluation of cold branding and jet injection of Alcian Blue in several fin locations. *Journal of Fish Biology*, 36(1):99–101, January 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sugita:1990:DFI

- [13] H. Sugita, C. Miyajima, Y. Kobiki, and Y. Deguchi. The daily fluctuation and inter-individual variation of the faecal flora of carp, *Cyprinus carpio* L. *Journal of Fish Biology*, 36(1):103–105, January 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brown:1990:PEW

- [14] P. B. Brown, W. H. Neill, and E. H. Robinson. Preliminary evaluation of whole body energy changes as a method of estimating maintenance energy needs of fish. *Journal of Fish Biology*, 36(1):107–108, January 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1990:BRa

- [15] Anonymous. Book reviews. *Journal of Fish Biology*, 36(1):109–116, January 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1990:Ab

- [16] Anonymous. Announcement. *Journal of Fish Biology*, 36(2):i, February 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kennedy:1990:CLS

- [17] C. R. Kennedy and D. J. Fitch. Colonization, larval survival and epidemiology of the nematode *Anguillicola crassus*, parasitic in the eel, *Anguilla anguilla*, in Britain. *Journal of Fish Biology*, 36(2):117–131, February 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Boujard:1990:DCH

- [18] T. Boujard, P. Keith, and P. Luquet. Diel cycle in *Hoplosternum littorale* (Teleostei): evidence for synchronization of locomotor, air breathing and feeding activity by circadian alternation of light and dark. *Journal of Fish Biology*, 36(2):133–140, February 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mayer:1990:ARB

- [19] I. Mayer, S. E. Shackley, and P. R. Witthames. Aspects of the reproductive biology of the bass, *Dicentrarchus labrax* L. II. Fecundity and pattern of oocyte development. *Journal of Fish Biology*, 36(2):141–148, February 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bonar:1990:RBC

- [20] S. A. Bonar, H. S. Sehgal, G. B. Pauley, and G. L. Thomas. Relationship between the chemical composition of aquatic macrophytes and their consumption by grass carp, *Ctenopharyngodon idella*. *Journal of Fish Biology*, 36(2):149–157, February 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Razquin:1990:OIP

- [21] B. E. Razquin, A. Castillo, P. López-Fierro, F. Alvarez, A. Zapata, and A. J. Villena. Ontogeny of IgM-producing cells in the lymphoid organs of rainbow trout, *Salmo gairdneri* Richardson: an immuno- and enzyme-histochemical study. *Journal of Fish Biology*, 36(2):159–173, February 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nilsson:1990:DAD

- [22] G. E. Nilsson. Distribution of aldehyde dehydrogenase and alcohol dehydrogenase in summer-acclimatized crucian carp, *Carassius carassius* L. *Journal of Fish Biology*, 36(2):175–179, February 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nonnotte:1990:TCE

- [23] G. Nonnotte and J.-P. Truchot. Time course of extracellular acid-base adjustments under hypo- or hyperosmotic conditions in the euryhaline fish *Platichthys flesus*. *Journal of Fish Biology*, 36(2):181–190, February 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Morales-Nin:1990:AGL

- [24] B. Morales-Nin and S. Ralston. Age and growth of *Lutjanus kasmira* (Forsskål) in Hawaiian waters. *Journal of Fish Biology*, 36(2):191–203, February 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sanger:1990:FSM

- [25] A. M. Sanger, Z. S. Kim, and H. Adam. The fine structure of muscle fibres of roach, *Rutilus rutilus* (L.), and chub, *Leuciscus cephalus* (L.), Cyprinidae, Teleostei: interspecific differences and effects of habitat and season. *Journal of Fish Biology*, 36(2):205–213, February 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wright:1990:PBP

- [26] R. M. Wright. The population biology of pike, *Esox lucius* L., in two gravel pit lakes, with special reference to early life history. *Journal of Fish Biology*, 36(2):215–229, February 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Trippel:1990:OAS

- [27] E. A. Trippel and H. H. Harvey. Ovarian atresia and sex ratio imbalance in white sucker, *Catostomus commersoni*. *Journal of Fish Biology*, 36(2):231–239, February 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wright:1990:OSG

- [28] P. J. Wright, N. B. Metcalfe, and J. E. Thorpe. Otolith and somatic growth rates in Atlantic salmon parr, *Salmo salar* L: evidence against coupling. *Journal of Fish Biology*, 36(2):241–249, February 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pulliainen:1990:SCC

- [29] E. Pulliainen and K. Korhonen. Seasonal changes in condition indices in adult mature and non-maturing burbot, *Lota lota* (L.), in the north-eastern Bothnian Bay, northern Finland. *Journal of Fish Biology*, 36(2):251–259, February 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Costello:1990:PFS

- [30] M. J. Costello. Predator feeding strategy and prey importance: a new graphical analysis. *Journal of Fish Biology*, 36(2):261–263, February 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Coello:1990:DBV

- [31] S. Coello and A. S. Grimm. Development of Balbiani's vitelline body in the oocytes of the Atlantic mackerel, *Scomber scombrus* L. *Journal of Fish Biology*, 36(2):265–267, February 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Robinson:1990:CIR

- [32] R. L. Robinson, G. F. Turner, A. S. Grimm, and T. J. Pitcher. A comparison of the ingestion rates of three tilapia species fed on a small planktonic alga. *Journal of Fish Biology*, 36(2):269–270, February 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Steele:1990:MBP

- [33] A. M. Calarco Steele and A. H. Houston. Modification of the *Bodian protargol* differential nerve stain for routine use with fish tissues. *Journal of Fish Biology*, 36(2):271–273, February 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Armstrong:1990:MTR

- [34] J. D. Armstrong and R. J. Baldwin. A method for testing retention of transmitters swallowed by deep-sea fish. *Journal of Fish Biology*, 36(2):273–274, February 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fannon:1990:MFC

- [35] E. Fannon, E. Fahy, and R. O'Reilly. Maturation in female conger eel, *Conger conger* (L.). *Journal of Fish Biology*, 36(2):275–276, February 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bechler:1990:NNT

- [36] D. L. Bechler, C. H. Conn, and T. S. Ling. A novel nest-trap for ecological and behavioural studies of cavity-nesting fishes. *Journal of Fish Biology*, 36(2):277–278, February 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1990:Ac

- [37] Anonymous. Announcement. *Journal of Fish Biology*, 36(3):i, March 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Romer:1990:SZF

- [38] G. S. Romer. Surf zone fish community and species response to a wave energy gradient. *Journal of Fish Biology*, 36(3):279–287, March 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Murad:1990:HRR

- [39] A. Murad, A. H. Houston, and L. Samson. Haematological response to reduced oxygen-carrying capacity, increased temperature and hypoxia in goldfish, *Carassius auratus* L. *Journal of Fish Biology*, 36(3):289–305, March 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Smith:1990:SCE

- [40] R. L. Smith, A. J. Paul, and J. M. Paul. Seasonal changes in energy and the energy cost of spawning in Gulf of Alaska Pacific cod. *Journal of Fish Biology*, 36(3):307–316, March 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rask:1990:DSP

- [41] M. Rask, P. J. Vourinen, and M. Vuorinen. Delayed spawning of perch, *Perca fluviatilis* L., in acidified lakes. *Journal of Fish Biology*, 36(3):317–325, March 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tosi:1990:RWO

- [42] L. Tosi, A. Spampanato, C. Sola, and P. Tongiorgi. Relation of water odour, salinity and temperature to ascent of glass-eels, *Anguilla anguilla* (L.): a laboratory study. *Journal of Fish Biology*, 36(3):327–340, March 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Steele:1990:AZB

- [43] C. W. Steele, D. W. Owens, and A. D. Scarfe. Attraction of zebrafish, *Brachydanio rerio*, to alanine and its suppression by copper. *Journal of Fish Biology*, 36(3):341–352, March 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kilarski:1990:HCM

- [44] W. Kilarski. Histochemical characterization of myotomal muscle in the roach, *Rutilus rutilus* (L.). *Journal of Fish Biology*, 36(3):353–362, March 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Spoor:1990:DFB

- [45] W. A. Spoor. Distribution of fingerling brook trout, *Salvelinus fontinalis* (Mitchill), in dissolved oxygen concentration gradients. *Journal of Fish Biology*, 36(3):363–373, March 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bern:1990:SMA

- [46] O. Bern and R. R. Avtalion. Some morphological aspects of fertilization in tilapias. *Journal of Fish Biology*, 36(3):375–381, March 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brusle-Sicard:1990:PHP

- [47] S. Brusle-Sicard and R. Reinboth. Protandric hermaphrodite peculiarities in *Amphiprion frenatus* Brevoort (Teleostei, Pomacentridae). *Journal of Fish Biology*, 36(3):383–390, March 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cyr:1990:IST

- [48] D. G. Cyr and J. G. Eales. Influence of short-term oestradiol treatment on plasma thyroid hormone kinetics in rainbow trout, *Salmo gairdneri*. *Journal of Fish Biology*, 36(3):391–400, March 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Naslund:1990:DRS

- [49] I. Näslund. The development of regular seasonal habitat shifts in a landlocked Arctic charr, *Salvelinus alpinus* L., population. *Journal of Fish Biology*, 36(3):401–414, March 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fan:1990:PRM

- [50] Z. Fan and G. Liu. The ploidy and reproductive mechanism of crucian carp, *Carassius auratus gibelio*. *Journal of Fish Biology*, 36(3):415–419, March 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Iger:1990:PSH

- [51] Y. Iger and M. Abraham. The process of skin healing in experimentally wounded carp. *Journal of Fish Biology*, 36(3):421–437, March 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Goldspink:1990:DAY

- [52] C. R. Goldspink. The distribution and abundance of young (I+–II+) perch, *Perca fluviatilis* L., in a deep eutrophic lake, England. *Journal of Fish Biology*, 36(3):439–447, March 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Skaala:1990:IBN

- [53] Ø. Skaala, G. Dahle, K. E. Jørstad, and G. Nævdal. Interactions between natural and farmed fish populations: information from genetic markers. *Journal of Fish Biology*, 36(3):449–460, March 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Carrasson:1990:PDA

- [54] M. Carrasson and J. Matallanas. Preliminary data about the feeding habits of some deep-sea Mediterranean fishes. *Journal of Fish Biology*, 36(3):461–463, March 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Herman:1990:PAR

- [55] R. L. Herman and C. A. Lemm. Putative autoimmune reaction of striped bass, *Morone saxatilis*, to skin and kidney-tubule basement membranes. *Journal of Fish Biology*, 36(3):465–468, March 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1990:Ad

- [56] Anonymous. Announcement. *Journal of Fish Biology*, 36(4):i, April 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Velasco:1990:AGR

- [57] J. C. Velasco, P. A. Rincón, and J. Lobón-Cerviá. Age, growth and reproduction of the cyprinid *Rutilus lemmingii* (Steindachner, 1866) in the River Huebra, Central Spain. *Journal of Fish Biology*, 36(4):469–480, April 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ip:1990:CLC

- [58] Y. K. Ip, W. P. Low, A. L. L. Lim, and S. F. Chew. Changes in lactate content in the gills of the mudskippers *Periophthalmus chrysospilos* and *Boleophthalmus boddarti* in response to environmental hypoxia. *Journal of Fish Biology*, 36(4):481–487, April 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McLean:1990:DIE

- [59] E. McLean, A. C. von der Meden, and E. M. Donaldson. Direct and indirect evidence for polypeptide absorption by the teleost gastrointestinal tract. *Journal of Fish Biology*, 36(4):489–498, April 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Garcia-Garrido:1990:SCT

- [60] L. Garcia-Garrido, R. Muñoz-Chapuli, and A. V. de Andres. Serum cholesterol and triglyceride levels in *Scyliorhinus canicula* (L.) during sexual maturation. *Journal of Fish Biology*, 36(4):499–509, April 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bagliniere:1990:MRB

- [61] J. L. Baglinière, G. Maise, and A. Nihouarn. Migratory and reproductive behaviour of female adult Atlantic salmon, *Salmo salar* L., in a spawning stream. *Journal of Fish Biology*, 36(4):511–520, April 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pawson:1990:UOW

- [62] M. G. Pawson. Using otolith weight to age fish. *Journal of Fish Biology*, 36(4):521–531, April 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Petridis:1990:IGC

- [63] D. Petridis. The influence of grass carp on habitat structure and its subsequent effect on the diet of tench. *Journal of Fish Biology*, 36(4):533–544, April 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bergheim:1990:PJA

- [64] A. Bergheim and T. Hesthagen. Production of juvenile Atlantic salmon, *Salmo salar* L., and brown trout, *Salmo trutta* L., within different sections of a small enriched Norwegian river. *Journal of Fish Biology*, 36(4):545–562, April 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Graham:1990:DFL

- [65] S. Graham and C. J. Secombes. Do fish lymphocytes secrete interferon- γ ? *Journal of Fish Biology*, 36(4):563–573, April 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Congleton:1990:ILA

- [66] J. L. Congleton, A. R. Greenlee, and S. S. Ristow. Isolation of leucocytes from the anterior kidney and spleen of rainbow trout in a self-generating density gradient. *Journal of Fish Biology*, 36(4):575–585, April 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Johnsen:1990:GSH

- [67] P. B. Johnsen, H. Zhou, and M. A. Adams. Gustatory sensitivity of the herbivore *Tilapia zillii* to amino acids. *Journal of Fish Biology*, 36(4):587–593, April 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wells:1990:TBA

- [68] R. M. G. Wells, J. A. Macdonald, and G. DiPrisco. Thin-blooded Antarctic fishes: a rheological comparison of the haemoglobin-free icefishes *Chionodraco kathleenae* and *Cryodraco antarcticus* with a red-blooded nototheniid, *Pagothenia bernacchii*. *Journal of Fish Biology*, 36(4):595–609, April 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gauld:1990:SFL

- [69] J. A. Gauld and J. R. Hutcheon. Spawning and fecundity in the lesser sandeel, *Ammodytes marinus* Raitt, in the north-western North Sea. *Journal of Fish Biology*, 36(4):611–613, April 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Robinson:1990:CSB

- [70] R. L. Robinson and G. F. Turner. Comparison of the social behaviour of an endemic Lake Malaŵi cichlid in the field and laboratory. *Journal of Fish Biology*, 36(4):615–616, April 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hunn:1990:CRE

- [71] J. B. Hunn and I. E. Greer. Colorimetric and refractometer estimates of total plasma protein in striped bass, *Morone saxatilis* (Walbaum). *Journal of Fish Biology*, 36(4):617–618, April 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kruse:1990:LCC

- [72] G. H. Kruse and E. L. Dalley. Length changes in capelin, *Mallotus villosus* (Müller), larvae due to preservation in formalin and anhydrous alcohol.

Journal of Fish Biology, 36(4):619–621, April 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Moreira:1990:FSX

- [73] F. Moreira. Food of the swordfish, *Xiphias gladius* Linnaeus, 1758, off the Portuguese coast. *Journal of Fish Biology*, 36(4):623–624, April 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1990:BRb

- [74] Anonymous. Book reviews. *Journal of Fish Biology*, 36(4):625–632, April 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1990:Ae

- [75] Anonymous. Announcement. *Journal of Fish Biology*, 36(5):i, May 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Grogan:1990:CSM

- [76] E. D. Grogan and R. Lund. A culture system for the maintenance and proliferation of shark and sting ray immunocytes. *Journal of Fish Biology*, 36(5):633–642, May 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rowe:1990:DGB

- [77] D. K. Rowe and J. E. Thorpe. Differences in growth between maturing and non-maturing male Atlantic salmon, *Salmo salar* L., parr. *Journal of Fish Biology*, 36(5):643–658, May 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tukamoto:1990:RME

- [78] K. Tukamoto. Recruitment mechanism of the eel, *Anguilla japonica*, to the Japanese coast. *Journal of Fish Biology*, 36(5):659–671, May 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hopkins:1990:GET

- [79] T. E. Hopkins and R. J. Larson. Gastric evacuation of three food types in the black and yellow rockfish *Sebastes chrysomelas* (Jordan and Gilbert). *Journal of Fish Biology*, 36(5):673–681, May 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Copp:1990:SML

- [80] G. H. Copp. Shifts in the microhabitat of larval and juvenile roach, *Rutilus rutilus* (L.), in a floodplain channel. *Journal of Fish Biology*,

36(5):683–692, May 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sujatha:1990:CDF

- [81] K. Sujatha and R. Madhavi. Comparison of digenean faunas of sillaginid fishes from inshore and offshore waters of visakhapatnam Coast, Bay of Bengal. *Journal of Fish Biology*, 36(5):693–699, May 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Chifamba:1990:PTR

- [82] P. C. Chifamba. Preference of *Tilapia rendalli* (Boulenger) for some species of aquatic plants. *Journal of Fish Biology*, 36(5):701–705, May 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Heggenes:1990:SSM

- [83] J. Heggenes and S. J. Saltveit. Seasonal and spatial microhabitat selection and segregation in young Atlantic salmon, *Salmo salar* L., and brown trout, *Salmo trutta* L., in a Norwegian river. *Journal of Fish Biology*, 36(5):707–720, May 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Emerson:1990:SME

- [84] L. S. Emerson, M. Greer Walker, and P. R. Witthames. A stereological method for estimating fish fecundity. *Journal of Fish Biology*, 36(5):721–730, May 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tatner:1990:AIB

- [85] M. F. Tatner. Antigen-induced blastogenesis of salmon, *Salmo salar* L., head kidney leucocytes to modified *Aeromonas salmonicida* antigens: a preliminary evaluation method for potential vaccine antigens. *Journal of Fish Biology*, 36(5):731–739, May 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ponton:1990:UDB

- [86] D. Ponton and H. J. Meng. Use of dual-beam acoustic technique for detecting young whitefish, *Coregonus* sp., juveniles: first experiments in an enclosure. *Journal of Fish Biology*, 36(5):741–750, May 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hutchinson:1990:BRI

- [87] S. Hutchinson and L. E. Hawkins. Book review: *The influence of salinity on water balance in 0-group flounders, Platichthys flesus (L)*. *Journal of*

Fish Biology, 36(5):751–764, May 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McIntosh:1990:REP

- [88] D. McIntosh and B. Austin. Recovery of an extremely proteolytic form of *Serratia liquefaciens* as a pathogen of Atlantic salmon, *Salmo solar*, in Scotland. *Journal of Fish Biology*, 36(5):765–772, May 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Richter:1990:SFO

- [89] H. Richter and J. G. McDermott. The staining of fish otoliths for age determination. *Journal of Fish Biology*, 36(5):773–779, May 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Waschkewitz:1990:AMR

- [90] R. Waschkewitz and P. Wirtz. Annual migration and return to the same site by an individual grouper, *Epinephelus alexandrinus* (Pisces, Serranidae). *Journal of Fish Biology*, 36(5):781–782, May 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

White:1990:DTR

- [91] R. J. White, A. T. Scholz, M. V. Baker, and D. E. Liljgren. Detection of triiodothyronine (T_3) receptors in isolated steelhead trout, *Oncorhynchus mykiss*, brain nuclei. *Journal of Fish Biology*, 36(5):783–785, May 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1990:BRc

- [92] Anonymous. Book reviews. *Journal of Fish Biology*, 36(5):787–788, May 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1990:Af

- [93] Anonymous. Announcement. *Journal of Fish Biology*, 36(6):i, June 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Marmulla:1990:MDR

- [94] G. Marmulla and R. Rösch. Maximum daily ration of juvenile fish fed on living natural zooplankton. *Journal of Fish Biology*, 36(6):789–801, June 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Copp:1990:RCG

- [95] G. H. Copp. Recognition of cohorts and growth of larval and juvenile roach *Rutilus rutilus* (L.), using size-class ordination of developmental

steps. *Journal of Fish Biology*, 36(6):803–819, June 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fujimaki:1990:FSS

- [96] Y. Fujimaki and M. Isoda. Fine-structural study of leucocytes in the goldfish, *Carassius auratus*. *Journal of Fish Biology*, 36(6):821–831, June 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pal:1990:BIU

- [97] J. Pal and K. Pradhan. Bacterial involvement in ulcerative condition of air-breathing fish from India. *Journal of Fish Biology*, 36(6):833–839, June 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Keckeis:1990:CGR

- [98] H. Keckeis and F. Schiemer. Consumption, growth and respiration of bleak, *Alburnus alburnus* (L.), and roach, *Rutilus rutilus* (L.), during early ontogeny. *Journal of Fish Biology*, 36(6):841–851, June 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hert:1990:FHP

- [99] E. Hert. Factors in habitat partitioning in *Pseudotropheus aurora* (Pisces: Cichlidae), an introduced species to a species-rich community of Lake Malaŵi. *Journal of Fish Biology*, 36(6):853–865, June 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tytler:1990:ODR

- [100] P. Tytler, M. Tatner, and C. Findlay. The ontogeny of drinking in the rainbow trout, *Oncorhynchus mykiss* (Walbaum). *Journal of Fish Biology*, 36(6):867–875, June 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Huntingford:1990:SDB

- [101] F. A. Huntingford, N. B. Metcalfe, J. E. Thorpe, W. D. Graham, and C. E. Adams. Social dominance and body size in Atlantic salmon parr, *Salmo solar* L. *Journal of Fish Biology*, 36(6):877–881, June 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Francis:1990:BCF

- [102] R. I. C. C. Francis. Back-calculation of fish length: a critical review. *Journal of Fish Biology*, 36(6):883–902, June 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Chambers:1990:GFT

- [103] J. Chambers. The gonopodia of the fishes of the tribe *Cnesterodontini* (Cyprinodontiformes, Poeciliidae). *Journal of Fish Biology*, 36(6):903–916, June 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Svedang:1990:GBL

- [104] H. Svedäng. Genetic basis of life-history variation of dwarf and normal Arctic charr, *Salvelinus alpinus* (L.), in Stora Rösjön, central Sweden. *Journal of Fish Biology*, 36(6):917–932, June 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lammens:1990:FCS

- [105] E. H. R. R. Lammens, W. L. T. van Densen, and R. Knijn. The fish community structure in Tjeukemeer in relation to fishery and habitat utilization. *Journal of Fish Biology*, 36(6):933–945, June 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ben-Tuvia:1990:TRA

- [106] A. Ben-Tuvia. A taxonomic reappraisal of the atlanto-Mediterranean soles *Solea solea*, *S. senegalensis* and *s. lascaris*. *Journal of Fish Biology*, 36(6):947–960, June 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Holmes:1990:HFR

- [107] R. H. A. Holmes and P. A. Henderson. High fish recruitment in the Severn Estuary: the effect of a warm year? *Journal of Fish Biology*, 36(6):961–963, June 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Taylor:1990:ECL

- [108] E. B. Taylor. Environmental correlates of life-history variation in juvenile Chinook salmon, *Oncorhynchus tshawytscha* (Walbaum). *Journal of Fish Biology*, 37(1):1–17, July 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Demetropoulos:1990:FDS

- [109] C. L. Demetropoulos, L. F. Braithwaite, B. A. Maurer, and D. Whiting. Foraging and dietary strategies of two sublittoral cottids, *Jordania zonope* and *Artedius harringtoni*. *Journal of Fish Biology*, 37(1):19–32, July 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Quinton:1990:EFC

- [110] J. C. Quinton and R. W. Blake. The effect of feed cycling and ration level on the compensatory growth response in rainbow trout, *Oncorhynchus mykiss*. *Journal of Fish Biology*, 37(1):33–41, July 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Witters:1990:EHS

- [111] H. E. Witters, S. Van Puymbroeck, J. H. D. Vangenechten, and O. L. J. Vanderborcht. The effect of humic substances on the toxicity of aluminium to adult rainbow trout, *Oncorhynchus mykiss* (Walbaum). *Journal of Fish Biology*, 37(1):43–53, July 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ogut-Ohwayo:1990:CPI

- [112] R. Ogutu-Ohwayo. Changes in the prey ingested and the variations in the Nile perch and other fish stocks of Lake Kyoga and the northern waters of Lake Victoria (Uganda). *Journal of Fish Biology*, 37(1):55–63, July 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kubasch:1990:AST

- [113] A. Kubasch and A. W. Rourke. Arteriosclerosis in steelhead trout, *Oncorhynchus mykiss* (Walbaum): a developmental analysis. *Journal of Fish Biology*, 37(1):65–69, July 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cucchi:1990:NMK

- [114] C. Cucchi and A. Baruffaldi. A new method for karyological studies in teleost fishes. *Journal of Fish Biology*, 37(1):71–75, July 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Magurran:1990:CCO

- [115] A. E. Magurran and J. A. Bendelow. Conflict and co-operation in White Cloud Mountain minnow schools. *Journal of Fish Biology*, 37(1):77–83, July 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lahnsteiner:1990:FTG

- [116] F. Lahnsteiner, U. Richtarski, and R. A. Patzner. Functions of the testicular gland in two blennioid fishes, *Salaria* (= *Blennius*) *pavo* and *Lipophrys* (= *Blennius*) *dalmatinus* (Blenniidae, Teleostei) as revealed by electron microscopy and enzyme histochemistry. *Journal of Fish Biology*, 37(1):

85–97, July 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jensen:1990:CFC

- [117] J. W. Jensen. Comparing fish catches taken with gill nets of different combinations of mesh sizes. *Journal of Fish Biology*, 37(1):99–104, July 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Oellermann:1990:HYS

- [118] L. K. Oellermann and P. H. Skelton. Hexaploidy in yellowfish species (Barbus, Pisces, Cyprinidae) from southern Africa. *Journal of Fish Biology*, 37(1):105–115, July 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Paul:1990:CGE

- [119] A. J. Paul, J. M. Paul, and R. L. Smith. Consumption, growth and evacuation in the Pacific cod, *Gadus macrocephalus*. *Journal of Fish Biology*, 37(1):117–124, July 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Oliva-Teles:1990:GNU

- [120] A. Oliva-Teles and S. J. Kaushik. Growth and nutrient utilization by 0 + and 1 + triploid rainbow trout, *Oncorhynchus mykiss*. *Journal of Fish Biology*, 37(1):125–133, July 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Munk:1990:LGD

- [121] P. Munk and V. Christensen. Larval growth and drift pattern and the separation of herring spawning groups in the North Sea. *Journal of Fish Biology*, 37(1):135–148, July 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Deniel:1990:CSG

- [122] C. Deniel. Comparative study of growth of flatfishes on the west coast of Brittany. *Journal of Fish Biology*, 37(1):149–166, July 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Avtalion:1990:SDG

- [123] R. R. Avtalion and J. Don. Sex-determining genes in tilapia: a model of genetic recombination emerging from sex ratio results of three generations of diploid gynogenetic *Oreochromis aureus*. *Journal of Fish Biology*, 37(1):167–173, July 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Davenport:1990:TLC

- [124] J. Davenport and A. K. M. Abdul Matin. Terrestrial locomotion in the climbing perch, *Anabas testudineus* (Bloch) (Anabantidea, Pisces). *Journal of Fish Biology*, 37(1):175–184, July 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Terhune:1990:NLM

- [125] J. M. Terhune, G. W. Friars, J. K. Bailey, and F. M. O’Flynn. Noise levels may influence Atlantic salmon smolting rates in tanks. *Journal of Fish Biology*, 37(1):185–187, July 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hartley:1990:VCD

- [126] S. E. Hartley. Variation in cellular DNA content in Arctic charr, *Salvelinus alpinus* (L.). *Journal of Fish Biology*, 37(1):189–190, July 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Micale:1990:QHS

- [127] V. Micale and F. Perdichizzi. A quantitative and histochemical study on melano-macrophage centres in the spleen of the teleost fish *Diplodus annularis* L. *Journal of Fish Biology*, 37(2):191–197, August 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kaige:1990:OEA

- [128] N. Kaige, T. Miyazaki, and S. S. Kubota. Opsonic effect of antiserum and complement on phagocytosis by macrophages from the peritoneal cavity of the Japanese eel, *Anguilla japonica*. *Journal of Fish Biology*, 37(2):199–204, August 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Milton:1990:DPS

- [129] D. A. Milton, S. J. M. Blaber, and N. J. F. Rawlinson. Diet and prey selection of six species of tuna baitfish in three coral reef lagoons in the Solomon Islands. *Journal of Fish Biology*, 37(2):205–224, August 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gehrke:1990:STD

- [130] Peter C. Gehrke. Spatial and temporal dispersion patterns of golden perch, *Macquaria ambigua*, larvae in an artificial floodplain environment. *Journal of Fish Biology*, 37(2):225–236, August 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Horn:1990:ETF

- [131] M. H. Horn and R. N. Gibson. Effects of temperature on the food processing of three species of seaweed-eating fishes from European coastal waters. *Journal of Fish Biology*, 37(2):237–247, August 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mor:1990:TAA

- [132] A. Mor and R. R. Avtalion. Transfer of antibody activity from immunized mother to embryo in tilapias. *Journal of Fish Biology*, 37(2):249–255, August 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Iguchi:1990:DCL

- [133] K. Iguchi and N. Mizuno. Diel changes of larval drift among amphidromous gobies in Japan, especially *Rhinogobius brunneus*. *Journal of Fish Biology*, 37(2):255–264, August 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lippitsch:1990:SMS

- [134] E. Lippitsch. Scale morphology and squamation patterns in cichlids (Teleostei, Perciformes): a comparative study. *Journal of Fish Biology*, 37(2):265–291, August 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Carpene:1990:ZCF

- [135] E. Carpenè, O. Cattani, G. P. Serrazanetti, G. Fedrizzi, and P. Cortesi. Zinc and copper in fish from natural waters and rearing ponds in Northern Italy. *Journal of Fish Biology*, 37(2):293–299, August 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kugel:1990:ELP

- [136] B. Kugel, R. W. Hoffmann, and A. Friess. Effects of low pH on the chorion of rainbow trout, *Oncorhynchus mykiss*, and brown trout, *Salmo trutta f. fario*. *Journal of Fish Biology*, 37(2):301–310, August 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McLean:1990:RTS

- [137] P. H. McLean, G. W. Smith, and M. J. Wilson. Residence time of the sea louse, *Lepeophtheirus salmonis* K., on Atlantic salmon, *Salmo salar* L., after immersion in fresh water. *Journal of Fish Biology*, 37(2):311–314, August 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ntiba:1990:GMS

- [138] M. J. Ntiba and V. Jaccarini. Gonad maturation and spawning times of *Siganus sutor* off the Kenya coast: evidence for definite spawning seasons in atropical fish. *Journal of Fish Biology*, 37(2):315–325, August 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Robert:1990:BPP

- [139] F. Robert, V. Boy, and C. Gabrion. Biology of parasite populations: population dynamics of bothriocephalids (Cestoda–Pseudophyllidea) in teleostean fish. *Journal of Fish Biology*, 37(2):327–342, August 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1990:BRd

- [140] Anonymous. Book reviews. *Journal of Fish Biology*, 37(2):343–346, August 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Capape:1990:RDT

- [141] C. Capapé, J. P. Quignard, and J. Mellinger. Reproduction and development of two angel sharks, *Squatina squatina* and *S. oculata* (Pisces: Squatinidae), off Tunisian coasts: semi-delayed vitellogenesis, lack of egg capsules, and lecithotrophy. *Journal of Fish Biology*, 37(3):347–356, September 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Imagawa:1990:VRD

- [142] T. Imagawa, Y. Hashimoto, Y. Kon, and M. Sugimura. Vascularization and related distribution of leucocytes in carp, *Cyprinus carpio* L., head kidney. *Journal of Fish Biology*, 37(3):357–366, September 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Thompson:1990:SIH

- [143] D. Thompson and K. Iliadou. A search for introgressive hybridization in the rudd, *Scardinius erythrophthalmus* (L.), and the roach, *Rutilus rutilus* (L.). *Journal of Fish Biology*, 37(3):367–373, September 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Agnese:1990:KSS

- [144] J.-F. Agnèse, T. Oberdorff, and C. Ozouf-Costaz. Karyotypic study of some species of family *Mochokidae* (Pisces, Siluriformes): evidence of female heterogamety. *Journal of Fish Biology*, 37(3):375–381, September 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Yadav:1990:GSR

- [145] A. N. Yadav, M. S. Prasad, and B. R. Singh. Gross structure of the respiratory organs and dimensions of the gill in the mud-skipper, *Periophthalmodon schlosseri* (Bleeker). *Journal of Fish Biology*, 37(3):383–392, September 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wheeler:1990:SBB

- [146] Alwyne Wheeler and D. R. Jordan. The status of the barbel, *Barbus barbus* (L.) (Teleostei, Cyprinidae), in the United Kingdom. *Journal of Fish Biology*, 37(3):393–399, September 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Henderson:1990:SOP

- [147] P. A. Henderson and I. Walker. Spatial organization and population density of the fish community of the litter banks within a central Amazonian blackwater stream. *Journal of Fish Biology*, 37(3):401–411, September 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jones:1990:CRF

- [148] K. A. Jones. Chemical requirements of feeding in rainbow trout, *Oncorhynchus mykiss* (Walbaum); palatability studies on amino acids, amides, amines, alcohols, aldehydes, saccharides, and other compounds. *Journal of Fish Biology*, 37(3):413–423, September 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Skilbrei:1990:CSG

- [149] O. T. Skilbrei. Compensatory sea growth of male Atlantic salmon, *Salmo salar* L., which previously mature as parr. *Journal of Fish Biology*, 37(3):425–435, September 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nielsen:1990:NDE

- [150] J. Nielsen, J. Badcock, and N. R. Merrett. New data elucidating the taxonomy and ecology of the Parabrotulidae (Pisces: Zoarcoidei). *Journal of Fish Biology*, 37(3):437–448, September 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Matallanas:1990:OLP

- [151] J. Matallanas. *Ophidian lozanoi* (Pisces: Ophidiiformes) an undescribed ophidiid from the North East Atlantic. *Journal of Fish Biology*, 37(3):

449–453, September 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pittman:1990:MBD

- [152] K. Pittman, A. B. Skiftesvik, and L. Berg. Morphological and behavioural development of halibut, *Hippoglossus hippoglossus* (L.) larvae. *Journal of Fish Biology*, 37(3):455–472, September 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Paine:1990:LHT

- [153] M. D. Paine. Life history tactics of darters (Percidae: Etheostomatiini) and their relationship with body size, reproductive behaviour, latitude and rarity. *Journal of Fish Biology*, 37(3):473–488, September 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Boxshall:1990:TMK

- [154] G. A. Boxshall and P. A. Frear. *Tracheliastes maculatus* (Kollar, 1836) (Crustacea: Lernaepodidae) a new species for Britain. *Journal of Fish Biology*, 37(3):489–491, September 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Levy:1990:SRV

- [155] D. A. Levy. Sex ratio variation in surf smelt, *Hypomesus pretiosus*, gillnet catches due to differences in mesh size. *Journal of Fish Biology*, 37(3):493–494, September 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Powell:1990:EGC

- [156] M. D. Powell, G. M. Wright, and J. F. Burka. Eosinophilic granule cells in the gills of rainbow trout, *Oncorhynchus mykiss*: evidence of migration? *Journal of Fish Biology*, 37(3):495–497, September 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Treasurer:1990:LWC

- [157] J. W. Treasurer. Length and weight changes in perch, *Perca fluviatilis* L., and pike, *Esox lucius* L., following freezing. *Journal of Fish Biology*, 37(3):499–500, September 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bruno:1990:OCT

- [158] D. W. Bruno. Occurrence of a conjoined twin among farmed Atlantic salmon, *Salmo salar* L. *Journal of Fish Biology*, 37(3):501–502, Septem-

ber 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Chevaldonne:1990:CSS

- [159] P. Chevaldonné. Ciguatera and the saupe, *Sarpa salpa* (L.), in the Mediterranean: a possible misinterpretation. *Journal of Fish Biology*, 37(3):503–504, September 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Higgins:1990:HHG

- [160] P. J. Higgins and J. E. Thorpe. Hyperplasia and hypertrophy in the growth of skeletal muscle in juvenile Atlantic salmon, *Salmo salar* L. *Journal of Fish Biology*, 37(4):505–519, October 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Higgins:1990:HMJ

- [161] P. J. Higgins. The histochemistry of muscle in juvenile Atlantic salmon, *Salmo solar* L. *Journal of Fish Biology*, 37(4):521–529, October 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Turner:1990:TDS

- [162] T. F. Turner, J. E. Ahlquist, and M. M. White. A thermal denaturation study of the genomic DNAs from the North American genera of the fish family Percidae. *Journal of Fish Biology*, 37(4):531–539, October 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Molony:1990:OIW

- [163] B. W. Molony and J. H. Choat. Otolith increment widths and somatic growth rate: the presence of a time-lag. *Journal of Fish Biology*, 37(4):541–551, October 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fan:1990:NMF

- [164] Z. Fan and D. P. Fox. A new method for fish chromosome preparation. *Journal of Fish Biology*, 37(4):553–561, October 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gold:1990:IMW

- [165] J. R. Gold, Y. C. Li, N. S. Shipley, and P. K. Powers. Improved methods for working with fish chromosomes with a review of metaphase chromosome banding. *Journal of Fish Biology*, 37(4):563–575, October 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bakke:1990:DHR

- [166] T. A. Bakke, P. A. Jansen, and L. P. Hansen. Differences in the host resistance of Atlantic salmon, *Salmo salar* L., stocks to the monogenean *Gyrodactylussalaris* Malmberg, 1957. *Journal of Fish Biology*, 37(4):577–587, October 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nakai:1990:LSS

- [167] K. Nakai, Y. Yanagisawa, T. Sato, Y. Niimura, and M. M. Gashagaza. Lunar synchronization of spawning in cichlid fishes of the tribe *Lamprologini* in Lake Tanganyika. *Journal of Fish Biology*, 37(4):589–598, October 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wells:1990:ESE

- [168] P. R. Wells and D. K. Cone. Experimental studies on the effect of *Gyrodactylus colemanensis* and *G. salmonis* (Monogenea) on density of mucous cells in the epidermis of fry of *Oncorhynchus mykiss*. *Journal of Fish Biology*, 37(4):599–603, October 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Henderson:1990:PST

- [169] P. A. Henderson and R. H. A. Holmes. Population stability over a ten-year period in the short-lived fish *Liparis liparis* (L.). *Journal of Fish Biology*, 37(4):605–615, October 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Michel:1990:OPN

- [170] C. Michel, R. Gonzalez, and S. Avrameas. Opsonizing properties of natural antibodies of rainbow trout, *Oncorhynchus mykiss* (Walbaum). *Journal of Fish Biology*, 37(4):617–622, October 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bardonnet:1990:DPF

- [171] A. Bardonnet and P. Gaudin. Diel pattern of first downstream post-emergence displacement in grayling, *Thymallus thymallus* (L., 1758). *Journal of Fish Biology*, 37(4):623–627, October 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wright:1990:AEB

- [172] R. M. Wright. Aspects of the ecology of bream, *Abramis brama* (L.), in a gravel pit lake and the effects of reducing the population density.

Journal of Fish Biology, 37(4):629–634, October 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Koldras:1990:SPS

- [173] M. Koldras, K. Bieniarz, and D. E. Kime. Sperm production and steroidogenesis in testes of the common carp, *Cyprinus carpio* L., at different stages of maturation. *Journal of Fish Biology*, 37(4):635–645, October 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lucas:1990:ORI

- [174] M. C. Lucas and A. D. F. Johnstone. Observations on the retention of intragastric transmitters, and their effects on food consumption, in cod, *Gadus morhua* L. *Journal of Fish Biology*, 37(4):647–649, October 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Munshi:1990:CMN

- [175] J. S. Datta Munshi, N. K. Singh, N. Mishra, and J. Ojha. Cytology of macrophages in normal and mercury-treated air-breathing fish, *Channa punctata* (Bloch). *Journal of Fish Biology*, 37(4):651–653, October 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kjorsvik:1990:EDI

- [176] E. Kjorsvik. The effects of different incubation conditions on the eggs of halibut, *Hippoglossus hippoglossus* (L.). *Journal of Fish Biology*, 37(4):655–657, October 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Alabaster:1990:TRA

- [177] J. S. Alabaster. The temperature requirements of adult Atlantic salmon, *Salmo salar* L., during their upstream migration in the River Dee. *Journal of Fish Biology*, 37(4):659–661, October 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ruzzante:1990:BGR

- [178] D. E. Ruzzante and R. W. Doyle. Behavioural and growth responses to the intensity of intraspecific social interaction among medaka, *Oryzias latipes* (Temminck and Schlegel) (Pisces, Cyprinodontidae). *Journal of Fish Biology*, 37(5):663–673, November 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Linner:1990:DSL

- [179] J. Linnér, E. Brännäs, B.-S. Wiklund, and H. Lundqvist. Diel and seasonal locomotor activity patterns in Arctic charr, *Salvelinus alpinus* (L.). *Journal of Fish Biology*, 37(5):675–685, November 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Melotto:1990:BCS

- [180] S. Melotto and G. Alessio. Biology of carpione, *Salmo carpio* L., an endemic species of Lake Garda (Italy). *Journal of Fish Biology*, 37(5):687–698, November 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lilley:1990:BRP

- [181] N. R. Lilley and Y. Rouger. Book review: *Plasma levels of gonadotropin and 17 α , 20 β -dihydroxy-4-pregnen-3-one in relation to spawning behaviour of rainbow trout, Oncorhynchus mykiss (Walbaum)*. *Journal of Fish Biology*, 37(5):699–711, November 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Moore:1990:EII

- [182] A. Moore, I. C. Russell, and E. C. E. Potter. The effects of intraperitoneally implanted dummy acoustic transmitters on the behaviour and physiology of juvenile Atlantic salmon, *Salmo salar* L. *Journal of Fish Biology*, 37(5):713–721, November 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hamerlynck:1990:IPM

- [183] O. Hamerlynck. The identification of *Pomatoschistus minutus* (Pallas) and *Pomatoschistus lozanoi* (de Buen) (Pisces, Gobiidae). *Journal of Fish Biology*, 37(5):723–728, November 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brandstatter:1990:MAP

- [184] R. Brandstätter, B. Misof, C. Pazmandi, and G. P. Wagner. Micro-anatomy of the pectoral fin in blennies (Blenniini, Blennioidea, Teleostei). *Journal of Fish Biology*, 37(5):729–743, November 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Elvira:1990:CPS

- [185] B. Elvira, P. A. Rincon, and J. C. Velasco. *Chondrostoma polylepis* Steindachner \times *Rutilus lemmingii* (Steindachner) (Osteichthyes, Cyprinidae), a new natural hybrid from the Duero River basin, Spain. *Journal of*

Fish Biology, 37(5):745–754, November 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

LAbee-Lund:1990:IVR

- [186] J. H. L’Abee-Lund and K. Hindar. Interpopulation variation in reproductive traits of anadromous female brown trout, *Salmo trutta* L. *Journal of Fish Biology*, 37(5):755–763, November 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gonzalez:1990:DSB

- [187] R. J. Gonzalez, R. S. Grippo, and W. A. Dunson. The disruption of sodium balance in brook charr, *Salvelinus fontinalis* (Mitchill), by manganese and iron. *Journal of Fish Biology*, 37(5):765–774, November 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hall:1990:FRL

- [188] S. J. Hall, D. Raffaelli, D. J. Basford, M. R. Robertson, and R. Fryer. The feeding relationships of the larger fish species in a Scottish sea loch. *Journal of Fish Biology*, 37(5):775–791, November 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Singh:1990:SCC

- [189] P. B. Singh and T. P. Singh. Seasonal correlative changes between sex steroids and lipid levels in the freshwater female catfish, *Heteropneustes fossilis* (Bloch). *Journal of Fish Biology*, 37(5):793–802, November 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Keats:1990:FRE

- [190] D. W. Keats and D. H. Steele. The fourbeard rockling, *Enchelyopus cimbrius* (L.), in eastern Newfoundland. *Journal of Fish Biology*, 37(5):803–811, November 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jessop:1990:DVD

- [191] B. M. Jessop. Diel variation in density, length composition, and feeding activity of juvenile alewife, *Alosa pseudoharengus* Wilson, and blueback herring, *A. aestivalis* Mitchill, at near-surface depths in a hydroelectric dam impoundment. *Journal of Fish Biology*, 37(5):813–822, November 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anyanwu:1990:FCP

- [192] A. O. Anyanwu and K. I. Kusemiju. Food of the croakers *Pseudotolithus senegalensis* (C. & V.) and *Pseudotolithus typus* (Bleeker) off the coast of

Lagos, Nigeria. *Journal of Fish Biology*, 37(5):823–825, November 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Casadevall:1990:FHG

- [193] M. Casadevall and J. Matallanas. Feeding habits of *Gnathophis mystax* (Delaroche, 1809), (Anguilliformes, Congridae) in the western Mediterranean. *Journal of Fish Biology*, 37(5):827–829, November 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1990:BRe

- [194] Anonymous. Book reviews. *Journal of Fish Biology*, 37(5):831–836, November 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Montecchia:1990:SVB

- [195] C. L. Montecchia, M. Crupkin, and R. E. Truccos. Seasonal variations in biochemical and physicochemical properties of actomyosin and energy content of the liver, gonads and muscle of mature Argentine hake, *Merluccius hubbsi* Marini. *Journal of Fish Biology*, 37(6):837–843, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kundu:1990:GDC

- [196] R. Kundu, R. Lakshmi, and A. P. Mansuri. Growth dynamics of caudal and pectoral fin muscle fibres in a carangid, *Caranx malabaricus* (Cuv. & Val.), and their possible relation with somatic growth. *Journal of Fish Biology*, 37(6):845–852, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vollestad:1990:GVL

- [197] L. A. Vøllestad and J. H. L'Abée-Lund. Geographic variation in life-history strategy of female roach, *Rutilus rutilus* (L.). *Journal of Fish Biology*, 37(6):853–864, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Geffen:1990:RRS

- [198] A. J. Geffen. Response of rainbow smelt, *Osmerus mordax* (Mitchill), eggs to low pH. *Journal of Fish Biology*, 37(6):865–871, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mock:1990:LAR

- [199] A. Möck and G. Peters. Lysozyme activity in rainbow trout, *Oncorhynchus mykiss* (Walbaum), stressed by handling, transport and wa-

ter pollution. *Journal of Fish Biology*, 37(6):873–885, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Saglio:1990:OCC

- [200] Ph. Saglio, B. Fauconneau, and J. M. Blanc. Orientation of carp, *Cyprinus carpio* L., to free amino acids from Tubifex extract in an olfactometer. *Journal of Fish Biology*, 37(6):887–898, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Persson:1990:FEE

- [201] L. Persson. A field experiment on the effects of interspecific competition from roach, *Rutilus rutilus* (L.), on age at maturity and gonad size in perch, *percafluviatilis* L. *Journal of Fish Biology*, 37(6):899–906, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Beckman:1990:EAD

- [202] B. R. Beckman and W. S. Zaugg. Effect of actinomycin-D on gill $\text{Na}^+ - \text{K}^+$ -ATPase of juvenile Chinook salmon, *Oncorhynchus tshawytscha* (Walbaum). *Journal of Fish Biology*, 37(6):907–911, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Karaaas:1990:SCG

- [203] P. Karaaas. Seasonal changes in growth and standard metabolic rate of juvenile perch, *Perca fluviatilis* L. *Journal of Fish Biology*, 37(6):913–920, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Petersen:1990:TBO

- [204] J. K. Petersen and G. I. Petersen. Tolerance, behaviour and oxygen consumption in the sand goby, *Pomatoschistus minutus* (Pallas), exposed to hypoxia. *Journal of Fish Biology*, 37(6):921–933, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Carss:1990:PAA

- [205] D. N. Carss, H. Kruuk, and J. W. H. Conroy. Predation on adult Atlantic salmon, *Salmo salar* L., by otters, *Lutra lutra* (L.), within the River Dee system, Aberdeenshire, Scotland. *Journal of Fish Biology*, 37(6):935–944, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Giles:1990:DCP

- [206] N. Giles, M. Street, and R. M. Wright. Diet composition and prey preference of tench, *Tinca tinca* (L.), common bream, *Abramis brama* (L.), perch, *Perca fluviatilis* L. and roach, *Rutilus rutilus* (L.), in two contrasting gravel pit lakes: potential trophic overlap with wildfowl. *Journal of Fish Biology*, 37(6):945–957, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wright:1990:TMS

- [207] J. M. Wright, D. A. Clayton, and J. M. Bishop. Tidal movements of shallow water fishes in Kuwait Bay. *Journal of Fish Biology*, 37(6):959–974, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Naismith:1990:MUE

- [208] I. A. Naismith and B. Knights. Modelling of unexploited and exploited populations of eels, *Anguilla anguilla* (L.), in the Thames Estuary. *Journal of Fish Biology*, 37(6):975–986, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Abud:1990:EFF

- [209] E. O. Aristizabal Abud. Effect of feeding frequency in juvenile croaker, *Micropogonias furnieri* (Desmarest) (Pisces: Sciaenidae). *Journal of Fish Biology*, 37(6):987–988, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Treasurer:1990:ORR

- [210] J. W. Treasurer. The occurrence of roach, *Rutilus rutilus* (L.), in northern Scotland. *Journal of Fish Biology*, 37(6):989–990, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Taggart:1990:HMD

- [211] J. B. Taggart and A. Ferguson. Hypervariable minisatellite DNA single locus probes for the Atlantic salmon, *Salmo salar* L. *Journal of Fish Biology*, 37(6):991–993, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1990:BRf

- [212] Anonymous. Book reviews. *Journal of Fish Biology*, 37(6):995–1000, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cren:1990:RFT

- [213] E. D. Le Cren. Rare fishes and their conservation: a brief introduction to the symposium. *Journal of Fish Biology*, 37(sA):1–3, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Beverton:1990:SMP

- [214] R. J. H. Beverton. Small marine pelagic fish and the threat of fishing; are they endangered? *Journal of Fish Biology*, 37(sA):5–16, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Achieng:1990:IIN

- [215] A. P. Achieng. The impact of the introduction of Nile perch, *Lates niloticus* (L.) on the fisheries of Lake Victoria. *Journal of Fish Biology*, 37(sA):17–23, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Altukhov:1990:IDS

- [216] Yu. P. Altukhov and E. A. Salmenkova. Introductions of distinct stocks of chum salmon, *Oncorhynchus keta* (Walbaum), into natural populations of the species. *Journal of Fish Biology*, 37(sA):25–33, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McDowall:1990:WGS

- [217] R. M. McDowall. When galaxiid and salmonid fishes meet — a family reunion in New Zealand. *Journal of Fish Biology*, 37(sA):35–43, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Neves:1990:HAE

- [218] R. J. Neves and P. L. Angermeier. Habitat alteration and its effects on native fishes in the upper Tennessee River system, east-central U.S.A. *Journal of Fish Biology*, 37(sA):45–52, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Andrews:1990:OFT

- [219] C. Andrews. The ornamental fish trade and fish conservation. *Journal of Fish Biology*, 37(sA):53–59, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Henderson:1990:FAI

- [220] P. A. Henderson. Fish of the Amazonian Igapô: stability and conservation in a high diversity-low biomass system. *Journal of Fish Biology*, 37

(sA):61–66, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pollard:1990:TFA

- [221] D. A. Pollard, B. A. Ingram, J. H. Harris, and L. F. Reynolds. Threatened fishes in Australia — an overview. *Journal of Fish Biology*, 37(sA):67–78, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Williams:1990:CSN

- [222] J. E. Williams and R. R. Miller. Conservation status of the North American fish fauna in fresh water. *Journal of Fish Biology*, 37(sA):79–85, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Skelton:1990:CST

- [223] P. H. Skelton. The conservation and status of threatened fishes in southern Africa. *Journal of Fish Biology*, 37(sA):87–95, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gaston:1990:PER

- [224] K. J. Gaston and J. H. Lawton. The population ecology of rare species. *Journal of Fish Biology*, 37(sA):97–104, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Meffe:1990:GAC

- [225] G. K. Meffe. Genetic approaches to conservation of rare fishes: examples from North American desert species. *Journal of Fish Biology*, 37(sA):105–112, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Holcik:1990:CHH

- [226] J. Holčík. Conservation of the huchen, *Hucho hucho* (L.), (Salmonidae) with special reference to Slovakian rivers. *Journal of Fish Biology*, 37(sA):113–121, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rochard:1990:SPA

- [227] E. Rochard, G. Castelnaud, and M. Lepage. Sturgeons (Pisces: Acipenseridae); threats and prospects. *Journal of Fish Biology*, 37(sA):123–132, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Swaby:1990:RBM

- [228] S. E. Swaby and G. W. Potts. Rare British marine fishes-identification and conservation. *Journal of Fish Biology*, 37(sA):133–143, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Miller:1990:EEM

- [229] P. J. Miller. The endurance of endemism: the Mediterranean freshwater gobies and their prospects for survival. *Journal of Fish Biology*, 37(sA):145–156, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Reid:1990:CBC

- [230] G. McGregor Reid. Captive breeding for the conservation of cichlid fishes. *Journal of Fish Biology*, 37(sA):157–166, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mills:1990:LES

- [231] C. A. Mills, S. I. Heaney, C. Butterwick, J. E. Corry, and J. M. Elliott. Lake enrichment and the status of Windermere charr, *Salvelinus alpinus* (L.). *Journal of Fish Biology*, 37(sA):167–174, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ingram:1990:TNF

- [232] B. A. Ingram, C. G. Barlow, J. J. Burchmore, G. J. Gooley, S. J. Rowland, and A. C. Sanger. Threatened native freshwater fishes in Australia—some case histories. *Journal of Fish Biology*, 37(sA):175–182, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pister:1990:DFI

- [233] E. P. Pister. Desert fishes: an interdisciplinary approach to endangered species conservation in North America. *Journal of Fish Biology*, 37(sA):183–187, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rinne:1990:SDB

- [234] J. N. Rinne. Status, distribution, biology, and conservation of two rare southwestern (U.S.A.) salmonids, the Apache trout, *Oncorhynchus apache* Miller, and the Gila trout, *O. gilae* Miller. *Journal of Fish Biology*, 37(sA):189–191, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Leberg:1990:IGV

- [235] P. L. Leberg. Influence of genetic variability on population growth: implications for conservation. *Journal of Fish Biology*, 37(sA):193–195, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Almada-Villela:1990:STM

- [236] P. C. Almada-Villela. Status of threatened Mexican fishes. *Journal of Fish Biology*, 37(sA):197–199, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Guevara:1990:CTM

- [237] J. C. Barrera Guevara. The conservation of *Totoaba macdonaldi* (Gilbert), (Pisces: Sciaenidae), in the Gulf of California, Mexico. *Journal of Fish Biology*, 37(sA):201–202, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Neiland:1990:IDD

- [238] A. E. Neiland, J. P. Goddard, and G. McGregor Reid. The impact of damming, drought and over-exploitation on the conservation of marketable fish stocks of the River Benue, Nigeria. *Journal of Fish Biology*, 37(sA):203–205, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ogutuhwayo:1990:RFS

- [239] R. Ogutu-Ohwayo. The reduction in fish species diversity in Lakes Victoria and Kyoga (East Africa) following human exploitation and introduction of non-native fishes. *Journal of Fish Biology*, 37(sA):207–208, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Reid:1990:TFB

- [240] G. McGregor Reid. Threatened fishes of Barombi Mbo: a crater lake in Cameroon. *Journal of Fish Biology*, 37(sA):209–211, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Shrestha:1990:RFH

- [241] T. K. Shrestha. Rare fishes of Himalayan waters of Nepal. *Journal of Fish Biology*, 37(sA):213–216, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Swales:1990:CSL

- [242] S. Swales. Conservation status of large galaxiids (Pisces; Galaxiidae) in tributaries of the Waikato River, New Zealand. *Journal of Fish Biology*, 37(sA):217–218, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Larje:1990:RFS

- [243] R. Larje. Rare fish in Sweden — Nemacheilus Survey and public reactions. *Journal of Fish Biology*, 37(sA):219–221, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bervoets:1990:VLR

- [244] L. Bervoets, J. Coeck, and R. F. Verheyen. The value of lowland rivers for the conservation of rare fish in Flanders. *Journal of Fish Biology*, 37(sA):223–224, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Assis:1990:TSA

- [245] C. A. Assis. Threats to the survival of anadromous fishes in the River Tagus, Portugal. *Journal of Fish Biology*, 37(sA):225–226, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Collares-Pereira:1990:AHS

- [246] M. J. Collares-Pereira. *Anaocypris hispanica* (Steindachner), a cyprinid fish in danger of extinction. *Journal of Fish Biology*, 37(sA):227–229, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Elvira:1990:IEF

- [247] B. Elvira. Iberian endemic freshwater fishes and their conservation status in Spain. *Journal of Fish Biology*, 37(sA):231–232, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Garcia-Marin:1990:GVI

- [248] J. L. García-Marín, A. Vila, and C. Pla. Genetic variation in the Iberian toothcarp, *Aphanius iberus* (Cuvier & Valenciennes). *Journal of Fish Biology*, 37(sA):233–234, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bianco:1990:VFF

- [249] P. G. Bianco. Vanishing freshwater fishes in Italy. *Journal of Fish Biology*, 37(sA):235–237, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Budihna:1990:BRS

- [250] N. Budihna and A. Ocvirk. Breeding and restocking of salmonoid fishes in Slovenia. *Journal of Fish Biology*, 37(sA):239–240, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mrakovcic:1990:SDC

- [251] M. Mrakovčić and S. Mišetić. Status, distribution and conservation of the salmonid, *Salmothymus obtusirostris* (Heckel) and the cyprinid, *Aulopyge hugeli* (Heckel) in Yugoslavia. *Journal of Fish Biology*, 37(sA):241–242, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Povz:1990:CMU

- [252] M. Povž. Conservation of the mudminnow, *Umbra krameri* Walbaum, in Slovenia. *Journal of Fish Biology*, 37(sA):243–245, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Povz:1990:BRD

- [253] M. Povž and A. Ocvirk. Breeding and restocking of Danubian roach, *Rutilus pigus virgo* (Heckel). *Journal of Fish Biology*, 37(sA):245–246, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Povz:1990:REF

- [254] M. Povz, S. Leiner, M. Mrakovčić, and J. Popović. Rare and endangered fishes from Yugoslavian Adriatic rivers. *Journal of Fish Biology*, 37(sA):247–249, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brown:1990:AAT

- [255] E. A. R. Brown and D. B. C. Scott. Anabolic adaptiveness in the two Scottish populations of powan, *Coregonus lavaretus* (L.). *Journal of Fish Biology*, 37(sA):251–253, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Maitland:1990:PCB

- [256] P. S. Maitland and A. A. Lyle. Practical conservation of British fishes: current action on six declining species. *Journal of Fish Biology*, 37(sA): 255–256, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Aprahamian:1990:SGA

- [257] M. W. Aprahamian and C. D. Aprahamian. Status of the genus *Alosa* in the British Isles; past and present. *Journal of Fish Biology*, 37(sA): 257–258, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Winfield:1990:CIP

- [258] I. J. Winfield and R. B. Wood. Conservation of the Irish pollan, *Coregonus autumnalis pollan* Thompson, in Lough Neagh, Northern Ireland. *Journal of Fish Biology*, 37(sA):259–260, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Armstrong:1990:GSC

- [259] D. W. Armstrong, R. S. T. Ferro, D. N. MacLennan, and S. A. Reeves. Gear selectivity and the conservation of fish. *Journal of Fish Biology*, 37(sA):261–262, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lowe-McConnell:1990:SAR

- [260] R. H. Lowe-McConnell. Summary address: rare fish, problems, progress and prospects for conservation. *Journal of Fish Biology*, 37(sA):263–269, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1990:CR

- [261] Anonymous. Conclusions and resolutions. *Journal of Fish Biology*, 37(sA):271, December 1990. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kjorsvik:1991:EDD

- [262] E. Kjorsvik, T. van der Meeren, H. Kryvi, J. Arnfinnson, and P. G. Kvenseseth. Early development of the digestive tract of cod larvae, *Gadus morhua* L., during start-feeding and starvation. *Journal of Fish Biology*, 38(1):1–15, January 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wright:1991:PBT

- [263] R. M. Wright and N. Giles. The population biology of tench, *Tinea tinea* (L.), in two gravel pit lakes. *Journal of Fish Biology*, 38(1):17–28, January 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Luczynski:1991:TRG

- [264] M. Luczynski. Temperature requirements for growth and survival of larval vendace, *Coregonus albula* (L.). *Journal of Fish Biology*, 38(1):29–35, January 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bodaly:1991:GCN

- [265] R. A. Bodaly, J. Vuorinen, R. D. Ward, M. Luczynski, and J. D. Reist. Genetic comparisons of New and Old World coregonid fishes. *Journal of Fish Biology*, 38(1):37–51, January 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wells:1991:TOH

- [266] R. M. G. Wells and R. E. Weber. Is there an optimal haematocrit for rainbow trout, *Oncorhynchus mykiss* (Walbaum)? An interpretation of recent data based on blood viscosity measurements. *Journal of Fish Biology*, 38(1):53–65, January 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Keats:1991:APH

- [267] D. W. Keats. American plaice, *Hippoglossoides platessoides* (Fabricius), predation on green sea urchins, *Strongylocentrotus droebachiensis* (O. F. Muller), in eastern Newfoundland. *Journal of Fish Biology*, 38(1):67–72, January 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Burton:1991:EAT

- [268] D. Burton and B. A. Everard. The effect of androgen treatment on the epidermis of post-spawned winter flounder, *Pseudopleuronectes americanus* (Walbaum). *Journal of Fish Biology*, 38(1):73–80, January 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Al-Daham:1991:AGR

- [269] N. K. Al-Daham and N. K. Wahab. Age, growth and reproduction of the greenback mullet, *Liza subviridis* (Valenciennes), in an estuary in South-

ern Iraq. *Journal of Fish Biology*, 38(1):81–88, January 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Simon:1991:EAA

- [270] B. Simon, P. Sebert, and L. Barthelemy. Eel, *Anguilla anguilla* (L.), muscle modifications induced by long-term exposure to 101 ATA hydrostatic pressure. *Journal of Fish Biology*, 38(1):89–94, January 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Troschel:1991:DRJ

- [271] H. J. Troschel and R. Rösch. Daily ration of juvenile *Coregonus lavaretus* (L.) fed on living zooplankton. *Journal of Fish Biology*, 38(1):95–104, January 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Smith:1991:ESL

- [272] Larry J. Smith, Jr. The effectiveness of sodium lauryl sulphate as a shark repellent in a laboratory test situation. *Journal of Fish Biology*, 38(1):105–113, January 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nordlie:1991:IAS

- [273] F. G. Nordlie, S. J. Walsh, D. C. Haney, and T. F. Nordlie. The influence of ambient salinity on routine metabolism in the teleost *Cyprinodon variegatus* Lacépède. *Journal of Fish Biology*, 38(1):115–122, January 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Parker:1991:PSE

- [274] H. H. Parker and L. Johnson. Population structure, ecological segregation and reproduction in non-anadromous Arctic charr, *Salvelinus alpinus* (L), in four unexploited lakes in the Canadian high Arctic. *Journal of Fish Biology*, 38(1):123–147, January 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Howe:1991:ESM

- [275] J. C. Howe. Egg surface morphology of *Dialommus fuscus* Gilbert (Pisces: Labrisomidae). *Journal of Fish Biology*, 38(1):149–152, January 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Handy:1991:AMS

- [276] R. D. Handy and F. B. Eddy. The absence of mucus on the secondary lamellae of unstressed rainbow trout, *Oncorhynchus mykiss* (Walbaum).

Journal of Fish Biology, 38(1):153–155, January 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1991:BRa

- [277] Anonymous. Book reviews. *Journal of Fish Biology*, 38(1):157, January 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gerasev:1991:NGF

- [278] P. I. Gerasev and V. K. Starovoitov. The number of generations in freshwater monogeneans per year. *Journal of Fish Biology*, 38(2):159–163, February 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jasra:1991:PMP

- [279] P. K. Jasra, C. L. Talesara, and Shashi Kiran. Polymorphism of myofibrillar proteins in histochemically identified myotomal muscle fibre types of *Heteropneustes fossilis* (Bloch) and *Labeo rohita* (Hamilton). *Journal of Fish Biology*, 38(2):165–173, February 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Harrison:1991:TEA

- [280] K. Harrison. The taxonomy of East African Nile Perch, *Lates* spp. (Perciformes, Centropomidae). *Journal of Fish Biology*, 38(2):175–186, February 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

dosSantos:1991:GEC

- [281] J. dos Santos and M. Jobling. Gastric emptying in cod, *Gadus morhua* L.: emptying and retention of indigestible solids. *Journal of Fish Biology*, 38(2):187–197, February 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dervo:1991:DFS

- [282] B. K. Dervo, O. Hegge, D. O. Hessen, and J. Skurdal. Diel food selection of pelagic Arctic charr, *Salvelinus alpinus* (L.), and brown trout, *Salmo trutta* L., in Lake Atnsjø, SE Norway. *Journal of Fish Biology*, 38(2):199–209, February 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Osman:1991:HST

- [283] A. H. K. Osman and T. Caceci. Histology of the stomach of *Tilapia nilotica* (Linnaeus, 1758) from the River Nile. *Journal of Fish Biology*,

38(2):211–223, February 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Egginton:1991:SRA

- [284] S. Egginton, E. W. Taylor, R. W. Wilson, I. A. Johnston, and T. W. Moon. Stress response in the Antarctic teleosts (*Notothenia neglecta* Nybelin and *N. rossii* Richardson). *Journal of Fish Biology*, 38(2):225–235, February 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Greenberg:1991:IVG

- [285] L. A. Greenberg and E. B. Brothers. Instream variation in growth rates and time of first otolith increment formation for young of the year *Etheostoma simoterum* (Cope) (Perciformes: Percidae). *Journal of Fish Biology*, 38(2):237–242, February 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Smith:1991:DRE

- [286] R. L. Smith, A. J. Paul, and J. M. Paul. Daily ration estimates for yellowfin sole, *Limanda aspera* (Pallas), based on laboratory consumption and growth. *Journal of Fish Biology*, 38(2):243–250, February 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hansen:1991:EGC

- [287] L. P. Hansen and B. Jonsson. Evidence of a genetic component in the seasonal return pattern of Atlantic salmon, *Salmo salar* L. *Journal of Fish Biology*, 38(2):251–258, February 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Heggenes:1991:MUB

- [288] J. Heggenes, Å. Brabrand, and S. J. Saltveit. Microhabitat use by brown trout, *Salmo trutta* L. and Atlantic salmon, *S. salar* L., in a stream: a comparative study of underwater and river bank observations. *Journal of Fish Biology*, 38(2):259–266, February 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Heggenes:1991:EHT

- [289] J. Heggenes and R. Borgstrøm. Effect of habitat types on survival, spatial distribution and production of an allopatric cohort of Atlantic salmon, *Salmo salar* L., under conditions of low competition. *Journal of Fish Biology*, 38(2):267–280, February 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Persson:1991:SFC

- [290] L. Persson, S. Diehl, L. Johansson, G. Andersson, and S. F. Hamrin. Shifts in fish communities along the productivity gradient of temperate lakes — patterns and the importance of size-structured interactions. *Journal of Fish Biology*, 38(2):281–293, February 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dahle:1991:CGM

- [291] G. Dahle. Cod, *Gadus morhua* L., populations identified by mitochondrial DNA. *Journal of Fish Biology*, 38(2):295–303, February 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tweddle:1991:EED

- [292] D. Tweddle and R. Crossley. Effects of an earthquake on demersal cichlid fishes of southern Lake Malaŵi. *Journal of Fish Biology*, 38(2):305–308, February 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Zhong:1991:CDZ

- [293] M.-C. Zhong. Collecting duct zones in the kidney of the freshwater teleost *Siniperca scherzeri* Steindachner (Sinipercinae, Percichthyidae, Perciformes). *Journal of Fish Biology*, 38(2):309–311, February 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Zhang:1991:NTP

- [294] Z. Zhang, N. W. Runham, and T. J. Pitcher. A new technique for preparing fish otoliths for examination of daily growth increments. *Journal of Fish Biology*, 38(2):313–315, February 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lucas:1991:EME

- [295] M. C. Lucas and J. D. Armstrong. Estimation of meal energy intake from heart rate records of pike, *Esox lndus* L. *Journal of Fish Biology*, 38(2):317–319, February 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lodi:1991:DSB

- [296] E. Lodi and G. Malacarne. Differences in sexual behaviour between two phenotypic states of the spined loach, *Cobitis taenia* L. *Journal of Fish Biology*, 38(2):321–323, February 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ritterbusch-Nauwerck:1991:CBS

- [297] B. Ritterbusch-Nauwerck. The coincidence between the shape of the pharyngeal bones of *Vimba elongata* (Valenciennes) (Pisces, Cyprinidae) and of its prey *Dreissena polymorpha* (Pallas) (Bivalva, Dreissenidae). *Journal of Fish Biology*, 38(2):325–326, February 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1991:BRb

- [298] Anonymous. Book reviews. *Journal of Fish Biology*, 38(2):327–329, February 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Quattro:1991:CBE

- [299] J. M. Quattro and S. C. Weeks. Correlations between egg size and egg energetic content within and among biotypes of the genus *Poeciliopsis*. *Journal of Fish Biology*, 38(3):331–334, March 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Linares:1991:ILP

- [300] F. Linares and R. J. Henderson. Incorporation of ¹⁴C-labelled polyunsaturated fatty acids by juvenile turbot, *Scophthalmus maximus* (L.) in vivo. *Journal of Fish Biology*, 38(3):335–347, March 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jennings:1991:ECN

- [301] S. Jennings. The effects of capture, net retention and preservation upon lengths of larval and juvenile bass, *Dicentrarchus labrax* (L.). *Journal of Fish Biology*, 38(3):349–357, March 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hart:1991:IPS

- [302] P. J. B. Hart and S. Ison. The influence of prey size and abundance, and individual phenotype on prey choice by the three-spined stickleback, *Gasterosteus aculeatus* L. *Journal of Fish Biology*, 38(3):359–372, March 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Holm:1991:RHE

- [303] G. Holm, L. Norrgren, and O. Lindén. Reproductive and histopathological effects of long-term experimental exposure to bis(tributyltin)oxide (TBTO) on the three-spined stickleback, *Gasterosteus aculeatus* Linnaeus. *Journal of Fish Biology*, 38(3):373–386, March 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Boujard:1991:GFP

- [304] T. Boujard, F. Lecomte, J.-F. Renno, F. Meunier, and P. Neveu. Growth in four populations of *Leporinus friderici* (Bloch, 1794) (Anostomidae, Teleostei) in French Guiana. *Journal of Fish Biology*, 38(3):387–397, March 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sureau:1991:CHR

- [305] D. Sureau and J.-P. Lagardère. Coupling of heart rate and locomotor activity in sole, *Solea solea* (L.), and bass, *Dicentrarchus labrax* (L.), in their natural environment by using ultrasonic telemetry. *Journal of Fish Biology*, 38(3):399–405, March 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Taylor:1991:CSV

- [306] E. B. Taylor and C. J. Foote. Critical swimming velocities of juvenile sockeye salmon and Kokanee, the anadromous and non-anadromous forms of *Oncorhynchus nerka* (Walbaum). *Journal of Fish Biology*, 38(3):407–419, March 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cossins:1991:ARR

- [307] A. R. Cossins and R. V. Kilbey. Adrenergic responses and the Root effect in erythrocytes of freshwater fish. *Journal of Fish Biology*, 38(3):421–429, March 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sayer:1991:ELDa

- [308] M. D. J. Sayer, J. P. Reader, and R. Morris. Embryonic and larval development of brown trout, *Salmo trutta* L.: exposure to aluminium, copper, lead or zinc in soft, acid water. *Journal of Fish Biology*, 38(3):431–455, March 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pomeroy:1991:CAT

- [309] P. P. Pomeroy. A comparative assessment of temporal variation in diet of powan, *Coregonus lavaretus* (L.), from Loch Lomond and Loch Eck, Scotland, U.K. *Journal of Fish Biology*, 38(3):457–478, March 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1991:BRc

- [310] Anonymous. Book reviews. *Journal of Fish Biology*, 38(3):479–481, March 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1991:A

- [311] Anonymous. Announcement. *Journal of Fish Biology*, 38(4):i, April 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Oikawa:1991:OCR

- [312] S. Oikawa, Y. Itazawa, and M. Gotoh. Ontogenetic change in the relationship between metabolic rate and body mass in a sea bream *Pagrus major* (Temminck & Schlegel). *Journal of Fish Biology*, 38(4):483–496, April 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

deSilva:1991:PEP

- [313] K. H. G. M. de Silva. Population ecology of the paddy field-dwelling fish *Channa gachua* (Günther) (Perciformes, Channidae) in Sri Lanka. *Journal of Fish Biology*, 38(4):497–508, April 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nicieza:1991:DLB

- [314] A. G. Nicieza, F. Braña, and M. M. Toledo. Development of length–bimodality and smolting in wild stocks of Atlantic salmon, *Salmo salar* L., under different growth conditions. *Journal of Fish Biology*, 38(4):509–523, April 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Thorarensen:1991:BVG

- [315] H. Thorarensen, E. McLean, E. M. Donaldson, and A. P. Farrell. The blood vasculature of the gastrointestinal tract in Chinook, *Oncorhynchus tshawytscha* (Walbaum), and Coho, *O. kisutch* (Walbaum), salmon. *Journal of Fish Biology*, 38(4):525–531, April 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pfeiler:1991:GCA

- [316] E. Pfeiler. Glycosaminoglycan composition of anguilliform and elopiiform leptocephali. *Journal of Fish Biology*, 38(4):533–540, April 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kennedy:1991:IFS

- [317] C. R. Kennedy, R. Hartvigsen, and O. Halvorsen. The importance of fish stocking in the dissemination of parasites throughout a group of reservoirs. *Journal of Fish Biology*, 38(4):541–552, April 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Steele:1991:EGS

- [318] C. W. Steele, A. D. Scarfe, and D. W. Owens. Effects of group size on the responsiveness of zebrafish, *Brachydanio rerio* (Hamilton Buchanan), to alanine, a chemical attractant. *Journal of Fish Biology*, 38(4):553–564, April 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mundahl:1991:SPG

- [319] N. D. Mundahl. Sediment processing by gizzard shad, *Dorosoma cepedianum* (Lesueur), in Acton Lake, Ohio, U.S.A. *Journal of Fish Biology*, 38(4):565–572, April 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brummer-Korvenkontio:1991:MPR

- [320] H. Brummer-Korvenkontio, E. Tellervo Valtonen, and O. N. Pugachev. Myxosporea parasites in roach, *Rutilus rutilus* (Linnaeus), from four lakes in central Finland. *Journal of Fish Biology*, 38(4):573–586, April 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Blasco:1991:ESR

- [321] J. Blasco, J. Fernández, and J. Gutiérrez. The effects of starvation and refeeding on plasma amino acid levels in carp, *Cyprinus carpio* L., 1758. *Journal of Fish Biology*, 38(4):587–598, April 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Croy:1991:HRP

- [322] M. I. Croy and R. N. Hughes. Hierarchical response to prey stimuli and associated effects of hunger and foraging experience in the fifteen-spined stickleback, *Spinachia spinachia* (L.). *Journal of Fish Biology*, 38(4):599–607, April 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bayne:1991:RBR

- [323] C. J. Bayne and S. Levy. The respiratory burst of rainbow trout, *Oncorhynchus mykiss* (Walbaum), phagocytes is modulated by sympathetic

neurotransmitters and the 'neuro'peptide ACTH. *Journal of Fish Biology*, 38(4):609–619, April 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ip:1991:EHM

- [324] Y. K. Ip, S. F. Chew, and W. P. Low. Effects of hypoxia on the mud-skipper, *Periophthalmus chrysospilos* (Bleeker, 1853). *Journal of Fish Biology*, 38(4):621–623, April 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wright:1991:CBS

- [325] P. J. Wright. Calcium binding by soluble matrix of the otoliths of Atlantic salmon, *Salmo salar* L. *Journal of Fish Biology*, 38(4):625–627, April 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Winfield:1991:FRC

- [326] I. J. Winfield and C. W. Bean. First record of the carp, *Cyprinus carpio* L., in the Lough Neagh catchment (Northern Ireland). *Journal of Fish Biology*, 38(4):629–630, April 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1991:BRd

- [327] Anonymous. Book reviews. *Journal of Fish Biology*, 38(4):631–633, April 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fan:1991:RPP

- [328] Z. Fan and D. P. Fox. Robertsonian polymorphism in plaice, *Pleuronectes platessa* L., and cod, *Gadus morhua* L., (Pisces Pleuronectiformes and Gadiformes). *Journal of Fish Biology*, 38(5):635–640, May 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Murad:1991:HIA

- [329] A. Murad and A. Houston. Haemoglobin isomorph abundances in splenectomized rainbow trout, *Oncorhynchus mykiss* (Walbaum). *Journal of Fish Biology*, 38(5):641–651, May 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nie:1991:PBC

- [330] P. Nie and C. R. Kennedy. The population biology of *Camallanus lacustris* (Zoega) in eels, *Anguilla anguilla* (Linnaeus), and their status as its host. *Journal of Fish Biology*, 38(5):653–661, May 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Adams:1991:SPE

- [331] C. E. Adams. Shift in pike, *Esox lucius* L., predation pressure following the introduction of ruffe, *Gymnocephalus cernuus* (L.) to Loch Lomond. *Journal of Fish Biology*, 38(5):663–667, May 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Iliadou:1991:FSA

- [332] K. Iliadou. Feeding of *Scardinius acarnanicus* Stephanidis, 1939 (Pisces: Cyprinidae) from Lakes Lysimachia and Trichonis, Greece. *Journal of Fish Biology*, 38(5):669–680, May 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tyler:1991:UVO

- [333] C. R. Tyler, J. P. Sumpter, and P. M. Campbell. Uptake of vitellogenin into oocytes during early vitellogenic development in the rainbow trout, *Oncorhynchus mykiss* (Walbaum). *Journal of Fish Biology*, 38(5):681–689, May 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gardiner:1991:SRI

- [334] R. Gardiner and P. Shackley. Stock and recruitment and inversely density-dependent growth of salmon, *Salmo salar* L., in a Scottish stream. *Journal of Fish Biology*, 38(5):691–696, May 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

dosSantos:1991:FAG

- [335] J. dos Santos and M. Jobling. Factors affecting gastric evacuation in cod, *Gadus morhua* L., fed single-meals of natural prey. *Journal of Fish Biology*, 38(5):697–713, May 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Waller:1991:CMN

- [336] G. N. H. Waller and A. Baranes. Chondrocranium morphology of northern Red Sea triakid sharks and relationships to feeding habits. *Journal of Fish Biology*, 38(5):715–730, May 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Crisp:1991:EIP

- [337] D. T. Crisp and R. H. K. Mann. Effects of impoundment on populations of bullhead *Cottus gobio* L. and minnow, *Phoxinus phoxinus* (L.), in

the basin of Cow Green Reservoir. *Journal of Fish Biology*, 38(5):731–740, May 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Alabaster:1991:ERA

- [338] J. S. Alabaster, P. J. Gough, and W. J. Brooker. The environmental requirements of Atlantic salmon, *Salmo salar* L., during their passage through the Thames Estuary, 1982–1989. *Journal of Fish Biology*, 38(5):741–762, May 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Basaglia:1991:SSW

- [339] F. Basaglia and M. G. Marchetti. Study of the soluble white muscle tissue proteins from fifteen Sparidae species. *Journal of Fish Biology*, 38(5):763–772, May 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sayer:1991:ELDb

- [340] M. D. J. Sayer, J. P. Reader, and R. Morris. Embryonic and larval development of brown trout, *Salmo trutta* L.: exposure to trace metal mixtures in soft water. *Journal of Fish Biology*, 38(5):773–787, May 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Johnson:1991:ECN

- [341] T. P. Johnson, J. D. Altringham, and I. A. Johnston. The effects of Ca^{2+} and neuromuscular blockers on the activation of fish muscle fibres. *Journal of Fish Biology*, 38(5):789–790, May 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Playle:1991:MAE

- [342] R. C. Playle and C. M. Wood. Mechanisms of aluminium extraction and accumulation at the gills of rainbow trout, *Oncorhynchus mykiss* (Walbaum), in acidic soft water. *Journal of Fish Biology*, 38(6):791–805, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Karakousis:1991:MVA

- [343] Y. Karakousis, C. Triantaphyllidis, and P. S. Economidis. Morphological variability among seven populations of brown trout, *Salmo trutta* L., in Greece. *Journal of Fish Biology*, 38(6):807–817, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Golani:1991:BSP

- [344] D. Golani and A. Diamant. Biology of the sweeper, *Pempheris vanicolensis* Cuvier & Valenciennes, a Lessepsian migrant in the eastern Mediterranean, with a comparison with the original Red Sea population. *Journal of Fish Biology*, 38(6):819–827, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Moller:1991:LFP

- [345] H. Möller and B. Dieckwisch. Larval fish production in the tidal River Elbe 1985–1986. *Journal of Fish Biology*, 38(6):829–838, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Swinney:1991:FRF

- [346] G. N. Swinney. The first record of fishes of the rare deep-sea family Megalomycteridae (Lampriformes) from the north-eastern Atlantic. *Journal of Fish Biology*, 38(6):839–843, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Moring:1991:STM

- [347] J. R. Moring and S. W. Moring. Short-term movements of larval and juvenile lumpfish, *Cyclopterus lumpus* L., in tidepools. *Journal of Fish Biology*, 38(6):845–850, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McLean:1991:GRF

- [348] E. McLean, D. B. Parker, C. M. Warby, N. M. Sherwood, and E. M. Donaldson. Gonadotropin release following oral delivery of luteinizing hormone-releasing hormone and its superactive analogue (des-Gly¹⁰ [D-Ala⁶]LHRH ethylamide) to 17 β -oestradiol-primed Coho salmon, *Oncorhynchus kisutch* (Walbaum). *Journal of Fish Biology*, 38(6):851–858, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Peterson:1991:FSA

- [349] R. H. Peterson and D. Gale. Fish species associations in riffle habitat of streams of varying size and acidity in New Brunswick and Nova Scotia. *Journal of Fish Biology*, 38(6):859–871, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sandlund:1991:YCF

- [350] O. T. Sandlund, B. Jonsson, T. F. Naesje, and P. Aass. Year-class fluctuations in vendace, *Coregonus albula* (Linnaeus): Who's got the upper

hand in intraspecific competition? *Journal of Fish Biology*, 38(6):873–885, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Shpigel:1991:TAB

- [351] M. Shpigel and L. Fishelson. Territoriality and associated behaviour in three species of the genus *Cephalopholis* (Pisces: Serranidae) in the Gulf of Aqaba, Red Sea. *Journal of Fish Biology*, 38(6):887–896, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Smith:1991:FIG

- [352] R. L. Smith, J. P. Salini, and S. J. M. Blaber. Food intake and growth in the Moses perch, *Lutjanus russelli* (Bleeker), with reference to predation on penaeid prawns. *Journal of Fish Biology*, 38(6):897–903, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Karjalainen:1991:SGF

- [353] J. Karjalainen. Survival, growth and feeding of vendace, *Coregonus albula* (L.), larvae in net enclosures. *Journal of Fish Biology*, 38(6):905–919, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nie:1991:PBP

- [354] P. Nie and C. R. Kennedy. Population biology of *Proteocephalus macrocephalus* (Creplin) in the European eel, *Anguilla anguilla* (Linnaeus), in two small rivers. *Journal of Fish Biology*, 38(6):921–927, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wright:1991:IMR

- [355] P. J. Wright. The influence of metabolic rate on otolith increment width in Atlantic salmon parr, *Salmo salar* L. *Journal of Fish Biology*, 38(6):929–933, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kubecka:1991:FFJ

- [356] J. Kubecka and M. Bohm. The fish fauna of the Jordan reservoir, one of the oldest man-made lakes in central Europe. *Journal of Fish Biology*, 38(6):935–950, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hert:1991:FCB

- [357] E. Hert. Female choice based on egg-spots in *Pseudotropheus aurora* Burgess 1976, a rock-dwelling cichlid of Lake Malaŵi, Africa. *Journal of*

Fish Biology, 38(6):951–953, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Blachuta:1991:HGT

- [358] J. Blachuta, A. Witkowski, and B. Kokurewicz. An hermaphrodite grayling, *Thymallus thymallus* (L.), from the Nysa Klodzka river (Lower Silesia, Poland). *Journal of Fish Biology*, 38(6):955–957, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Swinney:1991:LAP

- [359] G. N. Swinney. *Lampadena anomala* Parr (Myctophiformes, Myctophidae) in the NE Atlantic. *Journal of Fish Biology*, 38(6):959–960, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Adams:1991:EFI

- [360] C. E. Adams and P. S. Maitland. Evidence of further invasions of Loch Lomond by non-native fish species with the discovery of a roach \times bream, *Rutilus rutilus* (L.) \times *Abramis brama* (L.), hybrid. *Journal of Fish Biology*, 38(6):961–963, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Moreira:1991:SDS

- [361] F. Moreira. Some data on the size, breeding condition and age of swordfish, *Xiphias gladius* Linnaeus, 1758, caught off the Portuguese coast. *Journal of Fish Biology*, 38(6):965–966, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Svalastog:1991:NMA

- [362] D. Svalastog. A note on maximum age of brown trout, *Salmo trutta* L. *Journal of Fish Biology*, 38(6):967–968, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sayer:1991:SSD

- [363] M. D. J. Sayer. Survival and subsequent development of brown trout, *Salmo trutta* L., subjected to episodic exposures of acid, aluminium and copper in soft water during embryonic and larval stages. *Journal of Fish Biology*, 38(6):969–972, June 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kazakov:1991:GPP

- [364] R. V. Kazakov and S. F. Titov. Geographical patterns in the population genetics of Atlantic salmon, *Salmo salar* L., on U.S.S.R. territory, as

evidence for colonization routes. *Journal of Fish Biology*, 39(1):1–6, July 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jellyman:1991:FAA

- [365] D. J. Jellyman. Factors affecting the activity of two species of eel (*Anguilla* spp.) in a small New Zealand lake. *Journal of Fish Biology*, 39(1):7–14, July 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Turner:1991:DOL

- [366] G. F. Turner, A. S. Grimm, O. K. Mhone, R. L. Robinson, and T. J. Pitcher. The diet of *Oreochromis lidole* (Trewavas) and other chambo species in Lakes Malaŵi and Malombe. *Journal of Fish Biology*, 39(1):15–24, July 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Northcott:1991:CCR

- [367] S. J. Northcott. A comparison of circatidal rhythmicity and entrainment by hydrostatic pressure cycles in the rock goby, *Gobius paganellus* L. and the shanny, *Lipophrys pholis* (L.). *Journal of Fish Biology*, 39(1):25–33, July 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rourke:1991:CPP

- [368] A. W. Rourke, R. L. Saunders, and P. R. Harmon. Changes in plasma protein patterns in smolting Atlantic salmon, *Salmo salar* L., are not dependent on changed growth rates. *Journal of Fish Biology*, 39(1):35–43, July 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bakke:1991:HSG

- [369] T. A. Bakke, P. A. Jansen, and C. R. Kennedy. The host specificity of *Gyrodactylus salaris* Malmberg (Platyhelminthes, Monogenea): susceptibility of *Oncorhynchus mykiss* (Walbaum) under experimental conditions. *Journal of Fish Biology*, 39(1):45–57, July 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dorman:1991:IBG

- [370] J. A. Dorman. Investigations into the biology of the garfish, *Belone belone* (L.), in Swedish waters. *Journal of Fish Biology*, 39(1):59–69, July 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Amiri:1991:ESN

- [371] M. H. Amiri. The effects of spinal nerve section on responses of melanophores in the minnow, *Phoxinus phoxinus* (L.). *Journal of Fish Biology*, 39(1):71–82, July 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

vanderVelden:1991:GRT

- [372] J. A. van der Velden, F. A. T. Spanings, G. Flik, C. Zegers, Z. I. Kolar, and S. E. Wendelaar Bongat. Growth rate and tissue magnesium concentration in adult freshwater tilapia, *Oreochromis mossambicus* (Peters), fed diets differing in magnesium content. *Journal of Fish Biology*, 39(1):83–91, July 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fuiman:1991:ITE

- [373] L. A. Fuiman. Influence of temperature on evasive responses of Atlantic herring larvae attacked by yearling herring, *Clupea harengus* L. *Journal of Fish Biology*, 39(1):93–102, July 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wright:1991:DGI

- [374] P. J. Wright, D. Rowe, and J. E. Thorpe. Daily growth increments in the otoliths of Atlantic salmon parr, *Salmo salar* L., and the influence of environmental factors on their periodicity. *Journal of Fish Biology*, 39(1):103–113, July 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Walsh:1991:EDT

- [375] W. A. Walsh, C. Swanson, and C.-S. Lee. Effects of development, temperature and salinity on metabolism in eggs and yolk-sac larvae of milkfish, *Chanos chanos* (Forsskål). *Journal of Fish Biology*, 39(1):115–125, July 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pauly:1991:EOF

- [376] D. Pauly. Estimation of oxygen and food consumption in *Sarda chiliensis* (Cuvier): a correction. *Journal of Fish Biology*, 39(1):127–128, July 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kaiser:1991:PSF

- [377] M. J. Kaiser and M. I. Croy. Population structure of the fifteen-spined stickleback, *Spinachia spinachia* (L.). *Journal of Fish Biology*, 39(1):

129–131, July 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mangor-Jensen:1991:CBH

- [378] A. Mangor-Jensen and I. Huse. On the changes in buoyancy of halibut, *Hippoglossus hippoglossus* (L.), larvae caused by hatching — a theoretical view. *Journal of Fish Biology*, 39(1):133–135, July 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rass:1991:NPH

- [379] Th Rass and Alwyne Wheeler. The nomenclature of the Pacific herring, *Clupea pallasii* Valenciennes, 1847. *Journal of Fish Biology*, 39(1):137–138, July 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1991:BR

- [380] Anonymous. Book reviews. *Journal of Fish Biology*, 39(1):139–141, July 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Glass:1991:CRS

- [381] M. L. Glass, F. T. Rantin, R. M. M. Verzola, M. N. Fernandes, and A. L. Kalinin. Cardio-respiratory synchronization and myocardial function in hypoxic carp, *Cyprinus carpio* L. *Journal of Fish Biology*, 39(2):143–149, August 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Berg:1991:SET

- [382] S. Berg and J. Jorgensen. Stocking experiments with 0 + and 1 + trout parr, *Salmo trutta* L., of wild and hatchery origin: 1. Post-stocking mortality and smolt yield. *Journal of Fish Biology*, 39(2):151–169, August 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jorgensen:1991:SET

- [383] J. Jorgensen and S. Berg. Stocking experiments with 0 + and 1 + trout parr, *Salmo trutta* L., of wild and hatchery origin: 2. Post-stocking movements. *Journal of Fish Biology*, 39(2):171–180, August 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Reader:1991:EEA

- [384] J. P. Reader, T. R. K. Dalziel, R. Morris, M. D. J. Sayer, and C. H. Dempsey. Episodic exposure to acid and aluminium in soft water: survival and recovery of brown trout, *Salmo trutta* L. *Journal of Fish Bi-*

ology, 39(2):181–196, August 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cioni:1991:FSC

- [385] C. Cioni, D. de Merich, E. Cataldi, and S. Cataudella. Fine structure of chloride cells in freshwater- and seawater-adapted *Oreochromis niloticus* (Linnaeus) and *Oreochromis mossambicus* (Peters). *Journal of Fish Biology*, 39(2):197–209, August 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Umezawa:1991:FIO

- [386] A. Umezawa and K. Tsukamoto. Factors influencing otolith increment formation in Japanese eel, *Anguilla japonica* t. & s., elvers. *Journal of Fish Biology*, 39(2):211–223, August 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

VanderMeeren:1991:AFF

- [387] T. Van der Meeren. Algae as first food for cod larvae, *Gadus morhua* L.: filter feeding or ingestion by accident? *Journal of Fish Biology*, 39(2):225–237, August 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Santos:1991:CMD

- [388] E. A. Santos and A. S. Vinagre. Carbohydrate metabolism during embryonic and larval development of *Odonthestes humensis* (De Buen, 1953) (Pisces — Atherinidae). *Journal of Fish Biology*, 39(2):239–244, August 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Drake:1991:CSF

- [389] P. Drake and A. M. Arias. Composition and seasonal fluctuations of the ichthyoplankton community in a shallow tidal channel of Cadiz Bay (S.W. Spain). *Journal of Fish Biology*, 39(2):245–263, August 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Israelson:1991:ICA

- [390] O. Israelson, A. Petersson, E. Bengtén, E. J. Wiersma, J. Anderson, G. Gezelius, and L. Pilstrom. Immunoglobulin concentration in Atlantic cod, *Gadus morhua* L., serum and cross-reactivity between anti-cod-antibodies and immunoglobulins from other species. *Journal of Fish Biology*, 39(2):265–278, August 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cross:1991:ING

- [391] M. L. Cross and R. A. Matthews. Identification of a new granulocyte type in the skin of carp *Cyprinus carpio* (L.). *Journal of Fish Biology*, 39(2):279–283, August 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lobon-Cervia:1991:IEU

- [392] J. Lobon-Cervia, C. Montañés, and A. De Sostoa. Influence of environment upon the life history of gudgeon, *Gobio gobio* (L.): a recent and successful colonizer of the Iberian Peninsula. *Journal of Fish Biology*, 39(3):285–300, September 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Berman:1991:BTH

- [393] C. H. Berman and T. P. Quinn. Behavioural thermoregulation and homing by spring Chinook salmon, *Oncorhynchus tshawytscha* (Walbaum), in the Yakima River. *Journal of Fish Biology*, 39(3):301–312, September 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hanchet:1991:DSD

- [394] S. Hanchet. Diet of spiny dogfish, *Squalus acanthias* Linnaeus, on the east coast, South Island, New Zealand. *Journal of Fish Biology*, 39(3):313–323, September 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lucas:1991:DMM

- [395] M. C. Lucas, I. G. Priede, J. D. Armstrong, A. N. Z. Gindy, and L. De Vera. Direct measurements of metabolism, activity and feeding behaviour of pike, *Esox lucius* L., in the wild, by the use of heart rate telemetry. *Journal of Fish Biology*, 39(3):325–345, September 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Crisp:1991:SCEa

- [396] D. T. Crisp and M. A. Hurley. Stream channel experiments on downstream movement of recently emerged trout, *Salmo trutta* L. and salmon, *S. salar* L. — I. Effect of four different water velocity treatments upon dispersal rate. *Journal of Fish Biology*, 39(3):347–361, September 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Crisp:1991:SCEb

- [397] D. T. Crisp and M. A. Hurley. Stream channel experiments on downstream movement of recently emerged trout, *Salmo trutta* L., and salmon,

S. salar L. — II. Effects of constant and changing velocities and of day and night upon dispersal rate. *Journal of Fish Biology*, 39(3):363–370, September 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Crisp:1991:SCEc

- [398] D. T. Crisp. Stream channel experiments on downstream movement of recently emerged trout, *Salmo trutta* L., and salmon, *S. salar* L. — III. Effects of developmental stage and day and night upon dispersal. *Journal of Fish Biology*, 39(3):371–381, September 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lenke:1991:OGC

- [399] R. Lenke. The opercular gland of the cleaner-wrasse *Labroides dimidiatus* (Labridae), a light-, electron and scanning electron microscopic investigation. *Journal of Fish Biology*, 39(3):383–392, September 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Economou:1991:GMD

- [400] A. N. Economou, Ch. Daoulas, and T. Psarras. Growth and morphological development of chub, *Leuciscus cephalus* (L.), during the first year of life. *Journal of Fish Biology*, 39(3):393–408, September 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Raso:1991:SPI

- [401] D. S. Raso. A study of the peripheral innervation and muscle fibre types of *Ictalurus nebulosus* (Lesueur) and *Ictalurus punctatus* (Rafinesque). *Journal of Fish Biology*, 39(3):409–419, September 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bisbal:1991:CSH

- [402] G. A. Bisbal and J. L. Specker. Cortisol stimulates hypo-osmoregulatory ability in Atlantic salmon, *Salmo salar* L. *Journal of Fish Biology*, 39(3):421–432, September 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Moreira:1991:ADP

- [403] F. Moreira, J. L. Costa, P. R. Almeida, C. Assis, and M. J. Costa. Age determination in *Pomatoschistus minutus* (Pallas) and *Pomatoschistus microps* (Kreyer) (Pisces: Gobiidae) from the upper Tagus estuary, Portugal. *Journal of Fish Biology*, 39(3):433–440, September 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nie:1991:SPD

- [404] P. Nie and C. R. Kennedy. Seasonal population dynamics of *Paraquimpevia tenevima* (Linstow) (Nematoda) in the European eel *Anguilla anguilla* (Linnaeus) in three localities of southwest England. *Journal of Fish Biology*, 39(3):441–449, September 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jorde:1991:NBG

- [405] P. E. Jorde, A. Gitt, and N. Ryman. New biochemical genetic markers in the brown trout (*Salmo trutta* L.). *Journal of Fish Biology*, 39(3):451–454, September 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1991:BRf

- [406] Anonymous. Book reviews. *Journal of Fish Biology*, 39(3):455–458, September 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Woo:1991:IOA

- [407] N. Y. S. Woo, A. S. B. Chung, and T. B. Ng. Influence of oral administration of 3,5,3'-triiodo-thyronine on growth, digestion, food conversion and metabolism in the underyearling red sea bream, *Chrysophrys major* (Temminck & Schlegel). *Journal of Fish Biology*, 39(4):459–468, October 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McWilliams:1991:WQD

- [408] P. G. McWilliams and K. L. Shephard. Water quality during egg incubation influences yolk-sac fry sodium kinetics in Atlantic salmon, *Salmo salar* L.: a possible mechanism of adaptation to acid waters. *Journal of Fish Biology*, 39(4):469–483, October 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Weeks:1991:LHP

- [409] S. C. Weeks and J. M. Quattro. Life-history plasticity under resource stress in a clonal fish (Poeciliidae: Poeciliopsis). *Journal of Fish Biology*, 39(4):485–494, October 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Svedang:1991:EFQ

- [410] H. Svedäng. Effects of food quality on maturation rate in Arctic charr, *Salvelinus alpinus* (L.). *Journal of Fish Biology*, 39(4):495–504, October 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Banks:1991:ALC

- [411] M. A. Banks, G. J. Holt, and J. M. Wakeman. Age-linked changes in salinity tolerance of larval spotted seatrout (*Cynoscion nebulosus*, Cuvier). *Journal of Fish Biology*, 39(4):505–514, October 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Thoney:1991:PDC

- [412] D. A. Thoney. Population dynamics and community analysis of the parasite fauna of juvenile spot, *Leiostomus xanthurus* (Lacépède), and Atlantic croaker, *Micropogonias undulatus* (Linnaeus, Sciaenidae) in two estuaries along the middle Atlantic coast of the United States. *Journal of Fish Biology*, 39(4):515–534, October 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anderson:1991:MDM

- [413] T. A. Anderson. Mechanisms of digestion in the marine herbivore, the luderick, *Girella tricuspidata* (Quoy and Gaimard). *Journal of Fish Biology*, 39(4):535–547, October 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Martin:1991:STD

- [414] P. Martín and A. Sabates. Spatio-temporal distribution pattern of the red band-fish *Cepola rubescens* Linnaeus at different stages of its life cycle in the northwestern Mediterranean. *Journal of Fish Biology*, 39(4):549–557, October 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Franklin:1991:PFM

- [415] C. E. Franklin and P. S. Davie. The pericardium facilitates pressure work in the eel heart. *Journal of Fish Biology*, 39(4):559–564, October 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Heath:1991:MCS

- [416] D. D. Heath, J. W. Heath, and G. K. Iwama. Maturation in Chinook salmon, *Oncorhynchus tshawytscha* (Walbaum): early identification based on the development of a bimodal weight-frequency distribution. *Journal of Fish Biology*, 39(4):565–575, October 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lorenzen:1991:PDL

- [417] K. Lorenzen, S. A. Des Clers, and K. Anders. Population dynamics of lymphocystis disease in estuarine flounder, *Platichthys flesus* (L.). *Jour-*

Journal of Fish Biology, 39(4):577–587, October 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Stergiou:1991:FHO

- [418] K. I. Stergiou and H. Fourtouni. Food habits, ontogenetic diet shift and selectivity in *Zeus faber* Linnaeus, 1758. *Journal of Fish Biology*, 39(4):589–603, October 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Stewart:1991:DGI

- [419] B. D. Stewart and G. P. Jenkins. Daily growth increments in the otoliths of juvenile greenback flounder, *Rhombosolea tapirina* Günther, 1862. *Journal of Fish Biology*, 39(4):605–608, October 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Moffett:1991:GMI

- [420] I. J. J. Moffett and W. W. Crosier. Genetic marker identification in Atlantic salmon (*Salmo salar* L.) by electrophoretic analysis of low risk tissues. *Journal of Fish Biology*, 39(4):609–611, October 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pfeiler:1991:GCT

- [421] E. Pfeiler, J. Donnelly, J. J. Tores, and R. E. Crabtrees. Glycosaminoglycan composition of tarpon (*Megalops atlanticus*) and ladyfish (*Elops saurus*) leptocephali. *Journal of Fish Biology*, 39(4):613–615, October 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Winemiller:1991:CES

- [422] K. O. Winemiller. Comparative ecology of *Serranochromis* species (Teleostei: Cichlidae) in the Upper Zambezi River floodplain. *Journal of Fish Biology*, 39(5):617–639, November 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Marshall:1991:SAV

- [423] B. E. Marshall. Seasonal and annual variations in the abundance of the clupeid *Limnothrissa miodon* in Lake Kivu. *Journal of Fish Biology*, 39(5):641–648, November 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Danzmann:1991:MDD

- [424] R. G. Danzmann, M. M. Ferguson, S. Skúlason, S. S. Snorrason, and D. L. G. Noakes. Mitochondrial DNA diversity among four sympatric

morphs of Arctic charr, *Salvelinus alpinus* L., from Thingvallavatn, Iceland. *Journal of Fish Biology*, 39(5):649–659, November 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tsimenides:1991:DFC

- [425] N. Tsimenides, G. Tserpes, A. Machias, and A. Kallianiotis. Distribution of fishes on the Cretan shelf. *Journal of Fish Biology*, 39(5):661–672, November 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mattson:1991:NMD

- [426] N. S. Mattson. A new method to determine sex and gonad size in live fishes by using ultrasonography. *Journal of Fish Biology*, 39(5):673–677, November 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bauer:1991:SPD

- [427] O. N. Bauer. Spread of parasites and diseases of aquatic organisms by acclimatization: a short review. *Journal of Fish Biology*, 39(5):679–686, November 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Biagiанти-Risbourg:1991:FSH

- [428] S. Biagiанти-Risbourg. Fine structure of hepatocytes in juvenile grey mullets: *Liza saliens* Risso, *L. ramada* Risso and *L. aurata* Risso (Teleostei, Mugilidae). *Journal of Fish Biology*, 39(5):687–703, November 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Maisse:1991:SMS

- [429] G. Maisse, B. Mourot, B. Breton, A. Fostier, O. Marcuzzi, P. Y. Le Bail, J. L. Baglinière, and A. Richard. Sexual maturity in sea trout, *Salmo trutta* L., running up the River Calonne (Normandy, France) at the ‘finnock’ stage. *Journal of Fish Biology*, 39(5):705–715, November 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pen:1991:BGM

- [430] L. J. Pen, I. C. Potter, and R. W. Hilliard. Biology of *Galaxiella munda* McDowall (Teleostei: Galaxiidae), including a comparison of the reproductive strategies of this and three other local species. *Journal of Fish Biology*, 39(5):717–731, November 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ranta:1991:SSA

- [431] E. Ranta and V. Kaitala. School size affects individual feeding success in three-spined sticklebacks (*Gasterosteus aculeatus* L.). *Journal of Fish Biology*, 39(5):733–737, November 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jonsson:1991:ECS

- [432] N. Jonsson, B. Jonsson, and L. P. Hansen. Energetic cost of spawning in male and female Atlantic salmon (*Salmo salar* L.). *Journal of Fish Biology*, 39(5):739–744, November 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kime:1991:SCS

- [433] D. E. Kime, K. P. Lone, and A. Al-Marzouk. Seasonal changes in serum steroid hormones in a protandrous teleost, the sobaity (*Sparidentex hasta* Valenciennes). *Journal of Fish Biology*, 39(5):745–753, November 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Potts:1991:RFA

- [434] W. T. W. Potts and A. J. C. Malloch. River flow, Atlantic salmon (*Salmo salar* L.) movement and rod catch in the Aberdeenshire Dee. *Journal of Fish Biology*, 39(5):755–764, November 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Damsgaard:1991:SCA

- [435] B. Damsgård. Smolting characters in anadromous and resident Arctic charr, *Salvelinus alpinus* (L.). *Journal of Fish Biology*, 39(5):765–774, November 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Turner:1991:RIN

- [436] G. F. Turner, J. Witimani, R. L. Robinson, A. S. Grimm, and T. J. Pitcher. Reproductive isolation and the nest sites of Lake Malaŵi chambo, *Oveochromis* (Nyasalapia) spp. *Journal of Fish Biology*, 39(6):775–782, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kapasa:1991:PIC

- [437] C. K. Kapasa and I. G. Cowx. Post-impoundment changes in the fish fauna of Lake Itzhi-tezhi, Zambia. *Journal of Fish Biology*, 39(6):783–793, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Northcott:1991:MCG

- [438] S. J. Northcott and A. M. Bullock. The morphology of the club glands on the dorsal fin of mature male shannies, *Lipophrys pholis* (L.) (Blenniidae: Teleostei). *Journal of Fish Biology*, 39(6):795–806, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Creech:1991:EIP

- [439] S. Creech. An electrophoretic investigation of populations of *Atherina boyeri* Risso, 1810 and *A. presbyter* Cuvier, 1829 (Teleostei: Atherinidae): genetic evidence in support of the two species. *Journal of Fish Biology*, 39(6):807–816, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Alvarez:1991:STC

- [440] M. C. Alvarez, J. Otis, A. Amores, and K. Guise. Short-term cell culture technique for obtaining chromosomes in marine and freshwater fish. *Journal of Fish Biology*, 39(6):817–824, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Beveridge:1991:IBS

- [441] M. C. M. Beveridge, P. K. Sikdar, G. N. Frerichs, and S. Millar. The ingestion of bacteria in suspension by the common carp *Cyprinus carpio* L. *Journal of Fish Biology*, 39(6):825–831, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Norrgren:1991:AEA

- [442] L. Norrgren, A. Wicklund Gl, and O. Malmberg. Accumulation and effects of aluminium in the minnow (*Phoxinus phoxinus* L.) at different pH levels. *Journal of Fish Biology*, 39(6):833–847, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Milton:1991:AGT

- [443] D. A. Milton, S. J. M. Blaber, and N. J. F. Rawlinson. Age and growth of three species of tuna baitfish (genus: *Spratelloides*) in the tropical Indo-Pacific. *Journal of Fish Biology*, 39(6):849–866, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Patzner:1991:MMR

- [444] R. A. Patzner. Morphology of the male reproductive system of, *Coraliozetus angelica* (Pisces, Blennioidei, Chaenopsidae). *Journal of Fish Biology*, 39(6):867–872, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Carter:1991:BGC

- [445] C. G. Carter and A. E. Brafield. The bioenergetics of grass carp, *Ctenopharyngodon idella* (Val.): energy allocation at different planes of nutrition. *Journal of Fish Biology*, 39(6):873–887, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rogers:1991:OYS

- [446] S. I. Rogers. The occurrence of young scaldfish *Arnoglossus latevna* (Walbaum, 1792) in the eastern Irish Sea. *Journal of Fish Biology*, 39(6):889–891, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brafield:1991:EDZ

- [447] A. E. Brafield and A. Vokodie. Effects of dietary zinc on the assimilation efficiency of carp (*Cyprinus carpio* L.). *Journal of Fish Biology*, 39(6):893–895, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nie:1991:OSD

- [448] P. Nie and C. R. Kennedy. Occurrence and seasonal dynamics of *Pseudodactylogyrus anguillae* (Yin & Sproston) (Monogenea) in eel, *Anguilla anguilla* (L.), in England. *Journal of Fish Biology*, 39(6):897–900, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cardona:1991:MTN

- [449] L. Cardona. Measurement of trophic niche breadth using occurrence frequencies. *Journal of Fish Biology*, 39(6):901–903, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Heggenes:1991:BSD

- [450] J. Heggenes and N. B. Metcalfe. Bimodal size distributions in wild juvenile Atlantic salmon populations and their relationship with age at smolt migration. *Journal of Fish Biology*, 39(6):905–907, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Burton:1991:IRN

- [451] M. P. M. Burton. Induction and reversal of the non-reproductive state in winter flounder, *Pseudopleuronectes americanus* Walbaum, by manipulating food availability. *Journal of Fish Biology*, 39(6):909–910, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1991:BRg

- [452] Anonymous. Book reviews. *Journal of Fish Biology*, 39(6):911–916, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1991:BRh

- [453] Anonymous. Book received. *Journal of Fish Biology*, 39(6):915–916, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Utter:1991:BGF

- [454] F. M. Utter. Biochemical genetics and fishery management: an historical perspective. *Journal of Fish Biology*, 39(sA):1–20, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Shaklee:1991:GSS

- [455] J. B. Shaklee, D. C. Klaybor, S. Young, and B. A. White. Genetic stock structure of odd-year pink salmon, *Oncorhynchus gorbuscha* (Walbaum), from Washington and British Columbia and potential mixed-stock fisheries applications. *Journal of Fish Biology*, 39(sA):21–34, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mcelligott:1991:PVW

- [456] E. A. Mcelligott and T. F. Cross. Protein variation in wild Atlantic salmon, with particular reference to southern Ireland. *Journal of Fish Biology*, 39(sA):35–42, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jorstad:1991:PSA

- [457] K. E. Jørstad, D. P. F. King, and G. Naevdal. Population structure of Atlantic herring, *Clupea harengus* L. *Journal of Fish Biology*, 39(sA):43–52, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Roldan:1991:EPA

- [458] M. I. Roldán. Enzymatic polymorphisms in the Argentinian hake, *Merluccius hubbsi* Marini, of the Argentinian continental shelf. *Journal of Fish Biology*, 39(sA):53–59, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Baby:1991:GSR

- [459] M.-C. Baby, L. Bernatchez, and J. J. Dodson. Genetic structure and relationships among anadromous and landlocked populations of rainbow smelt, *Osmerus mordax*, Mitchill, as revealed by mtDNA restriction analysis. *Journal of Fish Biology*, 39(sA):61–68, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Danzmann:1991:GDW

- [460] R. G. Danzmann, P. E. Ihssen, and P. D. N. Hebert. Genetic discrimination of wild and hatchery populations of brook charr, *Salvelinus fontinalis* (Mitchill), in Ontario using mitochondrial DNA analysis. *Journal of Fish Biology*, 39(sA):69–77, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ferguson:1991:IEP

- [461] M. M. Ferguson, R. G. Danzmann, and J. A. Hutchings. Incongruent estimates of population differentiation among brook charr, *Salvelinus fontinalis*, from Cape Race, Newfoundland, Canada, based upon allozyme and mitochondrial DNA variation. *Journal of Fish Biology*, 39(sA):79–85, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Partti-Pellinen:1991:MDV

- [462] K. A. Partti-Pellinen, K. Elo, T. K. Palva, P. Tuunainen, and M. O. K. Hakumaki. Mitochondrial DNA variation of *Salvelinus* species found in Finland. *Journal of Fish Biology*, 39(sA):87–92, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pastene:1991:ERS

- [463] L. A. Pastene, K. Numachi, and K. Tsukamoto. Examination of reproductive success of transplanted stocks in an amphidromous fish, *Plecoglossus altivelis* (Temminck et Schlegel) using mitochondrial DNA and isozyme markers. *Journal of Fish Biology*, 39(sA):93–100, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Carr:1991:DAM

- [464] S. M. Carr and H. D. Marshall. A direct approach to the measurement of genetic variation in fish populations: applications of the polymerase chain reaction to studies of Atlantic cod, *Gadus morhua* L. *Journal of Fish Biology*, 39(sA):101–107, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hauser:1991:EST

- [465] L. Hauser, A. R. Beaumont, G. T. H. Marshall, and R. J. Wyatt. Effects of sea trout stocking on the population genetics of landlocked brown trout, *Salmo trutta* L., in the Conwy River system, North Wales, U.K. *Journal of Fish Biology*, 39(sA):109–116, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Moran:1991:FSP

- [466] P. Morán, A. M. Pendás, E. Garcia-Vázquez, and J. Izquierdo. Failure of a stocking policy, of hatchery reared brown trout, *Salmo trutta* L., in Asturias, Spain, detected using LDH-5* as a genetic marker. *Journal of Fish Biology*, 39(sA):117–121, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Skaala:1991:FSB

- [467] Ø. Skaala, K. E. Jørstad, and R. Borgstrøm. Fine-spotted brown trout: genetic aspects and the need for conservation. *Journal of Fish Biology*, 39(sA):123–130, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Turner:1991:RDS

- [468] B. J. Turner, J. F. Elder, Jr., and T. F. Lauchlin. Repetitive DNA sequences and the divergence offish populations: some hopeful beginnings. *Journal of Fish Biology*, 39(sA):131–142, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Leibel:1991:IAN

- [469] W. S. Leibel, K. N. Bass, and J. E. Eshbach. An immunochemical analysis of the novel liver-restricted LDH activity from cichlid fishes (Cichlidae: Teleostei) confirms its non-orthology with piscine LDH-C. *Journal of Fish Biology*, 39(sA):143–150, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rico:1991:SPT

- [470] C. Rico, U. Kuhnlein, and G. J. FitzGerald. Spawning patterns in the three-spined stickleback (*Gasterosteus aculeatus* L.): an evaluation by DNA fingerprinting. *Journal of Fish Biology*, 39(sA):151–158, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wirgin:1991:DUS

- [471] I. I. Wirgin and L. Maceda. Development and use of striped bass-specific RFLP probes. *Journal of Fish Biology*, 39(sA):159–167, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Powers:1991:ESG

- [472] D. A. Powers, T. Lauerman, D. Crawford, M. Smith, I. Gonzalez-Villasenor, and L. DiMichelet. The evolutionary significance of genetic variation at enzyme synthesizing loci in the teleost *Fundulus heteroclitus*. *Journal of Fish Biology*, 39(sA):169–184, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jordan:1991:GPV

- [473] W. C. Jordan and A. F. Youngson. Genetic protein variation and natural selection in Atlantic salmon (*Salmo salar*, L.) parr. *Journal of Fish Biology*, 39(sA):185–192, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vuorinen:1991:GCV

- [474] Jukka Vuorinen, Tor F. Næsje, and Odd Terje Sandlund. Genetic changes in a vendace *Covegonus albula* (L.) population, 92 years after introduction. *Journal of Fish Biology*, 39(sA):193–201, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Shaw:1991:PDT

- [475] P. W. Shaw, G. R. Carvalho, A. E. Magurran, and B. H. Seghers. Population differentiation in Trinidadian guppies (*Poecilia reticulata*): patterns and problems. *Journal of Fish Biology*, 39(sA):203–209, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ryman:1991:CGC

- [476] N. Ryman. Conservation genetics considerations in fishery management. *Journal of Fish Biology*, 39(sA):211–224, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Stock:1991:SLM

- [477] D. W. Stock, J. K. Gibbons, and G. S. Whitt. Strengths and limitations of molecular sequence comparisons for inferring the phylogeny of the major groups of fishes. *Journal of Fish Biology*, 39(sA):225–236, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Keenan:1991:PAS

- [478] C. P. Keenan. Phylogeny of Australian species of flatheads (Teleostei, Platycephalidae) as determined by allozyme electrophoresis. *Journal of Fish Biology*, 39(sA):237–249, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Billington:1991:PRA

- [479] N. Billington, R. G. Danzmann, P. D. N. Hebert, and R. D. Wards. Phylogenetic relationships among four members of *Stizostedion* (Percidae) determined by mitochondrial DNA and allozyme analyses. *Journal of Fish Biology*, 39(sA):251–258, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Phillips:1991:NDS

- [480] R. B. Phillips and K. A. Pleyte. Nuclear DNA and salmonid phylogenetics. *Journal of Fish Biology*, 39(sA):259–275, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mcveigh:1991:SIP

- [481] H. P. Mcveigh and W. S. Davidson. A salmonid phylogeny inferred from mitochondrial cytochrome *b* gene sequences. *Journal of Fish Biology*, 39(sA):277–282, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bernatchez:1991:PRA

- [482] L. Bernatchez, F. Colombani, and J. J. Dodson. Phylogenetic relationships among the subfamily *Coregoninae* as revealed by mitochondrial DNA restriction analysis. *Journal of Fish Biology*, 39(sA):283–290, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McKay:1991:ICT

- [483] S. I. McKay and P. J. Miller. Isozyme criteria in the testing of phyletic relationships between species of *Gobius* and related eastern Atlantic–Mediterranean genera (Teleostei: Gobiidae). *Journal of Fish Biology*, 39(sA):291–299, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sodsuk:1991:MST

- [484] P. Sodsuk and B. J. McAndrew. Molecular systematics of three tilapia genera *Tilapia*, *Sarotherodon* and *Oreochromis* using allozyme data.

Journal of Fish Biology, 39(sA):301–308, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Verspoor:1991:IHF

- [485] E. Verspoor and J. Hammart. Introgressive hybridization in fishes: the biochemical evidence. *Journal of Fish Biology*, 39(sA):309–334, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hurrell:1991:NHB

- [486] R. H. Hurrell and D. J. Price. Natural hybrids between Atlantic salmon, *Salmo salar* L., and trout, *Salmo trutta* L., in juvenile salmonid populations in south-west England. *Journal of Fish Biology*, 39(sA):335–341, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jansson:1991:HFN

- [487] H. Jansson, I. Holmgren, K. Wedin, and T. Anderson. High frequency of natural hybrids between Atlantic salmon, *Salmo salar* L., and brown trout, *S. trutta* L., in a Swedish river. *Journal of Fish Biology*, 39(sA):343–348, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Slechtova:1991:BGC

- [488] V. Slechtova, V. Slechta, Do Doan Hiep, and M. Valenta. Biochemical genetic comparison of bighead (*Hypophthalmichthys molitrix*), silver carp (*Aristichthys nobilis*), and their hybrids reared in Czechoslovakia. *Journal of Fish Biology*, 39(sA):349–357, December 1991. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kirpichnikov:1992:ANI

- [489] V. S. Kirpichnikov. Adaptive nature of intrapopulational biochemical polymorphism in fish. *Journal of Fish Biology*, 40(1):1–16, January 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kartavtsev:1992:AHM

- [490] Y. P. Kartavtsev. Allozyme heterozygosity and morphological homeostasis in pink salmon, *Oncorhynchus gorbuscha* (Walbaum): evidences from family analysis. *Journal of Fish Biology*, 40(1):17–24, January 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cross:1992:ISA

- [491] T. F. Cross, C. P. R. Mills, and M. de Courcy Williams. An intensive study of allozyme variation in freshwater resident and anadromous trout, *Salmo trutta* L., in western Ireland. *Journal of Fish Biology*, 40(1):25–32, January 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ginatulina:1992:GDA

- [492] L. K. Ginatulina. Genetic differentiation among chum salmon, *Oncorhynchus keta* (Walbaum), from Primorye and Sakhalin. *Journal of Fish Biology*, 40(1):33–38, January 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tzeng:1992:ESF

- [493] W.-N. Tzeng and S.-Y. Yu. Effects of starvation on the formation of daily growth increments in the otoliths of milkfish, *Chanos chanos* (Forsskål), larvae. *Journal of Fish Biology*, 40(1):39–48, January 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rankin:1992:TPE

- [494] C. H. Rankin and P. Moller. Temporal patterning of electric organ discharges in the African electric catfish, *Malapterurus electricus* (Gmelin). *Journal of Fish Biology*, 40(1):49–58, January 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Legendre:1992:CSM

- [495] M. Legendre, G. G. Teugels, C. Cauty, and B. Jalabert. A comparative study on morphology, growth rate and reproduction of *Clarias gariepinus* (Burchell, 1822), *Heterobranchus longifilis* Valenciennes, 1840, and their reciprocal hybrids (Pisces, Clariidae). *Journal of Fish Biology*, 40(1):59–79, January 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Teugels:1992:KAA

- [496] G. G. Teugels, C. Ozouf-costz, M. Legendre, and M. Parrent. A karyological analysis of the artificial hybridization between *Clarias gariepinus* (Burchell, 1822) and *Heterobranchus longifilis* Valenciennes, 1840 (Pisces; Clariidae). *Journal of Fish Biology*, 40(1):81–86, January 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Teugels:1992:EVA

- [497] G. G. Teugels, R. Guyomard, and M. Legendre. Enzymatic variation in African clariid catfishes. *Journal of Fish Biology*, 40(1):87–96, January 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kisia:1992:RMF

- [498] S. M. Kisia and G. M. Hughes. Red muscle fibre and capillary dimensions in different sizes of a tilapia, *Oreochromis niloticus* (Trewavas). *Journal of Fish Biology*, 40(1):97–106, January 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bell:1992:SVR

- [499] J. D. Bell, J. M. Lyle, C. M. Bulman, K. J. Graham, G. M. Newton, and D. C. Smith. Spatial variation in reproduction, and occurrence of non-reproductive adults, in orange roughy, *Hoplostethus atlanticus* Collett (Trachichthyidae), from south-eastern Australia. *Journal of Fish Biology*, 40(1):107–122, January 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Magalhães:1992:FEI

- [500] M. F. Magalhães. Feeding ecology of the Iberian cyprinid *Barbus bocagei* Steindachner, 1865 in a lowland river. *Journal of Fish Biology*, 40(1):123–133, January 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Armstrong:1992:RIT

- [501] J. D. Armstrong, A. D. F. Johnstone, and M. C. Lucas. Retention of intragastric transmitters after voluntary ingestion by captive cod, *Gadus morhua* L. *Journal of Fish Biology*, 40(1):135–137, January 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Golani:1992:RHF

- [502] D. Golani. *Rhabdosargus haffara* (Forsskål, 1775) and *Sphyræna flavicauda* Rüppell, 1833 — new Red Sea immigrants in the Mediterranean. *Journal of Fish Biology*, 40(1):139–140, January 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Olafsen:1992:IAU

- [503] J. A. Olafsen and G. H. Hansen. Intact antigen uptake in intestinal epithelial cells of marine fish larvae. *Journal of Fish Biology*, 40(2):141–156, February 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Calvo:1992:EPS

- [504] J. Calvo, E. Morriconi, G. A. Rae, and N. A. San Roman. Evidence of protandry in a subantarctic notothenid, *Eleginops maclovinus* (Cuv. & Val., 1830) from the Beagle Channel, Argentina. *Journal of Fish Biology*, 40(2):157–164, February 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kaseloo:1992:BSR

- [505] P. A. Kaseloo, A. H. Weatherley, J. Lotimer, and M. D. Farina. A biotelemetry system recording fish activity. *Journal of Fish Biology*, 40(2):165–179, February 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lecomte-Finiger:1992:CUO

- [506] R. Lecomte-Finiger. The crystalline ultrastructure of otoliths of the eel (*A. anguilla* L. 1758). *Journal of Fish Biology*, 40(2):181–190, February 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Stables:1992:AMT

- [507] T. B. Stables and G. L. Thomas. Acoustic measurement of trout distributions in Spada Lake, Washington, using stationary transducers. *Journal of Fish Biology*, 40(2):191–203, February 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hart:1992:CPS

- [508] P. J. B. Hart and A. B. Gill. Constraints on prey size selection by the three-spined stickleback: energy requirements and the capacity and fullness of the gut. *Journal of Fish Biology*, 40(2):205–218, February 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hartley:1992:MDA

- [509] S. E. Hartley, S. E. Bartlett, and W. S. Davidson. Mitochondrial DNA analysis of Scottish populations of Arctic charr, *Salvelinus alpinus* (L.). *Journal of Fish Biology*, 40(2):219–224, February 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Yamamoto:1992:CMD

- [510] T. S. Yamamoto and W. Kobayashi. Closure of the micropyle during embryonic development of some pelagic fish eggs. *Journal of Fish Biology*, 40(2):225–241, February 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mayr:1992:TMS

- [511] M. Mayr and A. Berger. Territoriality and microhabitat selection in two intertidal New Zealand fish. *Journal of Fish Biology*, 40(2):243–256, February 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brewer:1992:SPS

- [512] D. T. Brewer and K. Warburton. Selection of prey from a seagrass/mangrove environment by golden lined whiting, *Sillago analis* (Whitley). *Journal of Fish Biology*, 40(2):257–271, February 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dabrowski:1992:ACF

- [513] K. Dabrowski. Ascorbate concentration in fish ontogeny. *Journal of Fish Biology*, 40(2):273–279, February 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Berglund:1992:ESM

- [514] I. Berglund, I. Mayer, and B. Borg. Effects of sexual maturation, castration, and androgen implants on growth in one- and two-year-old parr in a Baltic Atlantic salmon (*Salmo salar* L.) stock. *Journal of Fish Biology*, 40(2):281–292, February 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Peltonen:1992:EMR

- [515] H. Peltonen and J. Horppila. The effects of mass removal on the roach *Rutilus rutilus* (L.) stock of Lake Vesijärvi estimated with VPA within one season. *Journal of Fish Biology*, 40(2):293–301, February 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mustafa:1992:EHV

- [516] T. Mustafa and F. B. Jensen. Effect of hypoxia on in vivo thromboxane and prostacyclin levels in arterial blood of rainbow trout, *Oncorhynchus mykiss* (Walbaum). *Journal of Fish Biology*, 40(2):303–306, February 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Turner:1992:AMP

- [517] B. J. Turner, W. P. Davis, and D. S. Taylor. Abundant males in populations of a selfing hermaphrodite fish, *Rivulus marmoratus*, from some Belize cays. *Journal of Fish Biology*, 40(2):307–310, February 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Reay:1992:MCF

- [518] P. J. Reay. *Mugil cephalus* L. — a first British record and a further 5°N. *Journal of Fish Biology*, 40(2):311–313, February 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Smith:1992:FIG

- [519] R. L. Smith, J. P. Salini, and S. J. M. Blaber. Food intake and growth in the blue-spotted trevally, *Caranx bucculentus* Alleyne and Macleay 1877, with reference to predation on penaeid prawns. *Journal of Fish Biology*, 40(3):315–324, March 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Zhang:1992:OMP

- [520] Z. Zhang and N. W. Runham. Otolith microstructure pattern in *Oreochromis niloticus* (L.). *Journal of Fish Biology*, 40(3):325–332, March 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Zhang:1992:TDI

- [521] Z. Zhang and N. W. Runham. Temporal deposition of incremental and discontinuous zones in the otoliths of *Oreochromis niloticus* (L.). *Journal of Fish Biology*, 40(3):333–339, March 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Zhang:1992:EFR

- [522] Z. Zhang and N. W. Runham. Effects of food ration and temperature level on the growth of *Oreochromis niloticus* (L.) and their otoliths. *Journal of Fish Biology*, 40(3):341–349, March 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gamal:1992:PNP

- [523] A. A. El Gamal. Predation by Nile perch *Lates niloticus* (L.) on *Oreochromis niloticus* (L.), *Cyprinus carpio* (L.), *Mugil* sp. and its role in controlling tilapia recruitment in Egypt. *Journal of Fish Biology*, 40(3):351–358, March 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Garcia:1992:LSS

- [524] L. Ma. B. Garcia. Lunar synchronization of spawning in sea bass, *Lates calcarifer* (Bloch): effect of luteinizing hormone-releasing hormone analogue (LHRHa) treatment. *Journal of Fish Biology*, 40(3):359–370, March 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wang:1992:OLD

- [525] D. S. Wang, Y. G. Zhang, and Q. S. Luo. Observations on the larval development of *Mystus macopterus* (Bleeker): Bagridae. *Journal of Fish Biology*, 40(3):371–379, March 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brown:1992:EEC

- [526] R. W. Brown and W. W. Taylor. Effects of egg composition and prey density on the larval growth and survival of lake whitefish (*Coregonus clupeaformis* Mitchell). *Journal of Fish Biology*, 40(3):381–394, March 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Stergiou:1992:AGM

- [527] K. I. Stergiou, P. Economidis, and A. Sinis. Age, growth and mortality of red bandfish, *Cepola macrophthalma* (L.), in the western Aegean Sea (Greece). *Journal of Fish Biology*, 40(3):395–418, March 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Oliveira:1992:ECR

- [528] C. Oliveira, L. F. Almeida-Toledo, L. Mori, and S. A. Toledo-Filho. Extensive chromosomal rearrangements and nuclear DNA content changes in the evolution of the armoured catfishes genus *Corydoras* (Pisces, Siluriformes, Callichthyidae). *Journal of Fish Biology*, 40(3):419–431, March 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Johnsen:1992:IAS

- [529] B. O. Johnsen and A. J. Jensen. Infection of Atlantic salmon, *Salmo salar* L., by *Gyrodactylus salaris*, Malmberg 1957, in the River Lakselva, Misvær in northern Norway. *Journal of Fish Biology*, 40(3):433–444, March 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Clayton:1992:IIV

- [530] G. M. Clayton and D. J. Price. Interspecific and intraspecific variation in resistance to ichthyophthiriasis among poeciliid and goodeid fishes. *Journal of Fish Biology*, 40(3):445–453, March 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dunbrack:1992:SSD

- [531] R. L. Dunbrack. Sub-surface drift feeding by Coho salmon (*Oncorhynchus kisutch*, Walbaum): a model and test. *Journal of Fish Biology*, 40(3):455–464, March 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Otteraa:1992:BCG

- [532] H. Otterå. Bias in calculating growth rates in cod (*Gadus morhua* L.) due to size selective growth and mortality. *Journal of Fish Biology*, 40(3):465–467, March 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nie:1992:OPF

- [533] P. Nie and C. R. Kennedy. Occurrence of *Phyllodistomum folium* (Olfers) (Digenea) in the eel, *Anguilla anguilla* (Linnaeus), in a small river. *Journal of Fish Biology*, 40(3):469–470, March 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Abud:1992:ESW

- [534] E. O. Aristizabal Abud. Effects of salinity and weight on routine metabolism in the juvenile croaker, *Micropogonias furnieri* (Desmarest 1823). *Journal of Fish Biology*, 40(3):471–472, March 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ralphs:1992:CKS

- [535] J. R. Ralphs and M. Benjamin. Chondroitin and keratan sulphate in the epidermal club cells of teleosts. *Journal of Fish Biology*, 40(3):473–475, March 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sukumasavin:1992:OIS

- [536] N. Sukumasavin, W. Leelapatra, E. McLean, and E. M. Donaldson. Orally induced spawning of Thai carp (*Puntius gonionotus*, Bleeker) following co-administration of des Gly¹⁰ (D-Arg⁶) sGnRH ethylamide and domperidone. *Journal of Fish Biology*, 40(3):477–479, March 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brown:1992:GCC

- [537] P. Brown. Gill chloride cell surface-area is greater in freshwater-adapted adult sea trout (*Salmo trutta*, L.) than those adapted to sea water. *Journal of Fish Biology*, 40(3):481–484, March 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kaiser:1992:OPM

- [538] M. J. Kaiser. The ontogeny of predatory mechanisms in the fifteen-spined stickleback, *Spinachia spinachia* (L.). *Journal of Fish Biology*, 40(3):485–487, March 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kilarski:1992:UMM

- [539] W. M. Kilarski, M. Kozłowska, and M. G. Martynova. The ultrastructure of myotomal muscles of the golomianka, *Cormephorus baikalensis* Pallas. *Journal of Fish Biology*, 40(4):489–495, April 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bindoo:1992:ISL

- [540] M. Bindoo and C. M. Aravindan. Influence of size and level of satiation on prey handling time in *Channa striata* (Bloch). *Journal of Fish Biology*, 40(4):497–502, April 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lee:1992:VAS

- [541] S. Lee and P. J. Whitfield. Virus-associated spawning papillomatosis in smelt, *Osmerus eperlanus* L., in the River Thames. *Journal of Fish Biology*, 40(4):503–510, April 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dabrowski:1992:CGA

- [542] K. Dabrowski, G. Krumschnabel, M. Pauku, and J. Labanowski. Cyclic growth and activity of pancreatic enzymes in alevins of Arctic charr (*Salvelinus alpinus* L.). *Journal of Fish Biology*, 40(4):511–521, April 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Knudsen:1992:ARA

- [543] F. R. Knudsen, P. S. Enger, and O. Sand. Awareness reactions and avoidance responses to sound in juvenile Atlantic salmon, *Salmo salar* L. *Journal of Fish Biology*, 40(4):523–534, April 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Boujard:1992:DFB

- [544] T. Boujard and J. F. Leatherland. Demand-feeding behaviour and diel pattern of feeding activity in *Oncorhynchus mykiss* held under different photoperiod regimes. *Journal of Fish Biology*, 40(4):535–544, April 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Chan:1992:ESI

- [545] C. B. Chan and E. Hale. Effect of somatostatin on intragastric pressure and smooth muscle contractility of the rainbow trout, *Oncorhynchus mykiss* Walbaum. *Journal of Fish Biology*, 40(4):545–556, April 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Basaglia:1992:CES

- [546] F. Basaglia. Comparative examination of soluble red muscle proteins of fifteen Sparidae species. *Journal of Fish Biology*, 40(4):557–566, April 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Crnjar:1992:OSA

- [547] R. Crnjar, G. Sclalera, A. Bigiani, I. Tomassini Barbarossa, P. C. Magherini, and P. Pietra. Olfactory sensitivity to amino acids in the juvenile stages of the European eel *Anguilla anguilla* (L.). *Journal of Fish Biology*, 40(4):567–576, April 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gibson:1992:RPP

- [548] R. N. Gibson and I. A. Ezzi. The relative profitability of particulate- and filter-feeding in the herring, *Clupea harengus* L. *Journal of Fish Biology*, 40(4):577–590, April 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Watson:1992:BFA

- [549] J. J. Watson, I. G. Priede, P. R. Witthames, and A. Owori-Wadunde. Batch fecundity of Atlantic mackerel, *Scomber scombrus* L. *Journal of Fish Biology*, 40(4):591–598, April 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cren:1992:EBI

- [550] E. D. Le Cren. Exceptionally big individual perch (*Perca fluviatilis* L.) and their growth. *Journal of Fish Biology*, 40(4):599–625, April 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Laprise:1992:PMP

- [551] R. Laprise and S. J. M. Blaber. Predation by Moses perch, *Lutjanus russelli*, and blue-spotted trevally, *Caranx bucculentus*, on juvenile brown tiger prawn, *Penaeus esculentus*: effects of habitat structure and time of day. *Journal of Fish Biology*, 40(4):627–635, April 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sanger:1992:ETA

- [552] A. M. Sanger. Effects of training on axial muscle of two cyprinid species: *Chondrostoma nasus* (L.) and *Leuciscus cephalus* (L.). *Journal of Fish Biology*, 40(4):637–646, April 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Zimmerman:1992:IFM

- [553] C. Zimmerman and H. Mosegaard. Initial feeding in migratory brown trout (*Salmo trutta* L.) alevins. *Journal of Fish Biology*, 40(4):647–650, April 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1992:BRa

- [554] Anonymous. Book reviews. *Journal of Fish Biology*, 40(4):651–653, April 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Greenstreet:1992:MHRA

- [555] S. P. R. Greenstreet. Migration of hatchery reared juvenile Atlantic salmon, *Salmo salar* L., smolts down a release ladder. 1. Environmental effects on migratory activity. *Journal of Fish Biology*, 40(5):655–666, May 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Greenstreet:1992:MHRAb

- [556] S. P. R. Greenstreet. Migration of hatchery reared juvenile Atlantic salmon, *Salmo salar* L., down a release ladder. 2. Effect of fish developmental strategy on speed and pattern of movement. *Journal of Fish Biology*, 40(5):667–681, May 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Greenstreet:1992:MHRAc

- [557] S. P. R. Greenstreet. Migration of hatchery reared juvenile Atlantic salmon, *Salmo salar* L., smolts down a release ladder. 3. Reactions on exiting the ladder. *Journal of Fish Biology*, 40(5):683–694, May 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gehrke:1992:DAM

- [558] P. C. Gehrke. Diel abundance, migration and feeding of fish larvae (Eleotridae) in a floodplain billabong. *Journal of Fish Biology*, 40(5):695–707, May 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lenhardt:1992:SCS

- [559] M. Lenhardt. Seasonal changes in some blood chemistry parameters and in relative liver and gonad weights of pike (*Esox lucius* L.) from the River Danube. *Journal of Fish Biology*, 40(5):709–718, May 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Xiao-Jun:1992:BSC

- [560] Xie Xiao-Jun and Sun Ruyung. The bioenergetics of the southern catfish (*Silurus meridionalis* Chen): growth rate as a function of ration level, body weight, and temperature. *Journal of Fish Biology*, 40(5):719–730, May 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Boisneau:1992:EIB

- [561] P. Boisneau, C. Mennesson-Boisneau, and R. Guyomard. Electrophoretic identity between allis shad, *Alosa alosa* (L.), and twaite shad, *A. fallax* (Lacépède). *Journal of Fish Biology*, 40(5):731–738, May 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Roed:1992:GVH

- [562] K. H. Røed, K. Fjalestad, H. J. Larsen, and L. Midthjel. Genetic variation in haemolytic activity in Atlantic salmon (*Salmo salar* L.). *Journal of Fish Biology*, 40(5):739–750, May 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Arnason:1992:GFL

- [563] E. Árnason, S. Pálsson, and A. Arason. Gene flow and lack of population differentiation in Atlantic cod, *Gadus morhua* L., from Iceland, and comparison of cod from Norway and Newfoundland. *Journal of Fish Biology*, 40(5):751–770, May 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gibson:1992:RBB

- [564] R. N. Gibson and L. Robb. The relationship between body size, sediment grain size and the burying ability of juvenile plaice, *Pleuronectes platessa* L. *Journal of Fish Biology*, 40(5):771–778, May 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wright:1992:OCA

- [565] P. J. Wright, C. Talbot, and J. E. Thorpe. Otolith calcification in Atlantic salmon parr, *Salmo salar* L. and its relation to photoperiod and calcium metabolism. *Journal of Fish Biology*, 40(5):779–790, May 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Steinhart:1992:ENC

- [566] M. Steinhart and R. Eckmann. Evaluating the nutritional condition of individual whitefish (*Coregonus* spp.) larvae by the RNA/DNA ratio.

Journal of Fish Biology, 40(5):791–799, May 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Grudzien:1992:BSV

- [567] T. A. Grudzien, M. M. White, and B. J. Turner. Biochemical systematics of the viviparous fish family Goodeidae. *Journal of Fish Biology*, 40(5):801–814, May 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Massay:1992:PCD

- [568] S. Massay and R. Mosquera. Presence of chame *Dormitator latifrom* (Richardson, 1844) (Pisces: Eleotridae) in the Galapagos Islands, Ecuador. *Journal of Fish Biology*, 40(5):815–816, May 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Youngson:1992:WAH

- [569] A. F. Youngson, D. Knox, and R. Johnstone. Wild adult hybrids of *Salmo salar* L. and *Salmo trutta* L. *Journal of Fish Biology*, 40(5):817–820, May 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Patterson:1992:IMS

- [570] K. R. Patterson. An improved method for studying the condition of fish, with an example using Pacific sardine *Sardinops sagax* (Jenyns). *Journal of Fish Biology*, 40(6):821–831, June 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wright:1992:ODS

- [571] P. J. Wright. Ovarian development, spawning frequency and batch fecundity in *Encrasicholina heteroloba* (Ruppell, 1858). *Journal of Fish Biology*, 40(6):833–844, June 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tzeng:1992:OMD

- [572] W.-N. Tzeng and Y.-C. Tsai. Otolith microstructure and daily age of *Anguilla japonica*, Temminck & Schlegel elvers from the estuaries of Taiwan with reference to unit stock and larval migration. *Journal of Fish Biology*, 40(6):845–857, June 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hyndes:1992:RBE

- [573] G. A. Hyndes, F. J. Neira, and I. C. Potter. Reproductive biology and early life history of the marine teleost *Platycephalus speculator* Klun-

zinger (Platycephalidae) in a temperate Australian estuary. *Journal of Fish Biology*, 40(6):859–874, June 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

vanderVelden:1992:PCA

- [574] J. A. van der Velden, G. Flik, and S. E. Wendelaar Bonga. Prolactin cell activity and ion regulation in tilapia, *Oreochromis mossambicus* (Peters): effects of a low magnesium diet. *Journal of Fish Biology*, 40(6):875–885, June 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Diez:1992:ESS

- [575] J. M. Diez, G. Giannicot, E. McLeant, and E. M. Donaldson. The effect of somatostatins (SRIF-14, 25 and 28), galanin and anti-SRIF on plasma growth hormone levels in Coho salmon (*Oncorhynchus kisutch*, Walbaum). *Journal of Fish Biology*, 40(6):887–893, June 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Carter:1992:RBS

- [576] C. G. Carter and A. E. Brafield. The relationship between specific dynamic action and growth in grass carp, *Ctenopharyngodon idella* (Val.). *Journal of Fish Biology*, 40(6):895–907, June 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Schulz:1992:MUT

- [577] U. Schulz and R. Berg. Movements of ultrasonically tagged brown trout (*Sulmo trutta* L.) in Lake Constance. *Journal of Fish Biology*, 40(6):909–917, June 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Manson:1992:LCE

- [578] F. D. C. Manson, T. C. Fletcher, and G. W. Gooday. Localization of chitinolytic enzymes in blood of turbot, *Scophthalmus maximus*, and their possible roles in defence. *Journal of Fish Biology*, 40(6):919–927, June 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Garcia-Berthou:1992:AGI

- [579] E. García-Berthou and R. Moreno-Amich. Age and growth of an Iberian cyprinodont, *Aphanius iberus* (Cuv. & Val.), in its most northerly population. *Journal of Fish Biology*, 40(6):929–937, June 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Walsh:1992:SBD

- [580] M. Walsh and A. D. F. Johnstone. Spawning behaviour and diel periodicity of egg production in captive Atlantic mackerel, *Scomber scombrus* L. *Journal of Fish Biology*, 40(6):939–950, June 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Webb:1992:PHH

- [581] R. O. Webb and M. J. Kingsford. Protogynous hermaphroditism in the half-banded sea perch, *Hypoplectrodes maccullochi* (Serranidae). *Journal of Fish Biology*, 40(6):951–961, June 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Taggart:1992:SPR

- [582] J. B. Taggart, R. A. Hynes, P. A. Prodöuhl, and A. Ferguson. A simplified protocol for routine total DNA isolation from salmonid fishes. *Journal of Fish Biology*, 40(6):963–965, June 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nag:1992:CRC

- [583] T. C. Nag and R. K. Sur. Cones in the retina of the catfish, *Clarias batrachus* (L.). *Journal of Fish Biology*, 40(6):967–969, June 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Macchi:1992:MMC

- [584] G. J. Macchi, L. A. Romano, and H. E. Christiansen. Melanomacrophage centres in whitemouth croaker, *Micropogonius furnieri*, as biological indicators of environmental changes. *Journal of Fish Biology*, 40(6):971–973, June 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Low:1992:DEP

- [585] W. P. Low, S. F. Chew, and Y. K. Ip. Differences in electrophoretic patterns of lactate dehydrogenases from the gills, hearts and muscles of three mudskippers. *Journal of Fish Biology*, 40(6):975–977, June 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Oliva:1992:SSP

- [586] M. E. Oliva, A. S. Bórquez, and A. N. Olivares. Sexual status of *Paralabrax humeralis* (Serranidae) and infection by *Philometra* sp. (Nematoda: Dracunculoidea). *Journal of Fish Biology*, 40(6):979–980, June 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Korwin-Kossakowski:1992:GSC

- [587] M. Korwin-Kossakowski. Growth and survival of carp (*Cyprinus carpio* L.) larvae in alkaline water. *Journal of Fish Biology*, 40(6):981–982, June 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1992:BRb

- [588] Anonymous. Book reviews. *Journal of Fish Biology*, 40(6):983–986, June 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kjorsvik:1992:HEY

- [589] E. Kjorsvik and A. L. Reiersen. Histomorphology of the early yolk-sac larvae of the Atlantic halibut (*Hippoglossus hippoglossus* L.) — an indication of the timing of functionality. *Journal of Fish Biology*, 41(1):1–19, July 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nordeide:1992:UOM

- [590] J. T. Nordeide, J. C. Holm, H. Otterå, G. Blom, and A. Borge. The use of oxytetracycline as a marker for juvenile cod (*Gadus morhua* L.). *Journal of Fish Biology*, 41(1):21–30, July 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hanson:1992:ESS

- [591] J. M. Hanson and G. A. Chouinard. Evidence that size-selective mortality affects growth of Atlantic cod (*Gadus morhua* L.) in the southern Gulf of St Lawrence. *Journal of Fish Biology*, 41(1):31–41, July 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vandewalle:1992:EDC

- [592] P. Vandewalle, B. Focant, F. Huriaux, and M. Chardon. Early development of the cephalic skeleton of *Barbus barbus* (Teleostei, Cyprinidae). *Journal of Fish Biology*, 41(1):43–62, July 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McIntosh:1992:CSB

- [593] A. R. McIntosh, C. R. Townsend, and T. A. Crowl. Competition for space between introduced brown trout (*Salmo trutta* L.) and a native galaxiid (*Galaxias vulgaris* Stokell) in a New Zealand stream. *Journal of Fish Biology*, 41(1):63–81, July 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Munshi:1992:SEM

- [594] J. S. D. Munshi and A. Singh. Scanning electron microscopic evaluation of effects of low pH on gills of *Channa punctata* (Bloch). *Journal of Fish Biology*, 41(1):83–89, July 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

LAbee-Lund:1992:PBT

- [595] J. H. L'Abée-Lund, A. Langeland, and H. Sægrov. Piscivory by brown trout *Salmo trutta* L. and Arctic charr *Salvelinus alpinus* (L.) in Norwegian lakes. *Journal of Fish Biology*, 41(1):91–101, July 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Flysand:1992:PCA

- [596] R. Flysand, J. A. Ask, G. Serck-Hanssen, and K. B. Helle. Plasma catecholamines and accumulation of adrenaline in the atrial cardiac tissue of aquacultured Atlantic salmon (*Salmo salar*) during stress. *Journal of Fish Biology*, 41(1):103–111, July 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Franklin:1992:PCO

- [597] C. E. Franklin, M. E. Forster, and W. Davison. Plasma cortisol and osmoregulatory changes in sockeye salmon transferred to sea water: Comparison between successful and unsuccessful adaptation. *Journal of Fish Biology*, 41(1):113–122, July 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kendall:1992:FCD

- [598] C. Kendall, S. Valentino, A. B. Bodine, and C. A. Luer. Flow cytometric DNA analysis of nurse shark, *Ginglymostoma cirratum* (Bonaterre) and clearnose skate, *Raja eglanteria* (Bosc) peripheral red blood cells. *Journal of Fish Biology*, 41(1):123–129, July 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Waring:1992:EHF

- [599] C. P. Waring, R. M. Stagg, and M. G. Poxton. The effects of handling on flounder (*Platichthys flesus* L.) and Atlantic salmon (*Salmo salar* L.). *Journal of Fish Biology*, 41(1):131–144, July 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Eyeson:1992:RBO

- [600] K. N. Eyeson. Residual biparental oral-brooding in the blackchin fish, *Sarotherodon melanotheron* Rüppell. *Journal of Fish Biology*, 41(1):145–

146, July 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Economidis:1992:MMS

- [601] P. S. Economidis and V. P. Vogiatzis. Mass mortality of *Sardinella aurita* Valenciennes (Pisces, Clupeidae) in Thessaloniki Bay (Macedonia, Greece). *Journal of Fish Biology*, 41(1):147–149, July 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Prasad:1992:LEC

- [602] G. Prasad and S. Radhakrishnan. The leucocyte enzyme cytochemistry of the Indian eel, *Anguilla bicolor bicolor* McClelland. *Journal of Fish Biology*, 41(1):151–154, July 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Chiarini-Garcia:1992:HEH

- [603] H. Chiarini-Garcia and R. M. A. Ferreira. Histochemical evidence of heparin in granular cells of *Hoplias malabaricus* Bloch. *Journal of Fish Biology*, 41(1):155–157, July 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ojha:1992:FMA

- [604] J. Ojha and S. K. Singh. Functional morphology of the anchorage system and food scrapers of a hillstream fish, *Garra lamta* (Ham.) (Cyprinidae, Cypriniformes). *Journal of Fish Biology*, 41(1):159–161, July 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Watson:1992:CPA

- [605] J. J. Watson, A. W. Pike, and I. G. Friede. Cardiac pathology associated with the infection of *Oncorhynchus mykiss* Walbaum with *Apatemon gracilis* Rud. 1819. *Journal of Fish Biology*, 41(1):163–167, July 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1992:BRc

- [606] Anonymous. Book reviews. *Journal of Fish Biology*, 41(1):169–171, July 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1992:Aa

- [607] Anonymous. Announcement. *Journal of Fish Biology*, 41(1):173, July 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lucas:1992:UMS

- [608] M. C. Lucas and I. G. Friede. Utilization of metabolic scope in relation to feeding and activity by individual and grouped zebrafish, *Brachydanio rerio* (Hamilton-Buchanan). *Journal of Fish Biology*, 41(2):175–190, August 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Greenstreet:1992:ESL

- [609] S. P. R. Greenstreet, R. I. G. Morgan, and J. E. Thorpe. Effect of stripping on the length, condition and gonadal state of mature male Atlantic salmon, *Salmo salar* L., parr during autumn and winter. *Journal of Fish Biology*, 41(2):191–200, August 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Panfili:1992:MGS

- [610] J. Panfili and M.-C. Ximenes. Measurements on ground or sectioned otoliths: possibilities of bias. *Journal of Fish Biology*, 41(2):201–207, August 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nash:1992:WGJ

- [611] R. D. M. Nash, A. J. Geffen, and G. Hughes. Winter growth of juvenile plaice on the Port Erin Bay (Isle of Man) nursery ground. *Journal of Fish Biology*, 41(2):209–215, August 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Karaas:1992:ABM

- [612] P. Karås and G. Thoreson. An application of a bioenergetics model to Eurasian perch (*Perca fluviatilis* L.). *Journal of Fish Biology*, 41(2):217–230, August 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cui:1992:GEB

- [613] Yibo Cui, Xiaofang Liu, Shaomei Wang, and Shaolian Chen. Growth and energy budget in young grass carp, *Ctenopharyngodon idella* Val., fed plant and animal diets. *Journal of Fish Biology*, 41(2):231–238, August 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Titus:1992:FRV

- [614] R. G. Titus and H. Mosegaard. Fluctuating recruitment and variable life history of migratory brown trout, *Salmo trutta* L., in a small, unstable

stream. *Journal of Fish Biology*, 41(2):239–255, August 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mccarthy:1992:EFH

- [615] I. D. Mccarthy, C. G. Carter, and D. F. Houlihan. The effect of feeding hierarchy on individual variability in daily feeding of rainbow trout, *Oncorhynchus mykiss* (Walbaum). *Journal of Fish Biology*, 41(2):257–263, August 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

vanDamme:1992:IDD

- [616] P. A. van Damme and O. Hamerlynck. The infection dynamics and dispersion pattern of *Lernaeocera branchialis* L. on 0+ whiting (*Merlangius merlangus* L.) in the Oosterschelde (SW Netherlands). *Journal of Fish Biology*, 41(2):265–275, August 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Creech:1992:SPB

- [617] S. Creech. A study of the population biology of *Athevina boyeri* Risso, 1810 in Aberthaw Lagoon, on the Bristol Channel, in South Wales. *Journal of Fish Biology*, 41(2):277–286, August 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Grau:1992:DTA

- [618] A. Grau, S. Crespo, M. C. Sarasquete, and M. L. González de Canales. The digestive tract of the amberjack *Seriola dumerili*, Risso: a light and scanning electron microscope study. *Journal of Fish Biology*, 41(2):287–303, August 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kirubagaran:1992:TEM

- [619] R. Kirubagaran and K. P. Joy. Toxic effects of mercury on testicular activity in the freshwater teleost, *Clarias batrachus* (L.). *Journal of Fish Biology*, 41(2):305–315, August 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gui:1992:MCB

- [620] J. F. Gui, J. Jia, S. C. Liang, and Y. G. Jiang. Meiotic chromosome behaviour in male triploid transparent coloured crucian carp, *Carassius auratus* L. *Journal of Fish Biology*, 41(2):317–326, August 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pereira:1992:BGF

- [621] J. J. Pereira, E. J. Lewis, Jr., R. L. Spallone, and C. Sword. Bifurcation of gill filaments in winter flounder (*Pleuronectes americanus* Walbaum) from Long Island Sound. *Journal of Fish Biology*, 41(2):327–338, August 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1992:BRd

- [622] Anonymous. Book review. *Journal of Fish Biology*, 41(2):339–340, August 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Creech:1992:MMI

- [623] S. Creech. A multivariate morphometric investigation of *Atherina boyeri* Risso, 1810 and *A. presbyter* Cuvier, 1829 (Teleostei: Atherinidae): morphometric evidence in support of the two species. *Journal of Fish Biology*, 41(3):341–353, September 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lippitsch:1992:SSC

- [624] E. Lippitsch. Squamation and scale character stability in cichlids, examined in *Sarotherodon galilaeus* (Linnaeus, 1758) (Perciformes, Cichlidae). *Journal of Fish Biology*, 41(3):355–362, September 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ogawa:1992:HSB

- [625] K. Ogawa, K. P. Delgahapitiya, T. Furuta, and H. Wakabayashi. Histological studies on the host response to *Myxobolus artus* Akhmerov, 1960 (Myxozoa: Myxobolidae) infection in the skeletal muscle of carp, *Cyprinus carpio* L. *Journal of Fish Biology*, 41(3):363–371, September 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lezama:1992:RMG

- [626] E. Lezama and J. Günther. The routine metabolism of the guapote, *Cichlasoma managuense* (Günther 1869), related to body weight and temperature. *Journal of Fish Biology*, 41(3):373–380, September 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Guinea:1992:MBS

- [627] J. Guinea and F. Fernandez. Morphological and biometrical study of the gill rakers in four species of mullet. *Journal of Fish Biology*, 41(3):381–397, September 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Marcogliese:1992:MPS

- [628] D. J. Marcogliese. Metazoan parasites of sticklebacks on Sable Island, Northwest Atlantic Ocean: biogeographic considerations. *Journal of Fish Biology*, 41(3):399–407, September 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Torrissen:1992:PDG

- [629] K. R. Torrissen and K. D. Shearer. Protein digestion, growth and food conversion in Atlantic salmon and Arctic charr with different trypsin-like isozyme patterns. *Journal of Fish Biology*, 41(3):409–415, September 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lehtonen:1992:RSM

- [630] H. Lehtonen, K. Nyberg, P. J. Vuoronen, and A. Leskelä. Radioactive strontium (^{85}Sr) in marking whitefish [*Coregonus lavaretus* (L.)] larvae and the dispersal of larvae from river to sea. *Journal of Fish Biology*, 41(3):417–423, September 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gershanovich:1992:FDS

- [631] A. D. Gershanovich and L. R. Taufik. Feeding dynamics of sturgeon fingerlings (Acipenseridae) depending on food concentration and stocking density. *Journal of Fish Biology*, 41(3):425–434, September 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pottinger:1992:ISI

- [632] T. G. Pottinger and A. D. Pickering. The influence of social interaction on the acclimation of rainbow trout, *Oncorhynchus mykiss* (Walbaum) to chronic stress. *Journal of Fish Biology*, 41(3):435–447, September 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pedersen:1992:MCD

- [633] T. Pedersen and I. B. Falk-Petersen. Morphological changes during metamorphosis in cod (*Gadus morhua* L.), with particular reference to the development of the stomach and pyloric caeca. *Journal of Fish Biology*, 41(3):449–461, September 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

vanDuren:1992:CWF

- [634] L. A. van Duren and C. W. Glass. Choosing where to feed: the influence of competition on feeding behaviour of cod, *Gadus morhua* L. *Journal of*

Fish Biology, 41(3):463–471, September 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Billard:1992:TSH

- [635] R. Billard, C. Weil, K. Bieniarz, T. Mikolajczyk, B. Breton, P. Epler, and M. Bougoussa. Testicular and some hormonal changes during the first four years of life in the mirror carp, *Cyprinus carpio* L. *Journal of Fish Biology*, 41(3):473–487, September 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Magtoon:1992:KEG

- [636] W. Magtoon, N. Nadee, T. Higsdhitani, K. Takata, and H. Uwa. Karyotype evolution and geographical distribution of the Thai-medaka, *Oryzias minutillus*, in Thailand. *Journal of Fish Biology*, 41(3):489–497, September 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bakke:1992:SSF

- [637] T. A. Bakke, P. D. Harris, and P. A. Jansen. The susceptibility of *Salvelinus fontinalis* (Mitchill) to *Gyrodactylus salaris* Malmberg (Platyhelminthes; Monogenea) under experimental conditions. *Journal of Fish Biology*, 41(3):499–507, September 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Navarro:1992:BDS

- [638] J. C. Navarro and J. R. Sargent. Behavioural differences in starving herring *Clupea harengus* L. larvae correlate with body levels of essential fatty acids. *Journal of Fish Biology*, 41(3):509–513, September 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Adams:1992:PPI

- [639] C. E. Adams, K. R. Murray, and F. A. Huntingford. The periodicity of primary increment formation in the otoliths of Arctic charr *Salvelinus alpinus* (L.). *Journal of Fish Biology*, 41(4):515–520, October 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nie:1992:PBC

- [640] P. Nie and C. R. Kennedy. Populations of *Bothriocephalus claviceps* (Goeze) (Cestoda) in the European eel, *Anguilla anguilla* (L.), in three localities in southwest England. *Journal of Fish Biology*, 41(4):521–531, October 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Carter:1992:BGC

- [641] C. G. Carter and A. E. Brafield. The bioenergetics of grass carp, *Ctenopharyngodon idella* (Val.): the influence of body weight, ration and dietary composition on nitrogenous excretion. *Journal of Fish Biology*, 41(4):533–543, October 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rodriguez-Ruiz:1992:SPM

- [642] A. Rodriguez-Ruiz and C. Granado-Lorencio. Spawning period and migration of three species of cyprinids in a stream with Mediterranean regimen (SW Spain). *Journal of Fish Biology*, 41(4):545–556, October 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Maccina:1992:SRM

- [643] M. J. Maccina. A simple regression model to assess environmental effects on fish growth. *Journal of Fish Biology*, 41(4):557–565, October 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kennedy:1992:EAA

- [644] C. R. Kennedy, P. Nie, J. Kaspers, and J. Paulisse. Are eels (*Anguilla anguilla* L.) planktonic feeders? Evidence from parasite communities. *Journal of Fish Biology*, 41(4):567–580, October 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kjesbu:1992:BVE

- [645] O. S. Kjesbu, H. Kryvi, S. Sundby, and P. Solemdal. Buoyancy variations in eggs of Atlantic cod (*Gadus morhua* L.) in relation to chorion thickness and egg size: theory and observations. *Journal of Fish Biology*, 41(4):581–599, October 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wood:1992:RVP

- [646] P. Wood, J. C. Partridge, and W. J. De Grip. Rod visual pigment changes in the elver of the eel *Anguilla anguilla* L. measured by microspectrophotometry. *Journal of Fish Biology*, 41(4):601–611, October 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jordan:1992:UGM

- [647] W. C. Jordan and A. F. Youngson. The use of genetic marking to assess the reproductive success of mature male Atlantic salmon parr (*Salmo salar*, L.) under natural spawning conditions. *Journal of Fish Biology*,

41(4):613–618, October 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ibrahim:1992:ENP

- [648] A. A. Ibrahim and F. A. Huntingford. Experience of natural prey and feeding efficiency in three-spined sticklebacks (*Gasterosteus aculeatus* L.). *Journal of Fish Biology*, 41(4):619–625, October 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ranta:1992:FES

- [649] E. Ranta, S.-K. Juvonen, and N. Peuhkuri. Further evidence for size-assortative schooling in sticklebacks. *Journal of Fish Biology*, 41(4):627–630, October 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Skaala:1992:GPS

- [650] Ø. Skaala. Genetic population structure of Norwegian brown trout. *Journal of Fish Biology*, 41(4):631–646, October 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Muoneke:1992:PSF

- [651] M. I. Muoneke, C. C. Henry, and O. E. Maughan. Population structure and food habits of white crappie *Pomoxis annularis* Rafinesque in a turbid Oklahoma reservoir. *Journal of Fish Biology*, 41(4):647–654, October 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Katano:1992:CED

- [652] O. Katano. Cannibalism on eggs by dark chub, *Zacco temminckii* (Temminck & Schlegel) (Cyprinidae). *Journal of Fish Biology*, 41(4):655–661, October 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Frankel:1992:ITC

- [653] J. S. Frankel. Inheritance of trunk coloration in the three-spot gourami, *Trichogaster trichopterus* Pallas. *Journal of Fish Biology*, 41(4):663–665, October 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nicotra:1992:AAC

- [654] A. Nicotra and O. Senatori. β -adrenergic antagonists and carp (*Cyprinus carpio* L.) sperm motility. *Journal of Fish Biology*, 41(4):667–669, October 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1992:Ab

- [655] Anonymous. Announcement. *Journal of Fish Biology*, 41(4):671, October 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1992:Ac

- [656] Anonymous. Announcement. *Journal of Fish Biology*, 41(4):672, October 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Buttiker:1992:ERC

- [657] B. Büttiker. Electrofishing results corrected by selectivity functions in stock size estimates of brown trout (*Salmo trutta* L.) in brooks. *Journal of Fish Biology*, 41(5):673–684, November 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Scott:1992:IVR

- [658] S. G. Scott and N. W. Pankhurst. Interannual variation in the reproductive cycle of the New Zealand snapper *Pagrus auratus* (Bloch & Schneider) (Sparidae). *Journal of Fish Biology*, 41(5):685–696, November 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mo:1992:SVP

- [659] T. A. Mo. Seasonal variations in the prevalence and infestation intensity of *Gyrodactylus salaris* Malmberg, 1957 (Monogenea: Gyrodactylidae) on Atlantic salmon parr, *Salmo salar* L., in the River Batnfjordselva, Norway. *Journal of Fish Biology*, 41(5):697–707, November 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Quentel:1992:CCB

- [660] C. Quentel and A. Obach. The cellular composition of the blood and haematopoietic organs of turbot *Scophthalmus maximus* L. *Journal of Fish Biology*, 41(5):709–716, November 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Krumschnabel:1992:MRF

- [661] G. Krumschnabel and R. Lackner. Metabolic responses of fish larvae [*Rutilus rutilus* (L.)] to forced activity (Cyprinidae, Teleostei). *Journal of Fish Biology*, 41(5):717–724, November 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Blanquer:1992:AVT

- [662] A. Blanquer, J.-P. Alayse, O. Berrada-Rkhami, and P. Berrebi. Allozyme variation in turbot (*Psetta maxima*) and brill (*Scophthalmus*

rhombus) (Osteichthyes, Pleuronectoformes, Scopthalmidae) throughout their range in Europe. *Journal of Fish Biology*, 41(5):725–736, November 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ishida:1992:SEA

- [663] Y. Ishida and H. Kobayashi. Stimulatory effectiveness of amino acids on the olfactory response in an algivorous marine teleost, the rabbitfish *Siganus fuscescens* Houttuyn. *Journal of Fish Biology*, 41(5):737–748, November 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gallahar:1992:PIW

- [664] N. K. Gallahar and M. J. Kingsford. Patterns of increment width and strontium: calcium ratios in otoliths of juvenile rock blackfish, *Girella elevata* (M.). *Journal of Fish Biology*, 41(5):749–763, November 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dutton:1992:EEF

- [665] P. Dutton. Effects of experience on feeding success by larval white seabass, *Atractoscion nobilis*. *Journal of Fish Biology*, 41(5):765–773, November 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lou:1992:VAG

- [666] Dong Chun Lou. Validation of annual growth bands in the otolith of tropical parrotfishes (*Scarus schlegeli* Bleeker). *Journal of Fish Biology*, 41(5):775–790, November 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pellertier:1992:ESD

- [667] D. Pellertier and M. Besner. The effect of salty diets and gradual transfer to sea water on osmotic adaptation, gill Na⁺, K⁺-ATPase activation, and survival of brook charr, *Salvelinus fontinalis*, Mitchill. *Journal of Fish Biology*, 41(5):791–803, November 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rantin:1992:RRH

- [668] F. T. Rantin, A. L. Kalinin, M. L. Glass, and M. N. Fernandes. Respiratory responses to hypoxia in relation to mode of life of two erythrinid species (*Hoplias malabaricus* and *Hoplias lacerdae*). *Journal of Fish Biology*, 41(5):805–812, November 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Powell:1992:FMR

- [669] M. D. Powell, D. J. Speare, and J. F. Burka. Fixation of mucus on rainbow trout (*Oncorhynchus mykiss* Walbaum) gills for light and electron microscopy. *Journal of Fish Biology*, 41(5):813–824, November 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bradford:1992:GEO

- [670] M. J. Bradford and G. H. Geen. Growth estimates from otolith increment widths of juvenile Chinook salmon (*Oncorhynchus tshawytscha*) reared in changing environments. *Journal of Fish Biology*, 41(5):825–832, November 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dong:1992:SVF

- [671] Shuanglin Dong, Deshang Li, Xuwen Bing, Qingfeng Shi, and Fang Wang. Suction volume and filtering efficiency of silver carp (*Hypophthalmichthys molitrix* Val.) and bighead carp (*Aristichthys nobilis* Rich.). *Journal of Fish Biology*, 41(5):833–840, November 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Costa:1992:FEE

- [672] J. L. Costa, C. A. Assis, P. R. Almeida, F. M. Moreira, and M. J. Costa. On the food of the European eel, *Anguilla anguilla* (L.), in the upper zone of the Tagus estuary, Portugal. *Journal of Fish Biology*, 41(5):841–850, November 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Graham:1992:EIC

- [673] M. S. Graham and A. P. Farrell. Environmental influences on cardiovascular variables in rainbow trout, *Oncorhynchus mykiss* (Walbaum). *Journal of Fish Biology*, 41(5):851–858, November 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1992:BRe

- [674] Anonymous. Book reviews. *Journal of Fish Biology*, 41(5):859–862, November 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gafny:1992:EWL

- [675] S. Gafny, A. Gasith, and M. Goren. Effect of water level fluctuation on shore spawning of *Mirogrex terraesanctae* (Steinitz), (Cyprinidae) in

Lake Kinneret, Israel. *Journal of Fish Biology*, 41(6):863–871, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Huriaux:1992:PWM

- [676] F. Huriaux, P. Vandewalle, and B. Focant. Polymorphism of white muscle myosin and parvalbumins in the genus *Barbus* (Teleostei: Cyprinidae). *Journal of Fish Biology*, 41(6):873–882, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Marteinsdottir:1992:IES

- [677] G. Marteinsdottir and K. W. Able. Influence of egg size on embryos and larvae of *Fundulus heteroclitus* (L.). *Journal of Fish Biology*, 41(6):883–896, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mattson:1992:MMG

- [678] N. S. Mattson and J. C. Mutales. Multi-mesh gillnets to estimate species composition and catch per unit effort of fish in a small water body in Zambia. *Journal of Fish Biology*, 41(6):897–908, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Glova:1992:IFS

- [679] G. J. Glova, P. M. Sagar, and I. Näslund. Interaction for food and space between populations of *Galaxias vulgaris* Stokell and juvenile *Salmo trutta* L. in a New Zealand stream. *Journal of Fish Biology*, 41(6):909–925, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Schurmann:1992:LOL

- [680] H. Schurmann and J. F. Steffensen. Lethal oxygen levels at different temperatures and the preferred temperature during hypoxia of the Atlantic cod, *Gadus morhua* L. *Journal of Fish Biology*, 41(6):927–934, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Neira:1992:ISC

- [681] F. J. Neira and I. C. Potter. The ichthyoplankton of a seasonally closed estuary in temperate Australia. Does an extended period of opening influence species composition? *Journal of Fish Biology*, 41(6):935–953, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brown:1992:ESD

- [682] G. E. Brown, J. A. Brown, and R. K. Srivastava. The effect of stocking density on the behaviour of Arctic charr (*Salvelinus alpinus* L.). *Journal of Fish Biology*, 41(6):955–963, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Alvarino:1992:PSB

- [683] J. M. R. Alvarino, M. Carrillo, S. Zanuy, F. Prat, and E. Mañanos. Pattern of sea bass oocyte development after ovarian stimulation by LHRHa. *Journal of Fish Biology*, 41(6):965–970, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Comte:1992:SBM

- [684] S. Comte and I. Vila. Spawning of *Basilichthys microlepidotus* (Jenyns). *Journal of Fish Biology*, 41(6):971–981, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kotrschal:1992:MEB

- [685] K. Kotrschal and A. Goldschmid. Morphological evidence for the biological role of caniniform teeth in combtooth blennies (Blenniidae, Teleostei). *Journal of Fish Biology*, 41(6):983–991, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Poncin:1992:IDD

- [686] P. Poncin. Influence of the daily distribution of light on reproduction in the barbel, *Barbus barbus* (L.). *Journal of Fish Biology*, 41(6):993–997, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Folmar:1992:ACB

- [687] L. C. Folmar, T. Moody, S. Bonomelli, and J. Gibson. Annual cycle of blood chemistry parameters in striped mullet (*Mugil cephalus* L.) and pinfish (*Lagodon rhomboides* L.) from the Gulf of Mexico. *Journal of Fish Biology*, 41(6):999–1011, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Prevost:1992:ISW

- [688] E. Prévost, E. M. P. Chadwick, and R. R. Claytor. Influence of size, winter duration and density on sexual maturation of Atlantic salmon (*Salmo salar*) juveniles in Little Codroy River (southwest Newfoundland). *Journal of Fish Biology*, 41(6):1013–1019, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hartley:1992:GSA

- [689] S. E. Hartley, C. McGowan, R. B. Greek, and A. F. Walker. The genetics of sympatric Arctic charr [*Salvelinus alpinus* (L.)] populations from Loch Rannoch, Scotland. *Journal of Fish Biology*, 41(6):1021–1031, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Treasurer:1992:LWC

- [690] J. W. Treasurer. Length and weight changes in 0+ perch, *Perca fluviatilis* L., following fixation in formalin. *Journal of Fish Biology*, 41(6):1033–1036, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Furones:1992:DVR

- [691] M. D. Furones, D. J. Alderman, D. Bucke, T. C. Fletcher, D. Knox, and A. White. Dietary vitamin E and the response of rainbow trout, *Oncorhynchus mykiss* (Walbaum), to infection with *Yersinia ruckeri*. *Journal of Fish Biology*, 41(6):1037–1041, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Stokes:1992:SSD

- [692] M. D. Stokes and N. D. Holland. Southern stingray (*Dasyatis americana*) feeding on lancelets (*Branchiostoma floridae*). *Journal of Fish Biology*, 41(6):1043–1044, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Quinn:1992:MCS

- [693] T. P. Quinn and G. R. Blair. Morphological changes in senescing adult male sockeye salmon (*Oncorhynchus nerka* Walbaum). *Journal of Fish Biology*, 41(6):1045–1047, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Assis:1992:DTS

- [694] C. A. Assis, P. R. Almeida, F. Moreira, J. L. Costa, and M. J. Costa. Diet of the twaite shad *Alosa fallax* (Lacépède) (Clupeidae) in the River Tagus Estuary, Portugal. *Journal of Fish Biology*, 41(6):1049–1050, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1992:BRf

- [695] Anonymous. Book reviews. *Journal of Fish Biology*, 41(6):1051–1052, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1992:I

- [696] Anonymous. Introduction. *Journal of Fish Biology*, 41(sA):1–3, September 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1992:LCSa

- [697] Anonymous. A list of the common and scientific names of fishes of the British Isles. *Journal of Fish Biology*, 41(sA):5–16, September 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1992:LCSb

- [698] Anonymous. A list of the common and scientific names of fishes of the British Isles. *Journal of Fish Biology*, 41(sB):17–26, September 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic). See updates [2496].

Anonymous:1992:FSP

- [699] Anonymous. Further symposium presentations not published in this supplement. *Journal of Fish Biology*, 41(sB):v–vi, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Chubb:1992:FSB

- [700] J. C. Chubb and E. D. Le Cren. The Fisheries Society of the British Isles: 0–25 years. *Journal of Fish Biology*, 41(sB):vii, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Parker:1992:ESS

- [701] G. A. Parker. The evolution of sexual size dimorphism in fish. *Journal of Fish Biology*, 41(sB):1–20, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Foster:1992:PIL

- [702] S. A. Foster, J. A. Baker, and M. A. Bell. Phenotypic integration of life history and morphology: an example from three-spined stickleback, *Gasterosteus aculeatus* L. *Journal of Fish Biology*, 41(sB):21–35, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Panagiotaki:1992:PES

- [703] P. Panagiotaki and A. J. Geffen. Parental effects on size variation in fish larvae. *Journal of Fish Biology*, 41(sB):37–42, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Huntingford:1992:PGS

- [704] F. A. Huntingford, J. E. Thorpe, C. Garcia de Leaniz, and D. W. Hay. Patterns of growth and smolting in autumn migrants from a Scottish population of Atlantic salmon, *Salmo salar* L. *Journal of Fish Biology*, 41(sB):43–51, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ahnesjö:1992:FNR

- [705] I. Ahnesjö. Fewer newborn result in superior juveniles in the paternally brooding pipefish *Syngnathus typhle* L. *Journal of Fish Biology*, 41(sB):53–63, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Armstrong:1992:LBR

- [706] J. D. Armstrong, I. G. Priede, and M. C. Lucas. The link between respiratory capacity and changing metabolic demands during growth of northern pike, *Esox lucius* L. *Journal of Fish Biology*, 41(sB):65–75, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hughes:1992:OFB

- [707] R. N. Hughes, M. J. Kaiser, P. A. Mackney, and K. Warburton. Optimizing foraging behaviour through learning. *Journal of Fish Biology*, 41(sB):77–91, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Metcalfe:1992:EPL

- [708] N. B. Metcalfe and J. E. Thorpe. Early predictors of life-history events: the link between first feeding date, dominance and seaward migration in Atlantic salmon, *Salmo salar* L. *Journal of Fish Biology*, 41(sB):93–99, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Geffen:1992:LHS

- [709] A. J. Geffen and R. D. M. Nash. The life-history strategy of deepwater sculpin, *Myoxocephalus thompsoni* (Girard), in Lake Michigan: dispersal and settlement patterns during the first year of life. *Journal of Fish Biology*, 41(sB):101–110, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Darwall:1992:ILH

- [710] W. R. T. Darwall, M. J. Costello, R. Donnelly, and S. Lysaght. Implications of life-history strategies for a new wrasse fishery. *Journal of Fish Biology*, 41(sB):111–123, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McEvoy:1992:MSS

- [711] L. A. McEvoy and J. McEvoy. Multiple spawning in several commercial fish species and its consequences for fisheries management, cultivation and experimentation. *Journal of Fish Biology*, 41(sB):125–136, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Beverton:1992:PRS

- [712] R. J. H. Beverton. Patterns of reproductive strategy parameters in some marine teleost fishes. *Journal of Fish Biology*, 41(sB):137–160, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Conover:1992:SSL

- [713] D. O. Conover. Seasonality and the scheduling of life history at different latitudes. *Journal of Fish Biology*, 41(sB):161–178, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1992:PA

- [714] Anonymous. Poster abstracts. *Journal of Fish Biology*, 41(sB):179–184, December 1992. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Don:1993:UIT

- [715] J. Don and R. R. Avtalion. Ultraviolet irradiation of tilapia spermatozoa and the Hertwig effect: electron microscopic analysis. *Journal of Fish Biology*, 42(1):1–14, January 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lou:1993:GJS

- [716] D. C. Lou. Growth in juvenile *Scarus rivulatus* and *Ctenochaetus binotatus*: a comparison of families Scaridae and Acanthuridae. *Journal of Fish Biology*, 42(1):15–23, January 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

King:1993:MDV

- [717] D. P. F. King, S. J. Hovey, D. Thompson, and A. Scott. Mitochondrial DNA variation in Atlantic salmon, *Salmo, salar* L., populations. *Journal of Fish Biology*, 42(1):25–33, January 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wanzenbock:1993:TEI

- [718] J. Wanzenböck and S. Wanzenböck. Temperature effects on incubation time and growth of juvenile whitefin gudgeon, *Gobio albipinnatus* Lukasch. *Journal of Fish Biology*, 42(1):35–46, January 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ghan:1993:DPS

- [719] D. Ghan and W. G. Sprules. Diet, prey selection, and growth of larval and juvenile burbot *Lota lota* (L.). *Journal of Fish Biology*, 42(1):47–64, January 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wright:1993:DGI

- [720] P. J. Wright and F. A. Huntingford. Daily growth increments in the otoliths of the three-spined stickleback, *Gasterosteus aculeatus* L. *Journal of Fish Biology*, 42(1):65–77, January 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lahnsteiner:1993:SDS

- [721] F. Lahnsteiner, R. A. Patzner, and T. Welsmann. The spermatic ducts of salmonid fishes (Salmonidae, Teleostei). Morphology, histochemistry and composition of the secretion. *Journal of Fish Biology*, 42(1):79–93, January 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Almeida:1993:FSL

- [722] P. R. Almeida, F. Moreira, J. L. Costa, C. A. Assis, and M. J. Costa. The feeding strategies of *Liza ramada* (Risso, 1826) in fresh and brackish water in the River Tagus, Portugal. *Journal of Fish Biology*, 42(1):95–107, January 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sabates:1993:SDB

- [723] A. Sabatés and P. Martin. Spawning and distribution of bluefish *Pomatomus saltatrix* (L.) in the northwestern Mediterranean. *Journal of Fish*

Biology, 42(1):109–118, January 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McWilliams:1993:EIT

- [724] P. G. McWilliams. Environmental induction of Na⁺ transporter affinity in Atlantic salmon embryos. *Journal of Fish Biology*, 42(1):119–130, January 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Morgan:1993:EFC

- [725] J. A. W. Morgan, T. G. Pottinger, and P. Rippon. Evaluation of flow cytometry as a method for quantification of circulating blood cell populations in salmonid fish. *Journal of Fish Biology*, 42(1):131–141, January 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Massuti:1993:FRS

- [726] E. Massuti and C. Stefanescu. First record of *Seriola fasciata* (Bloch, 1793) (Osteichthyes: Carangidae) in the Mediterranean. *Journal of Fish Biology*, 42(1):143–144, January 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Keats:1993:FGO

- [727] D. W. Keats and D. H. Steele. Food of 0-group ocean pout [*Macrozoarces americanus* (Schneider)] in eastern Newfoundland: the importance of harpacticoid copepods. *Journal of Fish Biology*, 42(1):145–148, January 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Johnstone:1993:RRR

- [728] A. D. F. Johnstone, C. S. Wardle, and S. M. Almatar. Routine respiration rates of Atlantic mackerel, *Scomber scombrus* L., and herring, *Clupea harengus* L., at low activity levels. *Journal of Fish Biology*, 42(1):149–151, January 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hurrell:1993:GVA

- [729] R. H. Hurrell and D. J. Price. Genetic variation in Atlantic salmon, *Salmo salar* L., within the Tamar catchment in south-west England. *Journal of Fish Biology*, 42(1):153–156, January 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1993:E

- [730] Anonymous. Erratum. *Journal of Fish Biology*, 42(1):157, January 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1993:IFM

- [731] Anonymous. Institute of Fisheries Management annual study course 1993. *Journal of Fish Biology*, 42(1):158, January 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Liu:1993:DRS

- [732] W. S. Liu. Development of the respiratory swimbladder of *Pangasius sutchi*. *Journal of Fish Biology*, 42(2):159–167, February 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Boisclair:1993:EAI

- [733] D. Boisclair and M. Tang. Empirical analysis of the influence of swimming pattern on the net energetic cost of swimming in fishes. *Journal of Fish Biology*, 42(2):169–183, February 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kramer:1993:SDA

- [734] C. R. Kramer, M. T. Caddell, and L. Bubenheimer-Livolsi. sGnRH-A [(d-Arg⁶, Pro⁹, NEt-)LHRH] in combination with domperidone induces gonad reversal in a protogynous fish, the bluehead wrasse, *Thalassoma bifasciatum*. *Journal of Fish Biology*, 42(2):185–195, February 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Xie:1993:PEA

- [735] X. J. Xie and R. Sun. Pattern of energy allocation in the southern catfish (*Silurus meridionalis*). *Journal of Fish Biology*, 42(2):197–207, February 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brannas:1993:MFA

- [736] E. Brännäs and A. Alanärä. Monitoring the feeding activity of individual fish with a demand feeding system. *Journal of Fish Biology*, 42(2):209–215, February 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Naismith:1993:DDG

- [737] I. A. Naismith and B. Knights. The distribution, density and growth of the European eel, *Anguilla anguilla*, in the freshwater catchment of the River Thames. *Journal of Fish Biology*, 42(2):217–226, February 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lahnsteiner:1993:UTA

- [738] F. Lahnsteiner, B. Nussbaumer, and R. A. Patzner. Unusual testicular accessory organs, the testicular blind pouches of blennies (Teleostei, Blenniidae). Fine structure, (enzyme-) histochemistry and possible functions. *Journal of Fish Biology*, 42(2):227–241, February 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Avella:1993:STT

- [739] M. Avella, J. Berhaut, and M. Bornancin. Salinity tolerance of two tropical fishes, *Oreochromis aureus* and *O. niloticus*. I. Biochemical and morphological changes in the gill epithelium. *Journal of Fish Biology*, 42(2):243–254, February 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Helminen:1993:FSA

- [740] H. Helminen, K. Ennola, A. Hirvonen, and J. Sarvala. Fish stock assessment in lakes based on mass removal. *Journal of Fish Biology*, 42(2):255–263, February 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bengtsson:1993:SVM

- [741] Å. Bengtsson. Seasonal variation of mass, condition and gonadosomatic index in fourhorn sculpin (*Myoxocephalus quadricornis*) with normal and malformed vertebrae in the Gulf of Bothnia. *Journal of Fish Biology*, 42(2):265–278, February 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Smedsrod:1993:CCC

- [742] B. Smedsrød, T. Gjøent, B. Sveinbjørnsson, and T. Berg. Catabolism of circulating collagen in the Atlantic salmon (*Salmo salar*). *Journal of Fish Biology*, 42(2):279–291, February 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Youngson:1993:THL

- [743] A. F. Youngson and J. H. Webb. Thyroid hormone levels in Atlantic salmon (*Salmo salar*) during the return migration from the ocean to spawn. *Journal of Fish Biology*, 42(2):293–300, February 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Davidson:1993:NCT

- [744] G. A. Davidson, A. E. Ellis, and C. J. Secombes. Novel cell types isolated from the skin of rainbow trout, *Oncorhynchus mykiss*. *Journal of Fish*

Biology, 42(2):301–306, February 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Schaefer:1993:ROI

- [745] S. A. Schaefer. A remarkable occurrence of isopod parasitism on an armoured catfish, *Microlepidogaster maculipinnis*. *Journal of Fish Biology*, 42(2):307–310, February 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lura:1993:SBF

- [746] H. Lura, B. T. Barlaup, and H. Sægrov. Spawning behaviour of a farmed escaped female Atlantic salmon (*Salmo salar*). *Journal of Fish Biology*, 42(2):311–313, February 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Murray:1993:CEG

- [747] H. M. Murray, G. M. Wright, and G. P. Goff. Ciliated epithelium in the gut of larval Atlantic halibut, *Hippoglossus hippoglossus*. *Journal of Fish Biology*, 42(2):314–316, February 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1993:R

- [748] Anonymous. Referees, 1992. *Journal of Fish Biology*, 42(2):317–319, February 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1993:FSB

- [749] Anonymous. The Fisheries Society of the British Isles: Factors Affecting the Distribution of Fish: Annual Symposium, 5–9 July 1993 Conwy, North Wales. *Journal of Fish Biology*, 42(2):320, February 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wajsbrodt:1993:CTA

- [750] N. Wajsbrodt, A. Gasith, A. Diamant, and D. M. Popper. Chronic toxicity of ammonia to juvenile gilthead seabream *Sparus aurata* and related histopathological effects. *Journal of Fish Biology*, 42(3):321–328, March 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Berghahn:1993:ESR

- [751] R. Berghahn, A. M. Bullock, and M. Karakiri. Effects of solar radiation on the population dynamics of juvenile flatfish in the shallows of the Wadden Sea. *Journal of Fish Biology*, 42(3):329–345, March 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wardle:1993:TEL

- [752] C. S. Wardle and J. J. Videler. The timing of the electromyogram in the lateral myotomes of mackerel and saithe at different swimming speeds. *Journal of Fish Biology*, 42(3):347–359, March 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Skryabin:1993:BSL

- [753] A. G. Skryabin. The biology of stone loach *Barbatula barbatulus* in the Rivers Goloustnaya and Olkha, East Siberia. *Journal of Fish Biology*, 42(3):361–374, March 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mikheev:1993:TPE

- [754] V. N. Mikheev and O. A. Andreev. Two-phase exploration of a novel environment in the guppy, *Poecilia reticulata*. *Journal of Fish Biology*, 42(3):375–383, March 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kobayashi:1993:FIC

- [755] W. Kobayashi and T. S. Yamamoto. Factors inducing closure of the micropylar canal in the chum salmon egg. *Journal of Fish Biology*, 42(3):385–394, March 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

VanDamme:1993:RCL

- [756] P. A. Van Damme, D. Maertens, A. Arrumm, O. Hamerlynck, and F. Ollevier. The role of *Callionymus lyra* and *C. reticulatus* in the life cycle of *Lernaeocera luscii* in Belgian coastal waters (Southern Bight of the North Sea). *Journal of Fish Biology*, 42(3):395–401, March 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bucher:1993:HEH

- [757] F. Bucher and R. Hofer. Histological and enzyme histochemical changes in the kidney of male bullhead (*Cottus gobio*) during the spawning period. *Journal of Fish Biology*, 42(3):403–409, March 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anders:1993:GFM

- [758] K. Anders and V. Wiese. Glochidia of the freshwater mussel, *Anodonta anatina*, affecting the anadromous European smelt (*Osmerus eperlanus*)

from the Eider estuary, Germany. *Journal of Fish Biology*, 42(3):411–419, March 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Quinteiro:1993:SLS

- [759] P. Quinteiro, J. Tojo, A. Núñez, M. T. Santamarina, and M. L. Santmartin. *Stephanostomum lophii* sp. nov. (Digenea: Acanthocolpidae), intestinal parasite of *Lophius piscatorius*, with reference to seasonal fluctuations of metacercariae in intermediate second hosts (Gadidae). *Journal of Fish Biology*, 42(3):421–433, March 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jonsson:1993:MBG

- [760] N. Jonsson, L. P. Hansen, and B. Jonsson. Migratory behaviour and growth of hatchery-reared post-smolt Atlantic salmon *Salmo salar*. *Journal of Fish Biology*, 42(3):435–443, March 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Golubtsov:1993:KSS

- [761] A. S. Golubtsov and E. Yu. Krysanov. Karyological study of some cyprinid species from Ethiopia. The ploidy differences between large and small *Barbus* of Africa. *Journal of Fish Biology*, 42(3):445–455, March 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Meneses:1993:CPP

- [762] M. I. Meneses, E. Lopez de Leon, W. Norbis, and S. Lopez Lerena. Characterization and prevalence of pigments in the muscle of hawkfish (*Cheilodactylus bergi*). *Journal of Fish Biology*, 42(3):457–460, March 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Foster:1993:ESA

- [763] A. R. Foster, S. J. Hall, and D. F. Houlihan. The effects of seasonal acclimatization on correlates of growth rate in juvenile cod, *Gadus morhua*. *Journal of Fish Biology*, 42(3):461–464, March 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Krysanov:1993:KTG

- [764] E. Yu. Krysanov and A. S. Golubtsov. Karyotypes of three *Garra* species from Ethiopia. *Journal of Fish Biology*, 42(3):465–467, March 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1993:IRT

- [765] Anonymous. International Round Table 'Barbus II': The biology of Barbels: July 6–8, 1993, University of Liège, Belgium. *Journal of Fish Biology*, 42(3):469, March 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ryman:1993:GCA

- [766] N. Ryman, F. Utter, F. W. Allendorf, C. Busack, and J. Shaklee. Genetic concerns about hatchery populations — a comment on the conclusions of Nyman and Ring. *Journal of Fish Biology*, 42(4):471–480, April 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nyman:1993:RCR

- [767] L. Nyman. Reply to the comments of Ryman et al. *Journal of Fish Biology*, 42(4):481–483, April 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Beacham:1993:FES

- [768] T. D. Beacham and C. B. Murray. Fecundity and egg size variation in North American Pacific salmon (*Oncorhynchus*). *Journal of Fish Biology*, 42(4):485–508, April 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Suquet:1993:CSF

- [769] M. Suquet, G. Dorange, M. H. Omnes, Y. Normant, A. Le Roux, and C. Fauvel. Composition of the seminal fluid and ultrastructure of the spermatozoon of turbot (*Scophthalmus maximus*). *Journal of Fish Biology*, 42(4):509–516, April 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Opuszynski:1993:FHF

- [770] K. Opuszynski and J. V. Shireman. Food habits, feeding behaviour and impact of triploid bighead carp, *Hypophthalmichthys nobilis*, in experimental ponds. *Journal of Fish Biology*, 42(4):517–530, April 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Luo:1993:TTB

- [771] J. Luo. Tidal transport of the bay anchovy, *Anchoa mitchilli*, in darkness. *Journal of Fish Biology*, 42(4):531–539, April 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Okland:1993:TTS

- [772] F. Økland, B. Jonsson, A. J. Jensen, and L. P. Hansen. Is there a threshold size regulating seaward migration of brown trout and Atlantic salmon? *Journal of Fish Biology*, 42(4):541–550, April 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

OConnell:1993:SSR

- [773] M. F. O'Connell and E. G. M. Ash. Smolt size in relation to age at first maturity of Atlantic salmon (*Salmo salar*): the role of lacustrine habitat. *Journal of Fish Biology*, 42(4):551–569, April 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Choudhury:1993:PLS

- [774] A. Choudhury and T. A. Dick. Parasites of lake sturgeon, *Acipenser fulvescens* (Chondrostei: Acipenseridae), from central Canada. *Journal of Fish Biology*, 42(4):571–584, April 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Humphries:1993:CMM

- [775] P. Humphries. A comparison of the mouth morphology of three co-occurring species of atherinid. *Journal of Fish Biology*, 42(4):585–593, April 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sabapathy:1993:QSS

- [776] U. Sabapathy and L. H. Teo. A quantitative study of some digestive enzymes in the rabbitfish, *Siganus canaliculatus* and the sea bass, *Lates calcarifer*. *Journal of Fish Biology*, 42(4):595–602, April 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Handy:1993:ADA

- [777] R. D. Handy. The accumulation of dietary aluminium by rainbow trout, *Oncorhynchus mykiss*, at high exposure concentrations. *Journal of Fish Biology*, 42(4):603–606, April 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Narayanan:1993:LCR

- [778] K. Narayanan and A. A. Khan. Landolt's club in the retina of catfish, *Heteropneustes fossilis*: a new finding in teleostei. *Journal of Fish Biology*, 42(4):607–608, April 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lyndon:1993:EAI

- [779] A. R. Lyndon. Effect of angiotensin II on transepithelial potential in the isolated perfused flounder (*Platichthys flesus*) gill. *Journal of Fish Biology*, 42(4):609–610, April 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Larsen:1993:APA

- [780] B. K. Larsen and F. B. Jensen. Arterial PO₂, acid-base status, and red cell nucleoside triphosphates in rainbow trout transferred from fresh water to 20 per mil sea water. *Journal of Fish Biology*, 42(4):611–614, April 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Copp:1993:FON

- [781] G. H. Copp, C. Vaughan, and Alwyne Wheeler. First occurrence of the North American white sucker *Catostomus commersoni* in Great Britain. *Journal of Fish Biology*, 42(4):615–617, April 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Walkrr:1993:PBG

- [782] M. Greer Walkrr and J. H. Nichols. Predation on *Benthosema glaciale* (Myctouhidae) by spawning mackerel (*Scomber scombrus*). *Journal of Fish Biology*, 42(4):618–620, April 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Winfield:1993:CPS

- [783] I. J. Winfield, J. M. Fletcher, and P. R. Cubby. Confirmation of the presence of schelly, *Coregonus lavaretus*, in Brotherswater, U.K. *Journal of Fish Biology*, 42(4):621–622, April 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1993:BRa

- [784] Anonymous. Book reviews. *Journal of Fish Biology*, 42(4):623–630, April 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1993:BRb

- [785] Anonymous. Books received. *Journal of Fish Biology*, 42(4):631, April 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1993:ISN

- [786] Anonymous. International Symposium on North Pacific Flatfish: Anchorage, Alaska, U.S.A., 26–28 October 1994. *Journal of Fish Biology*,

42(4):632, April 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Stergiou:1993:NDV

- [787] K. I. Stergiou. Nutrient-dependent variation in growth and longevity of the red bandfish, *Cepola macrophthalma*, in the Aegean Sea. *Journal of Fish Biology*, 42(5):633–644, May 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Stergiou:1993:ADR

- [788] K. I. Stergiou. Abundance-depth relationship, condition factor and adaptive value of zooplanktophagy for red bandfish, *Cepola macrophthalma*. *Journal of Fish Biology*, 42(5):645–660, May 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

vanDijk:1993:IGW

- [789] P. L. M. van Dijk, G. E. E. J. M. van den Thillart, P. Balm, and S. Wendelaar Bonga. The influence of gradual water acidification on the acid/base status and plasma hormone levels in carp. *Journal of Fish Biology*, 42(5):661–671, May 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

vanDijk:1993:TSE

- [790] P. L. M. van Dijk, G. E. E. J. M. Van den Thillart, and S. E. Wendelaar Bonga. Is there a synergistic effect between steady-state exercise and water acidification in carp? *Journal of Fish Biology*, 42(5):673–681, May 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sola:1993:BRG

- [791] C. Sola, A. Spampanato, and L. Tosi. Behavioural responses of glass eels (*Anguilla anguilla*) towards amino acids. *Journal of Fish Biology*, 42(5):683–691, May 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Olla:1993:ILE

- [792] B. L. Olla and M. W. Davis. The influence of light on egg buoyancy and hatching rate of the walleye pollock, *Theragra chalcogramma*. *Journal of Fish Biology*, 42(5):693–698, May 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Foyle:1993:HDG

- [793] T. P. Foyle. A histological description of gonadal development and sex differentiation in the Coho salmon (*Oncorhynchus kisutch*) for both un-

treated and oestradiol immersed fry. *Journal of Fish Biology*, 42(5):699–712, May 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Keefe:1993:PMS

- [794] M. Keefe and K. W. Able. Patterns of metamorphosis in summer flounder, *Paralichthys dentatus*. *Journal of Fish Biology*, 42(5):713–728, May 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bagarinao:1993:STA

- [795] T. Bagarinao and R. D. Vetter. Sulphide tolerance and adaptation in the California killifish, *Fundulus parvipinnis*, a salt marsh resident. *Journal of Fish Biology*, 42(5):729–748, May 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Daoulas:1993:RSE

- [796] Ch. Daoulas, A. N. Economou, Th. Psarras, and R. Barbieri-Tseliki. Reproductive strategies and early development of three freshwater gobies. *Journal of Fish Biology*, 42(5):749–776, May 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Diter:1993:SFE

- [797] A. Diter, E. Quillet, and D. Chourrout. Suppression of first egg mitosis induced by heat shocks in the rainbow trout. *Journal of Fish Biology*, 42(5):777–786, May 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dickey-Collas:1993:OJP

- [798] M. Dickey-Collas. The occurrence of juvenile pigmentation abnormalities in plaice (*Pleuronectes platessa*) larvae fed on enriched and unenriched *Artemia salina nauplii*. *Journal of Fish Biology*, 42(5):787–795, May 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bernadsky:1993:DRF

- [799] G. Bernadsky, N. Sar, and E. Rosenberg. Drag reduction of fish skin mucus: Relationship to mode of swimming and size. *Journal of Fish Biology*, 42(5):797–800, May 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pendas:1993:IAS

- [800] A. M. Pendas, P. Morán, and E. García-Vázquez. Improvements to Atlantic salmon anterior kidney metaphase yields following phytohemaglu-

tinin injection. *Journal of Fish Biology*, 42(5):801–802, May 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Owen:1993:LLI

- [801] S. F. Owen, I. Barber, and P. J. B. Hart. Low level infection by eye fluke, *Diplostomum* spp., affects the vision of three-spined sticklebacks, *Gasterosteus aculeatus*. *Journal of Fish Biology*, 42(5):803–806, May 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

VanGuelpen:1993:SNR

- [802] L. Van Guelpen. Substantial northward range extension for *Gephyroberyx darwini* (Berycoidei, Trachichthyidae) in the western North Atlantic, possibly explained by habitat preference. *Journal of Fish Biology*, 42(5):807–810, May 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Raadik:1993:SST

- [803] T. A. Raadik. A specimen of *Salmo trutta* (Pisces: Salmonidae) possessing an additional dorsal fin. *Journal of Fish Biology*, 42(5):811–812, May 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Yankson:1993:ARD

- [804] K. Yankson and E. G. S. Azumah. Aspects of reproduction and diet of the long-finned herring, *Ilisha africana*, off Cape Coast, Ghana. *Journal of Fish Biology*, 42(5):813–815, May 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1993:BRc

- [805] Anonymous. Book reviews. *Journal of Fish Biology*, 42(5):817–818, May 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Heins:1993:CPD

- [806] D. C. Heins and J. A. Baker. Clutch production in the darter *Etheostoma lynceum* and its implications for life-history study. *Journal of Fish Biology*, 42(6):819–829, June 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ferreira:1993:RIC

- [807] B. P. Ferreira. Reproduction of the inshore coral trout *Plectropomus maculatus* (Perciformes: Serranidae) from the Central Great Barrier Reef, Australia. *Journal of Fish Biology*, 42(6):831–844, June 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pentuce:1993:SAF

- [808] W. S. Pentuce and F. B. Eddy. Spatial arrangement of fish gill secondary lamellar cells in intact and dissociated tissues from rainbow trout (*Oncorhynchus mykiss*) and Atlantic salmon (*Salmo salar*). *Journal of Fish Biology*, 42(6):845–850, June 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Conand:1993:LHS

- [809] F. Conand. Life history of the silverside *Atherinomorus lacunosus* (Atherinidae) in New Caledonia. *Journal of Fish Biology*, 42(6):851–863, June 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Getachew:1993:CNS

- [810] T. Getachew. The composition and nutritional status of the diet of *Oreochromis niloticus* in Lake Chamo, Ethiopia. *Journal of Fish Biology*, 42(6):865–874, June 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Magalhães:1993:ESB

- [811] M. F. Magalhães. Effects of season and body-size on the distribution and diet of the Iberian chub *Leuciscus pyrenaicus* in a lowland catchment. *Journal of Fish Biology*, 42(6):875–888, June 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Alvarez-Pellitero:1993:CSP

- [812] P. Alvarez-Pellitero and A. Sitjà-Bobadilla. *Ceratomyxa* spp. (Protozoa: Myxosporea) infections in wild and cultured sea bass, *Dicentrarchus labrax*, from the Spanish Mediterranean area. *Journal of Fish Biology*, 42(6):889–901, June 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lippitsch:1993:PSL

- [813] E. Lippitsch. A phyletic study on lacustrine haplochromine fishes (Perciformes, Cichlidae) of East Africa, based on scale and squamation characters. *Journal of Fish Biology*, 42(6):903–946, June 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Foster:1993:ETA

- [814] A. R. Foster, S. J. Hall, and D. F. Houlihan. The effects of temperature acclimation on organ/tissue mass and cytochrome c oxidase activity in juvenile cod (*Gadus morhua*). *Journal of Fish Biology*, 42(6):947–957,

June 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Aguirre:1993:CMC

- [815] A. L. Ibanez Aguirre. Coexistence of *Mugil cephalus* and *M. curema* in a coastal lagoon in the Gulf of Mexico. *Journal of Fish Biology*, 42(6):959–961, June 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Holst:1993:OBP

- [816] J. C. Holst, F. Nilsen, K. Hodneland, and A. Nylund. Observations of the biology and parasites of postsmolt Atlantic salmon, *Salmo salar*, from the Norwegian sea. *Journal of Fish Biology*, 42(6):962–966, June 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Davenport:1993:VGP

- [817] J. Davenport. Ventilation of the gills by the pectoral fins in the fangtooth *Anoplogaster cornutum*: how to breathe with a full mouth. *Journal of Fish Biology*, 42(6):967–970, June 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1993:BRd

- [818] Anonymous. Book reviews. *Journal of Fish Biology*, 42(6):971–973, June 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1993:BRe

- [819] Anonymous. Books received. *Journal of Fish Biology*, 42(6):973–974, June 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hop:1993:WFE

- [820] H. Hop, D. S. Danielssen, and J. Gjøsæter. Winter feeding ecology of cod (*Gadus morhua*) in a fjord of southern Norway. *Journal of Fish Biology*, 43(1):1–18, July 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dalzell:1993:FBF

- [821] P. Dalzell. The fisheries biology of flying fishes (families: Exocoetidae and Hemiramphidae) from the Camotes Sea, Central Philippines. *Journal of Fish Biology*, 43(1):19–32, July 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Politou:1993:FBB

- [822] C.-Y. Politou, P. S. Economidis, and A. I. Sinis. Feeding biology of bleak, *Alburnus alburnus*, in Lake Koronia, northern Greece. *Journal of Fish Biology*, 43(1):33–43, July 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Perera:1993:UPG

- [823] K. M. L. Perera. Ultrastructure of the primary gill lamellae of *Scomber australasicus*. *Journal of Fish Biology*, 43(1):45–59, July 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Menezes:1993:GCF

- [824] M. R. Menezes, S. Naik, and M. Martins. Genetic characterization in four sciaenid species from the Arabian Sea. *Journal of Fish Biology*, 43(1):61–67, July 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Koumans:1993:GCC

- [825] J. T. M. Koumans, H. A. Akster, G. H. R. Booms, and J. W. M. Osse. Growth of carp (*Cyprinus carpio*) white axial muscle; hyperplasia and hypertrophy in relation to the myonucleus/sarcoplasm ratio and the occurrence of different subclasses of myogenic cells. *Journal of Fish Biology*, 43(1):69–80, July 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hartmann:1993:FWC

- [826] J. Hartmann and H. Quoss. Fecundity of whitefish (*Coregonus lavaretus*) during the eu- and oligotrophication of Lake Constance. *Journal of Fish Biology*, 43(1):81–87, July 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Milton:1993:AGT

- [827] D. A. Milton, S. J. M. Blaber, and N. J. F. Rawlinson. Age and growth of three species of clupeids from Kiribati, tropical central south Pacific. *Journal of Fish Biology*, 43(1):89–108, July 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hartman:1993:EPC

- [828] K. J. Hartman and F. J. Margraf. Evidence of predatory control of yellow perch (*Perca flavescens*) recruitment in Lake Erie, U.S.A. *Journal of Fish Biology*, 43(1):109–119, July 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pottinger:1993:DPC

- [829] T. G. Pottinger and T. A. Moran. Differences in plasma cortisol and cortisone dynamics during stress in two strains of rainbow trout (*Oncorhynchus mykiss*). *Journal of Fish Biology*, 43(1):121–130, July 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Paul:1993:SCS

- [830] A. J. Paul, J. M. Paul, and R. L. Smith. The seasonal changes in somatic energy content of Gulf of Alaska yellowfin sole, *Pleuronectes asper*. *Journal of Fish Biology*, 43(1):131–138, July 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fouda:1993:RBR

- [831] M. M. Fouda, M. Y. Hanna, and F. M. Fouda. Reproductive biology of a Red Sea goby, *Silhouettea aegyptia*, and a Mediterranean goby, *Pomatoschistus marmoratus*, in Lake Timsah, Suez Canal. *Journal of Fish Biology*, 43(1):139–151, July 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1993:Aa

- [832] Anonymous. Announcement. *Journal of Fish Biology*, 43(1):153–154, July 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Abdel-Aziz:1993:LDC

- [833] S. H. Abdel-Aziz and F. S. El-Nady. Lipid dynamics in the common torpedo, *Torpedo torpedo*, from the south eastern Mediterranean. *Journal of Fish Biology*, 43(2):155–162, August 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nilsson:1993:ACS

- [834] J. Nilsson. Arctic charr strain crosses: effects on growth and sexual maturity. *Journal of Fish Biology*, 43(2):163–171, August 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Zivkov:1993:PCB

- [835] M. Živkov and G. Petrova. On the pattern of correlation between the fecundity, length, weight and age of pikeperch *Stizostedion lucioperca*. *Journal of Fish Biology*, 43(2):173–182, August 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tilney:1993:EOG

- [836] R. L. Tilney and T. Hecht. Early ontogeny of *Galeichthys feliceps* from the south east coast of South Africa. *Journal of Fish Biology*, 43(2):183–212, August 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Franklin:1993:RPC

- [837] C. E. Franklin and P. S. Davie. The role of the pericardium in cardiac function in the dogfish, *Squalus acanthias*. *Journal of Fish Biology*, 43(2):213–219, August 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vitturi:1993:CAB

- [838] R. Vitturi, E. Catalano, and D. Colombera. Chromosome analysis of *Bothus podas* (Pisces, Pleuronectiformes) from the Mediterranean Sea. *Journal of Fish Biology*, 43(2):221–227, August 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

NDa:1993:SCS

- [839] K. N'Da and C. Déniel. Sexual cycle and seasonal changes in the ovary of the red mullet, *Mullus surmuletus*, from the southern coast of Brittany. *Journal of Fish Biology*, 43(2):229–244, August 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mathers:1993:RGP

- [840] E. M. Mathers, D. F. Houlihan, I. D. McCarthy, and L. J. Burren. Rates of growth and protein synthesis correlated with nucleic acid content in fry of rainbow trout, *Oncorhynchus mykiss*: effects of age and temperature. *Journal of Fish Biology*, 43(2):245–263, August 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gehrke:1993:ERR

- [841] P. C. Gehrke, M. B. Revell, and A. W. Philbey. Effects of river red gum, *Eucalyptus camaldulensis*, litter on golden perch, *Macquaria ambigua*. *Journal of Fish Biology*, 43(2):265–279, August 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gibson:1993:MWA

- [842] D. I. Gibson. *Monobothrium wageneri*: another imported tapeworm established in wild British freshwater fishes? *Journal of Fish Biology*, 43(2):281–285, August 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kennedy:1993:ISC

- [843] C. R. Kennedy. Introductions, spread and colonization of new localities by fish helminth and crustacean parasites in the British Isles: a perspective and appraisal. *Journal of Fish Biology*, 43(2):287–301, August 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Finstad:1993:MGS

- [844] B. Finstad and T. G. Heggberget. Migration, growth and survival of wild and hatchery-reared anadromous Arctic charr (*Salvelinus alpinus*) in Finnmark, Northern Norway. *Journal of Fish Biology*, 43(2):303–312, August 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bentzen:1993:NSP

- [845] P. Bentzen, E. B. Taylor, and J. M. Wright. A novel synthetic probe for DNA fingerprinting salmonid fishes. *Journal of Fish Biology*, 43(2):313–316, August 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nash:1993:OLW

- [846] R. D. M. Nash and R. S. Santos. The occurrence of the lesser weever in the Azores. *Journal of Fish Biology*, 43(2):317–319, August 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Houthuijzen:1993:ERG

- [847] R. P. Houthuijzen, J. J. G. M. Backx, and A. D. Buuse. Exceptionally rapid growth and early maturation of perch in a freshwater lake recently converted from an estuary. *Journal of Fish Biology*, 43(2):320–324, August 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hutchinson:1993:MGG

- [848] S. Hutchinson and L. E. Hawkins. The migration and growth of O-group flounders *Pleuronecte flesus* in mixohaline conditions. *Journal of Fish Biology*, 43(2):325–328, August 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sola:1993:KAG

- [849] L. Sola, S. Bressanello, A. R. Rossi, V. Iaselli, D. Crosetti, and S. Cataudella. A karyotype analysis of the genus *Dicentrarchus* by different staining techniques. *Journal of Fish Biology*, 43(3):329–337, Septem-

ber 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pilcher:1993:DPA

- [850] M. W. Pilcher and J. F. Moore. Distribution and prevalence of *Anguillicola crassus* in eels from the tidal Thames catchment. *Journal of Fish Biology*, 43(3):339–344, September 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mangor-Jensen:1993:WBE

- [851] A. Mangor-Jensen, K. G. Waiwood, and R. H. Peterson. Water balance in eggs of striped bass (*Morone saxatilis*). *Journal of Fish Biology*, 43(3):345–353, September 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pulliainen:1993:DBL

- [852] E. Pulliainen and K. Korhonen. Does the burbot, *Lota lota*, have rest years between normal spawning seasons? *Journal of Fish Biology*, 43(3):355–362, September 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gonzalez:1993:HCS

- [853] G. Gonzalez, S. Crespo, and J. Brusle. Histo-cytological study of the liver of the cabrilla sea bass, *Serranus cabrilla* (Teleostei, Serranidae), an available model for marine fish experimental studies. *Journal of Fish Biology*, 43(3):363–373, September 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bardonnet:1993:UVL

- [854] A. Bardonnet. Use of visual landmarks by young trout (*Salmo trutta*) during their diel downstream post-emergence displacement in experimental channels. *Journal of Fish Biology*, 43(3):375–384, September 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dempster:1993:HTO

- [855] P. W. Dempster, M. C. M. Beveridge, and D. J. Baird. Herbivory in the tilapia *Oreochromis niloticus*: a comparison of feeding rates on phytoplankton and periphyton. *Journal of Fish Biology*, 43(3):385–392, September 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wilkins:1993:RGB

- [856] N. P. Wilkins, H. P. Courtney, and A. Curatolo. Recombinant genotypes in backcrosses of male Atlantic salmon \times brown trout hybrids to female Atlantic salmon. *Journal of Fish Biology*, 43(3):393–399, September 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kiessling:1993:DPM

- [857] A. Kiessling, S. S. O. Hung, and T. Storebakken. Differences in protein mobilization between ventral and dorsal parts of white epaxial muscle from fed, fasted and refed white sturgeon (*Acipenser transmontanus*). *Journal of Fish Biology*, 43(3):401–408, September 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jobling:1993:IPF

- [858] M. Jobling, E. H. Jørgensen, and S. I. Siikavuopio. The influence of previous feeding regime on the compensatory growth response of maturing and immature Arctic charr, *Salvelinus alpinus*. *Journal of Fish Biology*, 43(3):409–419, September 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kurokawa:1993:PFPP

- [859] T. Kurokawa, T. Suzuki, and S. Funakoshi. Purification of flounder (*Paralichthys olivaceus*) fibronectin and its localization during epithelialization at a fin wound. *Journal of Fish Biology*, 43(3):421–432, September 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nordlie:1993:EAF

- [860] F. G. Nordlie and D. C. Haney. Euryhaline adaptations in the fat sleeper, *Dormitator maculatus*. *Journal of Fish Biology*, 43(3):433–439, September 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Furuta:1993:HIR

- [861] T. Furuta, K. Ogawa, and H. Wakabayashi. Humoral immune response of carp *Cyprinus carpio* to *Myxobolus artus* (Myxozoa: Myxobolidae) infection. *Journal of Fish Biology*, 43(3):441–450, September 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dempson:1993:STF

- [862] J. B. Dempson. Salinity tolerance of freshwater acclimated, small-sized Arctic charr, *Salvelinus alpinus* from northern Labrador. *Journal of Fish Biology*, 43(3):451–462, September 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fechhelm:1993:EST

- [863] R. G. Fechhelm, P. S. Fitzgerald, J. D. Bryan, and B. J. Gallaway. Effect of salinity and temperature on the growth of yearling Arctic cisco (*Coregonus autumnalis*) of the Alaskan Beaufort Sea. *Journal of Fish Biology*, 43(3):463–474, September 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Degani:1993:PMB

- [864] G. Degani and M. P. Schreiberman. Pheromone of male blue gourami and its effect on vitellogenesis, steroidogenesis and gonadotropin cells in pituitary of the female. *Journal of Fish Biology*, 43(3):475–485, September 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jobling:1993:SLD

- [865] M. Jobling and I. Miglavs. The size of lipid depots — a factor contributing to the control of food intake in Arctic charr, *Salvelinus alpinus*? *Journal of Fish Biology*, 43(3):487–489, September 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Saegrov:1993:MMP

- [866] H. Sægrov and K. Urdal. Mature male parr buried among eggs in an Atlantic salmon redd. *Journal of Fish Biology*, 43(3):490–491, September 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nakano:1993:SDA

- [867] T. Nakano, M. Sato, and M. Takeuchi. Superoxide dismutase activity in lite skin of fish. *Journal of Fish Biology*, 43(3):492–496, September 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Franck:1993:DHM

- [868] D. Franck and A. Ribowski. Dominance hierarchies of male green sword-tails (*Xiphophorus helleri*) in nature. *Journal of Fish Biology*, 43(3):497–499, September 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bardonnet:1993:POM

- [869] A. Bardonnet, P. Gaudin, O. Grolet, and J. E. Thorpe. Presence of an oesophageal mucus plug at the time of emergence in grayling (*Thymallus thymallus*) and Atlantic salmon (*Salmo salar*). *Journal of Fish Biology*, 43(3):500–502, September 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Navarro:1993:ETA

- [870] J. C. Navarro, R. S. Batty, M. V. Bell, and J. R. Sargent. Effects of two *Artemia* diets with different contents of polyunsaturated fatty acids on the lipid composition of larvae of Atlantic herring (*Clupea harengus*). *Journal of Fish Biology*, 43(4):503–515, October 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fangstam:1993:ESE

- [871] H. Fångstam, I. Berglund, M. Sjöberg, and H. Lundqvist. Effects of size and early sexual maturity on downstream migration during smolting in Baltic salmon (*Salmo salar*). *Journal of Fish Biology*, 43(4):517–529, October 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ranta:1993:IAF

- [872] E. Ranta and S.-K. Juvonen. Interference affects food-finding rate in schooling sticklebacks. *Journal of Fish Biology*, 43(4):531–535, October 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lobon-Cervia:1993:PEP

- [873] J. Lobón-Cervia, C. G. Utrilla, E. Querol, and M. A. Puig. Population ecology of pike-cichlid, *Crenicichla lepidota*, in two streams of the Brazilian Pampa subject to a severe drought. *Journal of Fish Biology*, 43(4):537–557, October 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Olsen:1993:GKA

- [874] Y. A. Olsen, L. J. Reitan, and K. H. Røed. Gill Na^+ , K^+ -ATPase activity, plasma cortisol level, and non-specific immune response in Atlantic salmon (*Salmo salar*) during parr-smolt transformation. *Journal of Fish Biology*, 43(4):559–573, October 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Merron:1993:PHT

- [875] G. S. Merron. Pack-hunting in two species of catfish, *Clavias gariepinus* and *C. ngamensis*, in the Okavango Delta, Botswana. *Journal of Fish Biology*, 43(4):575–584, October 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Peruzzi:1993:IGO

- [876] S. Peruzzi, A. G. Scott, J. C. J. Domaniewski, and G. F. Warner. Initiation of gynogenesis in *Oreochromis niloticus* following heterologous fertilization. *Journal of Fish Biology*, 43(4):585–591, October 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Howe:1993:CAF

- [877] J. C. Howe. A comparative analysis of the feeding apparatus in pomacanthids, with special emphasis of oesophageal papillae in *Genicanthus personatus*. *Journal of Fish Biology*, 43(4):593–602, October 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hartvigsen:1993:PCR

- [878] R. Hartvigsen and C. R. Kennedy. Patterns in the composition and richness of helminth communities in brown trout, *Salmo trutta*, in a group of reservoirs. *Journal of Fish Biology*, 43(4):603–615, October 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Riehl:1993:USP

- [879] R. Riehl and M. Kokoscha. A unique surface pattern and micropylar apparatus in the eggs of *Luciocephalus* sp. (Perciformes, Luciocephalidae). *Journal of Fish Biology*, 43(4):617–620, October 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Valtonen:1993:BRS

- [880] E. T. Valtonen, H. Tuuha, and O. N. Pugachev. Book review: *Seasonal studies of the biology of Achtheres percarum in perch, Perca fluviatilis, from four Finnish lakes over a 3-year period*. *Journal of Fish Biology*, 43(4):621–632, October 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jay:1993:SVH

- [881] C. V. Jay. Structure and volume of the hoki, *Macruronus novaezelandiae* (Merlucciidae), swimbladder. *Journal of Fish Biology*, 43(4):633–642, October 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Otteraa:1993:AGJ

- [882] H. Otterå and A. Folkvord. Allometric growth in juvenile cod (*Gadus morhua*) and possible effects on cannibalism. *Journal of Fish Biology*, 43(4):643–645, October 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Armstrong:1993:EIT

- [883] J. D. Armstrong and C. E. Rawlings. The effect of intragastric transmitters on feeding behaviour of Atlantic salmon, *Salmo salar*; parr during autumn. *Journal of Fish Biology*, 43(4):646–648, October 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Amores:1993:CCC

- [884] A. Amores, G. Thode, G. Martinez, and V. Giles. Chromosome complement, C-banding and Ag-NOR in *Gymnammodytes cicereus* (Ammodytidae, Perciformes). *Journal of Fish Biology*, 43(4):649–651, October 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wheeler:1993:DGC

- [885] Alwyne Wheeler. The distribution of *Gobius cobitis* in the British Isles. *Journal of Fish Biology*, 43(4):652–655, October 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Crisp:1993:AUK

- [886] D. T. Crisp. The ability of U.K. salmonid alevins to emerge through a sand layer. *Journal of Fish Biology*, 43(4):656–658, October 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1993:Ab

- [887] Anonymous. Announcement. *Journal of Fish Biology*, 43(4):659, October 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rasotto:1993:EOJ

- [888] M. B. Rasotto. The embryological origin of the juxtatesticular body in jawfishes (Opistognathidae). *Journal of Fish Biology*, 43(5):661–669, November 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Letcher:1993:efd

- [889] B. H. Letcher and D. A. Bengtson. Effects of food density and temperature on feeding and growth of young inland silversides (*Menidia beryll-*

lina). *Journal of Fish Biology*, 43(5):671–686, November 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Webb:1993:TBL

- [890] P. W. Webb. Is tilting behaviour at low swimming speeds unique to negatively buoyant fish? Observations on steelhead trout, *Oncorhynchus mykiss*, and bluegill, *Lepomis macrochirus*. *Journal of Fish Biology*, 43(5):687–694, November 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mees:1993:PBS

- [891] C. C. Mees. Population biology and stock assessment of *Pristipomoides filamentosus* on the Mahe Plateau, Seychelles. *Journal of Fish Biology*, 43(5):695–708, November 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pajak:1993:CSM

- [892] B. Pajak and A. Danguy. Characterization of sugar moieties and oligosaccharide sequences in the distal intestinal epithelium of the rainbow trout by means of lectin histochemistry. *Journal of Fish Biology*, 43(5):709–722, November 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McKay:1993:GRB

- [893] S. I. McKay. Genetic relationships of *Brachygobius* and related brackish Indo-west Pacific and Australasian genera (Teleostei: Gobiidae). *Journal of Fish Biology*, 43(5):723–738, November 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tyler:1993:IGM

- [894] C. R. Tyler and S. Everett. Incidences of gross morphological disorders in barbel (*Barbus barbus*) in three rivers in southern England. *Journal of Fish Biology*, 43(5):739–748, November 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sims:1993:DRM

- [895] D. W. Sims, S. J. Davies, and Q. Bone. On the diel rhythms in metabolism and activity of post-hatching lesser spotted dogfish, *Scyliorhinus canicula*. *Journal of Fish Biology*, 43(5):749–754, November 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bardonnet:1993:DRE

- [896] A. Bardonnet, P. Gaudin, and J. E. Thorpe. Diel rhythm of emergence and of first displacement downstream in trout (*Salmo trutta*), Atlantic salmon (*S. salar*) and grayling (*Thymallus thymallus*). *Journal of Fish Biology*, 43(5):755–762, November 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wilkins:1993:SUG

- [897] H. K. A. Wilkins and A. A. Myers. Shelter utilization by *Gobius cruentatus* and *Thorogobius ephippiatus* (Teleostei: Gobiidae). *Journal of Fish Biology*, 43(5):763–773, November 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Krause:1993:IHS

- [898] J. Krause. The influence of hunger on shoal size choice by three-spined sticklebacks, *Gasterosteus aculeatus*. *Journal of Fish Biology*, 43(5):775–780, November 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Thoney:1993:CEP

- [899] D. A. Thoney. Community ecology of the parasites of adult spot, *Leiostomus xanthurus*, and Atlantic croaker, *Micropogonias undulatus* (Sciaenidae) in the Cape Hatteras region. *Journal of Fish Biology*, 43(5):781–804, November 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Reimers:1993:CGR

- [900] E. Reimers, A. G. Kjørrefjord, and S. M. Stavøstrand. Compensatory growth and reduced maturation in second sea winter farmed Atlantic salmon following starvation in February and March. *Journal of Fish Biology*, 43(5):805–810, November 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bradford:1993:DUS

- [901] R. G. Bradford. Differential utilization of storage lipids and storage proteins by Northwest Atlantic herring (*Clupea harengus harengus*). *Journal of Fish Biology*, 43(6):811–824, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Shackley:1993:UWB

- [902] P. E. Shackley, C. Talbot, and A. Cowan. The use of whole-body sodium, potassium and calcium content to identify the nutrient status of first

year salmon fry. *Journal of Fish Biology*, 43(6):825–836, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ansell:1993:ESL

- [903] A. D. Ansell and R. N. Gibson. The effect of sand and light on predation of juvenile plaice (*Pleuronectes platessa*) by fishes and crustaceans. *Journal of Fish Biology*, 43(6):837–845, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pen:1993:BBS

- [904] L. J. Pen, H. S. Gill, P. Humphries, and I. C. Potter. Biology of the black-stripe minnow *Galaxiella nigvostriata*, including comparisons with the other two *Galaxiella* species. *Journal of Fish Biology*, 43(6):847–863, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Stoumboudi:1993:GIB

- [905] M. Th. Stoumboudi, W. Villwock, J. Sela, and M. Abraham. Gonadosomatic index in *Barbus longiceps*, *Capoeta damascina* and their natural hybrid (Pisces, Cyprinidae), versus spermatozoan index in the parental males. *Journal of Fish Biology*, 43(6):865–875, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Morgan:1993:BRA

- [906] I. J. Morgan, P. Tytler, and M. V. Bell. Book review: *The accumulation of 137-caesium from fresh water by alevins and fry of Atlantic salmon and brown trout*. *Journal of Fish Biology*, 43(6):877–888, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bridcut:1993:MSF

- [907] E. E. Bridcut and P. S. Giller. Movement and site fidelity in young brown trout *Salmo trutta* populations in a southern Irish stream. *Journal of Fish Biology*, 43(6):889–899, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Beveridge:1993:GRT

- [908] M. C. M. Beveridge, D. J. Baird, S. M. Rahmatullah, L. A. Lawton, K. A. Beattie, and G. A. Codd. Grazing rates on toxic and non-toxic strains of cyanobacteria by *Hypophthalmichthys molitrix* and *Oreochromis niloticus*. *Journal of Fish Biology*, 43(6):901–907, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bentzen:1993:GRA

- [909] P. Bentzen, W. C. Leggett, and G. G. Brown. Genetic relationships among the shads (*Alosa*) revealed by mitochondrial DNA analysis. *Journal of Fish Biology*, 43(6):909–917, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fevolden:1993:CIC

- [910] S. E. Fevolden and K. H. Røed. Cortisol and immune characteristics in rainbow trout (*Oncorhynchus mykiss*) selected for high or low tolerance to stress. *Journal of Fish Biology*, 43(6):919–930, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mattei:1993:POT

- [911] X. Mattei, Y. Siau, O. T. Thiaw, and D. Thiam. Peculiarities in the organization of testis of *Ophidian* sp. (Pisces Teleostei). Evidence for two types of spermatogenesis in teleost fish. *Journal of Fish Biology*, 43(6):931–937, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bishop:1993:WSO

- [912] J. M. Bishop and A.-R. Abdul-Ghaffar. Whale shark observations off Kuwait's coast in 1992. *Journal of Fish Biology*, 43(6):939–940, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Billington:1993:GVL

- [913] N. Billington. Genetic variation in Lake Erie yellow perch (*Perca flavescens*) demonstrated by mitochondrial DNA analysis. *Journal of Fish Biology*, 43(6):941–943, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nag:1993:OCC

- [914] T. C. Nag and J. Bhattacharjee. Optic cyst in a cyprinid teleost. *Journal of Fish Biology*, 43(6):944–946, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

MacLean:1993:GXC

- [915] S. A. MacLean and L. I. Despres-Patanjo. Gill X-cell lesions in American plaice (*Hippoglossoides platessoides*) concurrent with lymphocystis infection. *Journal of Fish Biology*, 43(6):947–950, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Alexandrino:1993:GPA

- [916] P. J. Alexandrino, C. Sousa, A. Pereira, and N. Ferrand. Genetic polymorphism of adenosine deaminase (ADA; E.C. 3.5.4.4.) in allis shad, *Alosa alosa* and twaite shad, *Alosa fallax*. *Journal of Fish Biology*, 43(6):951–953, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1993:BRf

- [917] Anonymous. Book reviews. *Journal of Fish Biology*, 43(6):955–959, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1993:BRg

- [918] Anonymous. Books received. *Journal of Fish Biology*, 43(6):960, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jonsson:1993:LCL

- [919] B. Jonsson and J. H. L'Abée-Lund. Latitudinal clines in life-history variables of anadromous brown trout in Europe. *Journal of Fish Biology*, 43(sA):1–16, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Amara:1993:SDD

- [920] R. Amara, F. Lagardere, and Y. Desaunay. Seasonal distribution and duration of the planktonic stage of Dover sole, *Solea solea*, larvae in the Bay of Biscay: an hypothesis. *Journal of Fish Biology*, 43(sA):17–30, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jager:1993:DGf

- [921] Z. Jager, H. L. Kleef, and P. Tydeman. The distribution of 0-group flatfish in relation to abiotic factors on the tidal flats in the brackish Dollard (Ems Estuary, Wadden Sea). *Journal of Fish Biology*, 43(sA):31–43, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bembo:1993:DGM

- [922] D. G. Bembo, R. J. H. Beverton, A. J. Weightman, and R. C. Cresswell. Distribution, growth and movement of River Usk brown trout (*Salmo trutta*). *Journal of Fish Biology*, 43(sA):45–52, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Carvalho:1993:EAF

- [923] G. R. Carvalho. Evolutionary aspects of fish distribution: genetic variability and adaptation. *Journal of Fish Biology*, 43(sA):53–73, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Naish:1993:GSM

- [924] K.-A. Naish, G. R. Carvalho, and T. J. Pitcher. The genetic structure and microdistribution of shoals of *Phoxinus phoxinus*, the European minnow. *Journal of Fish Biology*, 43(sA):75–89, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ferguson:1993:DMD

- [925] M. M. Ferguson, L. Bernatchez, M. Gatt, B. R. Konkle, S. Lee, M. L. Malott, and R. S. McKinley. Distribution of mitochondrial DNA variation in lake sturgeon (*Adpenser fulvescens*) from the Moose River basin, Ontario, Canada. *Journal of Fish Biology*, 43(sA):91–101, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Milner:1993:VDA

- [926] N. J. Milner, R. J. Wyatt, and M. D. Scott. Variability in the distribution and abundance of stream salmonids, and the associated use of habitat models. *Journal of Fish Biology*, 43(sA):103–119, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Davenport:1993:PDD

- [927] J. Davenport and M. D. J. Sayer. Physiological determinants of distribution in fish. *Journal of Fish Biology*, 43(sA):121–145, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Huse:1993:VDA

- [928] I. Huse and J. C. Holm. Vertical distribution of Atlantic salmon (*Salmo salar*) as a function of illumination. *Journal of Fish Biology*, 43(sA):147–156, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sayer:1993:DDP

- [929] M. D. J. Sayer, R. N. Gibson, and R. J. A. Atkinson. Distribution and density of populations of goldsinny wrasse (*Ctenolabrus rupestris*) on the west coast of Scotland. *Journal of Fish Biology*, 43(sA):157–167, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Smale:1993:ADC

- [930] M. J. Smale, B. A. Roel, A. Badenhorst, and J. G. Field. Analysis of the demersal community of fish and cephalopods on the Agulhas Bank, South Africa. *Journal of Fish Biology*, 43(sA):169–191, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pet:1993:CHO

- [931] J. S. Pet and G. J. Piet. The consequences of habitat occupation and habitat overlap of the introduced tilapia *Oreochromis mossambicus* and indigenous fish species for fishery management in a Sri Lankan reservoir. *Journal of Fish Biology*, 43(sA):193–208, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Albert:1993:TSV

- [932] O. T. Albert and O. A. Bergstad. Temporal and spatial variation in the species composition of trawl samples from a demersal fish community. *Journal of Fish Biology*, 43(sA):209–222, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Craig:1993:ADF

- [933] J. F. Craig and J. A. Babaluk. An analysis of the distribution of fish species in a large prairie lake. *Journal of Fish Biology*, 43(sA):223–228, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Copp:1993:DSR

- [934] G. H. Copp and P. Jurajda. Do small riverine fish move inshore at night? *Journal of Fish Biology*, 43(sA):229–241, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McCleave:1993:PBC

- [935] J. D. McCleave. Physical and behavioural controls on the oceanic distribution and migration of leptocephali. *Journal of Fish Biology*, 43(sA):243–273, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rogers:1993:DSS

- [936] S. I. Rogers. The dispersion of sole, *Solea solea* and plaice, *Pleuronectes platessa* within and away from a nursery ground in the Irish Sea. *Journal of Fish Biology*, 43(sA):275–288, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Huntingford:1993:CCB

- [937] F. A. Huntingford. Can cost–benefit analysis explain fish distribution patterns? *Journal of Fish Biology*, 43(sA):289–308, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Krause:1993:PBF

- [938] J. Krause. Positioning behaviour in fish shoals: a cost–benefit analysis. *Journal of Fish Biology*, 43(sA):309–314, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Smith:1993:DPS

- [939] G. W. Smith, C. W. Glass, A. D. F. Johnstone, and W. R. Mojsiewicz. Diurnal patterns in the spatial relationships between saithe, *Pollachius virens*, schooling in the wild. *Journal of Fish Biology*, 43(sA):315–325, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1993:PA

- [940] Anonymous. Poster abstracts. *Journal of Fish Biology*, 43(sA):327–344, December 1993. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tang:1994:RAM

- [941] Y. Tang, J. A. Nelson, S. P. Reidy, S. R. Kerr, and R. G. Boutilier. A reappraisal of activity metabolism in Atlantic cod (*Gadus morhua*). *Journal of Fish Biology*, 44(1):1–10, January 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Herrera:1994:AGR

- [942] M. Herrera and C. Fernández-Delgado. The age, growth and reproduction of *Chondrostoma polylepis willkommii* in a seasonal stream in the Guadalquivir River basin (southern Spain). *Journal of Fish Biology*, 44(1):11–22, January 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fuiman:1994:SAH

- [943] L. A. Fuiman and R. S. Batty. Susceptibility of Atlantic herring and plaice larvae to predation by juvenile cod and herring at two constant temperatures. *Journal of Fish Biology*, 44(1):23–34, January 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nash:1994:DVC

- [944] R. D. M. Nash, R. S. Santos, A. J. Geffen, G. Hughes, and T. R. Ellis. Diel variability in catch rate of juvenile flatfish on two small nursery grounds (Port Erin Bay, Isle of Man and Porto Pirn Bay, Faial, Azores). *Journal of Fish Biology*, 44(1):35–45, January 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Crosetti:1994:PGS

- [945] D. Crosetti, W. S. Nelson, and J. C. Avise. Pronounced genetic structure of mitochondrial DNA among populations of the circumglobally distributed grey mullet (*Mugil cephalus*). *Journal of Fish Biology*, 44(1):47–58, January 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Clayton:1994:HRI

- [946] G. M. Clayton and D. J. Price. Heterosis in resistance to *Ichthyophthirius multifiliis* infections in poeciliid fish. *Journal of Fish Biology*, 44(1):59–66, January 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bird:1994:MBS

- [947] D. J. Bird, I. C. Potter, M. W. Hardisty, and B. I. Baker. Morphology, body size and behaviour of recently-metamorphosed sea lampreys, *Petromyzon marinus*, from the lower River Severn, and their relevance to the onset of parasitic feeding. *Journal of Fish Biology*, 44(1):67–74, January 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Flshelson:1994:CIM

- [948] L. Flshelson. Comparative internal morphology of deep-sea eels, with particular emphasis on gonads and gut structure. *Journal of Fish Biology*, 44(1):75–101, January 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tytler:1994:DWA

- [949] P. Tytler and J. Ireland. Drinking and water absorption by the larvae of herring (*Clupea harengus*) and turbot (*Scophthalmus maximus*). *Journal of Fish Biology*, 44(1):103–116, January 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Scott:1994:DED

- [950] A. P. Scott and N. R. Liley. Dynamics of excretion of 17α , 20β -dihydroxy-4-pregnen-3-one 20-sulphate, and of the glucuronides of testosterone and 17β -oestradiol, by urine of reproductively mature male and female rainbow trout (*Oncorhynchus mykiss*). *Journal of Fish Biology*, 44(1):117–129, January 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Scott:1994:URM

- [951] A. P. Scott, N. R. Liley, and E. L. M. Vermeirssen. Urine of reproductively mature female rainbow trout, *Oncorhynchus mykiss* (Walbaum), contains a priming pheromone which enhances plasma levels of sex steroids and gonadotrophin II in males. *Journal of Fish Biology*, 44(1):131–147, January 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pottinger:1994:PSI

- [952] T. G. Pottinger, T. A. Moran, and J. A. W. Morgan. Primary and secondary indices of stress in the progeny of rainbow trout (*Oncorhynchus mykiss*) selected for high and low responsiveness to stress. *Journal of Fish Biology*, 44(1):149–163, January 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Salam:1994:EBW

- [953] A. Salam and P. M. C. Davies. Effect of body weight and temperature on the maximum daily food consumption of *Esox lucius*. *Journal of Fish Biology*, 44(1):165–167, January 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Saxena:1994:ITO

- [954] P. K. Saxena and R. Sandhu. Influence of temperature on ovarian recrudescence in the Indian catfish, *Heteropneustes fossilis*. *Journal of Fish Biology*, 44(1):168–171, January 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Soto:1994:ICB

- [955] C. G. Soto, J. S. Zhang, and Y. H. Shi. Intraspecific cleaning behaviour in *Cyprinus carpio* in aquaria. *Journal of Fish Biology*, 44(1):172–174, January 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Paxton:1994:CEF

- [956] C. G. M. Paxton, A. E. Magurran, and S. Zschokke. Caudal eyespots on fish predators influence the inspection behaviour of Trinidadian guppies, *Poecilia reticulata*. *Journal of Fish Biology*, 44(1):175–177, January 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Amundsen:1994:SSP

- [957] P.-A. Amundsen. A simplified sampling procedure for field estimation of food consumption of Arctic charr *Salvelinus alpinus* using gillnets. *Journal of Fish Biology*, 44(1):178–180, January 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kuperman:1994:UIE

- [958] B. I. Kuperman and V. V. Kuz'mina. The ultrastructure of the intestinal epithelium in fishes with different types of feeding. *Journal of Fish Biology*, 44(2):181–193, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Singh:1994:IHE

- [959] P. B. Singh, D. E. Kime, P. Epler, and J. Chyb. Impact of γ -hexachlorocyclohexane exposure on plasma gonadotropin levels and in vitro stimulation of gonadal steroid production by carp hypophyseal homogenate in *Carassius auratus*. *Journal of Fish Biology*, 44(2):195–204, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Siau:1994:PSR

- [960] Y. Siau. Population structure, reproduction and sex-change in a tropical East Atlantic grouper. *Journal of Fish Biology*, 44(2):205–211, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ward:1994:CGD

- [961] R. D. Ward, M. Woodwark, and D. O. F. Skibinski. A comparison of genetic diversity levels in marine, freshwater, and anadromous fishes. *Journal of Fish Biology*, 44(2):213–232, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kisia:1994:MSS

- [962] S. M. Kisia and G. M. Hughes. Morphometry of some structural parameters affecting oxygen diffusion in body trunk red muscle at different sizes of a tilapia, *Oreochromis niloticus*. *Journal of Fish Biology*, 44

(2):233–239, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bolliet:1994:DSN

- [963] V. Bolliet, S. Perreault, and M. A. Ali. Development of serotonergic neurons in the brain of the mackerel, *Scomber scombrus*. An immunohistochemical study. *Journal of Fish Biology*, 44(2):241–253, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McFadzen:1994:HCS

- [964] I. R. B. McFadzen, D. M. Lowe, and S. H. Coombs. Histological changes in starved turbot larvae (*Scophthalmus maximus*) quantified by digital image analysis. *Journal of Fish Biology*, 44(2):255–262, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bushmann:1994:SCM

- [965] P. J. Bushmann and J. R. Burns. Social control of male sexual maturation in the swordtail characin, *Corynopoma riisei*. *Journal of Fish Biology*, 44(2):263–272, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Chivers:1994:REC

- [966] D. P. Chivers and R. J. F. Smith. The role of experience and chemical alarm signalling in predator recognition by fathead minnows, *Pimephales promelas*. *Journal of Fish Biology*, 44(2):273–285, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Perez-Sanchez:1994:HGH

- [967] J. Pérez-Sánchez, H. Martí-Palanca, and P-Y. Le Bail. Homologous growth hormone (GH) binding in gilthead sea bream (*Sparus aurata*). Effect of fasting and refeeding on hepatic GH-binding and plasma somatomedin-like immunoreactivity. *Journal of Fish Biology*, 44(2):287–301, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Reitan:1994:SMA

- [968] K. I. Reitan, S. Bolla, and Y. Olsen. A study of the mechanism of algal uptake in yolk-sac larvae of Atlantic halibut (*Hippoglossus hippoglossus*). *Journal of Fish Biology*, 44(2):303–310, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kamler:1994:TIC

- [969] E. Kamler, M. Szlamińska, M. Kuczyński, J. Hamáčková, J. Kouřil, and R. Dabrowski. Temperature-induced changes of early development and yolk utilization in the African catfish *Clarias gariepinus*. *Journal of Fish Biology*, 44(2):311–326, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Benjamin:1994:DGA

- [970] M. Benjamin and J. R. Ralphs. The dorsal groove and associated structures on the head of the sucking loach, *Gyrinocheilus aymonieri* (Cypriniformes). *Journal of Fish Biology*, 44(2):327–330, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cortes:1994:ERS

- [971] E. Cortes and S. H. Gruber. Effect of ration size on growth and gross conversion efficiency of young lemon sharks, *Negaprion brevirostris*. *Journal of Fish Biology*, 44(2):331–341, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Crisp:1994:RIF

- [972] D. T. Crisp. Reproductive investment of female brown trout, *Salmo trutta* L., in a stream and reservoir system in northern England. *Journal of Fish Biology*, 44(2):343–349, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sayer:1994:FSF

- [973] M. D. J. Sayer, K. S. Cameron, and G. Wilkinson. Fish species found in the rocky sublittoral during winter months as revealed by the underwater application of the anaesthetic quinaldine. *Journal of Fish Biology*, 44(2):351–353, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Di:1994:KDL

- [974] Shaojie Di and J. F. Knowles. The karyotype of the dab (*Limanda limanda* L.). *Journal of Fish Biology*, 44(2):354–356, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1994:BRa

- [975] Anonymous. Book reviews. *Journal of Fish Biology*, 44(2):357–363, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1994:Aa

- [976] Anonymous. Announcement. *Journal of Fish Biology*, 44(2):364, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1994:Ea

- [977] Anonymous. Errata. *Journal of Fish Biology*, 44(2):365, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1994:Eb

- [978] Anonymous. Errata. *Journal of Fish Biology*, 44(2):366, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1994:R

- [979] Anonymous. Reference, 1993. *Journal of Fish Biology*, 44(2):367–369, February 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Araujo-Lima:1994:ESL

- [980] C. A. R. M. Araujo-Lima. Egg size and larval development in Central Amazonian fish. *Journal of Fish Biology*, 44(3):371–389, March 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Koumans:1994:NMN

- [981] J. T. M. Koumans, H. A. Akster, A. Witkam, and J. W. M. Osse. Numbers of muscle nuclei and myosatellite cell nuclei in red and white axial muscle during growth of the carp (*Cyprinus carpio*). *Journal of Fish Biology*, 44(3):391–408, March 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Campos:1994:PCD

- [982] A. Campos and E. Carbonell. Parasite community diversity in two Mediterranean labrid fishes *Symphodus tinea* and *Labrus merula*. *Journal of Fish Biology*, 44(3):409–413, March 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Galetto:1994:DAS

- [983] M. J. Galetto and D. R. Bellwood. Digestion of algae by *Stegastes nigricans* and *Amphiprion akindynos* (Pisces: Pomacentridae), with an evaluation of methods used in digestibility studies. *Journal of Fish Biology*, 44(3):415–428, March 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tsai:1994:MCC

- [984] Huai-Jen Tsai and Yen-Long Chen. Molecular cloning and characterization of complementary DNA encoding for the gonadotropin α -subunit of yellowfin porgy (*Acanthopagrus latus*). *Journal of Fish Biology*, 44(3):429–438, March 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Miller:1994:IGP

- [985] P. J. Miller, M. Serventi, D. Soregaroli, P. Torricelli, and G. Gandolfi. Isozyme genetics and the phylogeny of Italian freshwater gobies (Teleostei: Gobiidae). *Journal of Fish Biology*, 44(3):439–451, March 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Armstrong:1994:RVW

- [986] J. D. Armstrong and C. L. West. Relative ventricular weight of wild Atlantic salmon parr in relation to sex, gonad maturation and migratory activity. *Journal of Fish Biology*, 44(3):453–457, March 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lahnsteiner:1994:TMDa

- [987] F. Lahnsteiner, R. A. Patzner, and T. Weismann. The testicular main ducts and the spermatic ducts in some cyprinid fishes — II. Composition of the seminal fluid. *Journal of Fish Biology*, 44(3):459–467, March 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lindstrom:1994:EFR

- [988] K. Lindström and C. Wennström. Expected future reproductive success and paternal behaviour in the sand goby, *Pomatoschistus minutus* (Pisces, Gobiidae). *Journal of Fish Biology*, 44(3):469–477, March 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mookerji:1994:IOC

- [989] N. Mookerji and T. Ramakrishna Rao. Influence of ontogenetic changes in prey selection on the survival and growth of rohu, *Labeo rohita* and singhi, *Heteropneustes fossilis* larvae. *Journal of Fish Biology*, 44(3):479–490, March 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Young:1994:HBC

- [990] G. Young, C. L. Brown, R. S. Nishioka, L. C. Folmar, M. Andrews, J. R. Cashman, and H. A. Bern. Histopathology, blood chemistry, and physiological status of normal and moribund striped bass (*Morone saxatilis*)

involved in summer mortality ('die-off') in the Sacramento–San Joaquin Delta of California. *Journal of Fish Biology*, 44(3):491–512, March 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nelson:1994:GRE

- [991] S. G. Nelson and S. DeC. Wilkins. Growth and respiration of embryos and larvae of the rabbittish *Siganus randalli* (Pisces, Siganidae). *Journal of Fish Biology*, 44(3):513–525, March 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McKim:1994:RCP

- [992] J. M. McKim, J. W. Nichols, G. J. Lien, and S. L. Bertelsen. Respiratory-cardiovascular physiology and chloroethane gill flux in the channel catfish, *Ictalurus punctatus*. *Journal of Fish Biology*, 44(3):527–547, March 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Waters:1994:MDV

- [993] J. M. Waters, M. Lintermans, and R. W. G. White. Mitochondrial DNA variation suggests river capture as a source of vicariance in *Gadopsis bispinosus* (Pisces: Gadopsidae). *Journal of Fish Biology*, 44(3):549–551, March 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Elorduy-Garay:1994:GDS

- [994] J. F. Elorduy-Garay and S. Ramirez-Luna. Gonadal development and spawning of female ocean whitefish, *Caulolatilus princeps* (Pisces: Branchiostegidae) in the Bay of La Paz, B.C.S., Mexico. *Journal of Fish Biology*, 44(4):553–566, April 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gold:1994:ADW

- [995] J. R. Gold, T. L. King, L. R. Richardson, D. A. Bohlmeier, and G. C. Matlock. Allozyme differentiation within and between red drum (*Sciaenops ocellatus*) from the Gulf of Mexico and Atlantic Ocean. *Journal of Fish Biology*, 44(4):567–590, April 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sutela:1994:DZA

- [996] T. Sutela and A. Huusko. Digestion of zooplankton in the alimentary tract of vendace (*Coregonus albula*) larvae. *Journal of Fish Biology*, 44(4):591–596, April 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Murie:1994:CAG

- [997] D. J. Murie. Comparative allometric growth of the gastrointestinal tract of two sympatric congeners, copper rockfish (*Sebastes caurinus*) and quillback rockfish (*S. maliger*). *Journal of Fish Biology*, 44(4):597–605, April 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hickley:1994:DLB

- [998] P. Hickley, R. North, S. M. Muchiri, and D. M. Harper. The diet of largemouth bass, *Micropterus salmoides*, in Lake Naivasha, Kenya. *Journal of Fish Biology*, 44(4):607–619, April 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dong:1994:CSF

- [999] Shuanglin Dong and Deshang Li. Comparative studies on the feeding selectivity of silver carp *Hypophthalmichthys molitrix* and bighead carp *Aristichthys nobilis*. *Journal of Fish Biology*, 44(4):621–626, April 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Alves:1994:GVP

- [1000] M. J. Alves and M. M. Coelho. Genetic variation and population subdivision of the endangered Iberian cyprinid *Chondrostoma lusitanicum*. *Journal of Fish Biology*, 44(4):627–636, April 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Whitmore:1994:LBC

- [1001] D. H. Whitmore, T. H. Thai, and C. M. Craft. The largemouth bass cytochrome *b* gene. *Journal of Fish Biology*, 44(4):637–645, April 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vega-Cendejas:1994:TIB

- [1002] M. E. Vega-Cendejas, M. Hernandez, and F. Arreguin-Sanchez. Trophic interrelations in a beach seine fishery from the northwestern coast of the Yucatan Peninsula, Mexico. *Journal of Fish Biology*, 44(4):647–659, April 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Korsgaard:1994:CMR

- [1003] B. Korsgaard. Calcium metabolism in relation to ovarian functions during early and late pregnancy in the viviparous blenny *Zoarces viviparus*. *Journal of Fish Biology*, 44(4):661–672, April 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Guandalini:1994:HSO

- [1004] E. Guandalini, A. Mantovani, P. Fazzi, E. Gelosi, P. T. Colombari, M. Mazzini, and A. M. Fausto. Histological study on the oocyte filaments of the silverside *Odonthestes bonariensis*. *Journal of Fish Biology*, 44(4):673–682, April 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sezaki:1994:BGE

- [1005] K. Sezaki, S. Watabe, Y. Ochiai, and K. Hashimoto. Biochemical genetic evidence for a hybrid origin of spined loach, *Cobitis taenia taenia*, in Japan. *Journal of Fish Biology*, 44(4):683–691, April 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Shackley:1994:UBW

- [1006] P. E. Shackley, C. Talbot, A. Cowan, and A. Watt. The use of body water, sodium, potassium and calcium content to investigate the nutritional status of first year Atlantic salmon parr in two Scottish Highland streams. *Journal of Fish Biology*, 44(4):693–706, April 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lyndon:1994:MMO

- [1007] A. R. Lyndon. A method for measuring oxygen consumption in isolated perfused gills. *Journal of Fish Biology*, 44(4):707–715, April 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bembo:1994:MDV

- [1008] D. G. Bembo, A. J. Weightman, R. J. H. Beverton, and R. C. Cresswell. Mitochondrial DNA variation in River Usk brown trout, *Salmo trutta*. *Journal of Fish Biology*, 44(4):717–723, April 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Powell:1994:CUM

- [1009] M. D. Powell, D. J. Speare, and G. M. Wright. Comparative ultrastructural morphology of lamellar epithelial, chloride and mucous cell glyco-calyx of the rainbow trout (*Oncorhynchus mykiss*) gill. *Journal of Fish Biology*, 44(4):725–730, April 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tierney:1994:ESS

- [1010] J. F. Tierney. Effects of *Schistocephalus solidus* (Cestoda) on the food intake and diet of the three-spined stickleback, *Gasterosteus aculeatus*.

Journal of Fish Biology, 44(4):731–735, April 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Baroudy:1994:TPA

- [1011] E. Baroudy and J. M. Elliott. Tolerance of parr of Arctic charr, *Salvelinus alpinus*, to reduced dissolved oxygen concentrations. *Journal of Fish Biology*, 44(4):736–738, April 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1994:Ab

- [1012] Anonymous. Announcement. *Journal of Fish Biology*, 44(4):739–740, April 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gehrke:1994:ILI

- [1013] Peter C. Gehrke. Influence of light intensity and wavelength on phototactic behaviour of larval silver perch *Bidyanus bidyanus* and golden perch *Macquana ambigua* and the effectiveness of light traps. *Journal of Fish Biology*, 44(5):741–751, May 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hamerlynck:1994:FPM

- [1014] O. Hamerlynck and A. Cattrijsse. The food of *Pomatoschistus minutus* (Pisces, Gobiidae) in Belgian coastal waters, and a comparison with the food of its potential competitor *P. lozanoi*. *Journal of Fish Biology*, 44(5):753–771, May 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Banbura:1994:LPM

- [1015] J. Bańbura. Lateral plate morph differentiation of freshwater and marine populations of the three-spined stickleback, *Gasterosteus aculeatus*, in Poland. *Journal of Fish Biology*, 44(5):773–783, May 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Shearer:1994:WBE

- [1016] K. D. Shearer, T. Åsgård, G. Andorsdóttir, and G. H. Aas. Whole body elemental and proximate composition of Atlantic salmon (*Salmo salar*) during the life cycle. *Journal of Fish Biology*, 44(5):785–797, May 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Turner:1994:DCI

- [1017] G. F. Turner. Description of a commercially important pelagic species of the genus *Diplotaxodon* (Pisces: Cichlidae) from Lake Malawi, Africa.

Journal of Fish Biology, 44(5):799–807, May 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Swinney:1994:CAS

- [1018] G. N. Swinney. Comments on the Atlantic species of the genus *Evermannella* (Scopelomorpha, Aulopiformes, Evermannellidae) with a re-evaluation of the status of *Evermannella melanoderma*. *Journal of Fish Biology*, 44(5):809–819, May 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Martell:1994:DSF

- [1019] D. J. Martell and G. McClelland. Diets of sympatric flatfishes, *Hippoglossoides platessoides*, *Pleuronectes ferrugineus*, *Pleuronectes americanus*, from Sable Island Bank, Canada. *Journal of Fish Biology*, 44(5):821–848, May 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Canfield:1994:HBR

- [1020] P. J. Canfield, N. Quartararo, D. L. Griffin, G. N. Tsoukalas, and S. E. Cocaro. Haematological and biochemical reference values for captive Australian snapper, *Pagrus auratus*. *Journal of Fish Biology*, 44(5):849–856, May 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mittal:1994:EAD

- [1021] A. K. Mittal and T. K. Garg. Effect of an anionic detergent — sodium dodecyl sulphate exposure on club cells in the epidermis of *Clarias batrachus*. *Journal of Fish Biology*, 44(5):857–875, May 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fukushima:1994:SMR

- [1022] M. Fukushima. Spawning migration and redd construction of Sakhalin taimen, *Hucho perryi* (Salmonidae) on northern Hokkaido Island, Japan. *Journal of Fish Biology*, 44(5):877–888, May 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lucas:1994:HRI

- [1023] M. C. Lucas. Heart rate as an indicator of metabolic rate and activity in adult Atlantic salmon, *Salmo salar*. *Journal of Fish Biology*, 44(5):889–903, May 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Treasurer:1994:DAG

- [1024] J. W. Treasurer. The distribution, age and growth of wrasse (Labridae) in inshore waters of west Scotland. *Journal of Fish Biology*, 44(5):905–918, May 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1994:Ac

- [1025] Anonymous. Announcement. *Journal of Fish Biology*, 44(5):919, May 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Iger:1994:CRSa

- [1026] Y. Iger, H. A. Jenner, and S. E. Wendelaar Bonga. Cellular responses in the skin of the trout (*Oncorhynchus mykiss*) exposed to temperature elevation. *Journal of Fish Biology*, 44(6):921–935, June 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lahnsteiner:1994:TMDb

- [1027] F. Lahnsteiner, R. A. Patzner, and T. Weismann. Testicular main ducts and spermatid ducts in some cyprinid fishes I. Morphology, fine structure and histochemistry. *Journal of Fish Biology*, 44(6):937–951, June 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Usher:1994:MDA

- [1028] M. L. Usher, N. C. Stickland, and J. E. Thorpe. Muscle development in Atlantic salmon (*Salmo salar*) embryos and the effect of temperature on muscle cellularity. *Journal of Fish Biology*, 44(6):953–964, June 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Karlsen:1994:UNI

- [1029] Ørjan Karlsen and JensChristian Holm. Ultrasonography, a non-invasive method for sex determination in cod (*Gadus morhua*). *Journal of Fish Biology*, 44(6):965–971, June 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jonsson:1994:ESA

- [1030] N. Jonsson, B. Jonsson, L. P. Hansen, and P. Aass. Effects of seawater-acclimatization and release sites on survival of hatchery-reared brown trout *Salmo trutta*. *Journal of Fish Biology*, 44(6):973–981, June 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Budworth:1994:RPS

- [1031] P. R. Budworth, P. L. Senger, M. D. Griswold, and E. M. Donaldson. Relationship of plasma steroids to germ cell development and the presence of protamine mRNA in rainbow trout during the induction of spermatogenesis with partially purified salmon gonadotropin. *Journal of Fish Biology*, 44(6):983–995, June 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Everson:1994:TOM

- [1032] Inigo Everson. Timescale of ovarian maturation in *Notothenia coriiceps*; evidence for a prolonged adolescent phase. *Journal of Fish Biology*, 44(6):997–1004, June 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Belghyti:1994:PBT

- [1033] D. Belghyti, O. Berrada-rkhami, V. Boy, P. Aguesse, and C. Gabrion. Population biology of two helminth parasites of flatfishes from the Atlantic coast of Morocco. *Journal of Fish Biology*, 44(6):1005–1021, June 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Paul:1994:ERR

- [1034] A. J. Paul, J. M. Paul, and R. L. Smith. Energy and ration requirements of juvenile Pacific halibut (*Hippoglossus stenolepis*) based on energy consumption and growth rates. *Journal of Fish Biology*, 44(6):1023–1031, June 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mwangangi:1994:ETA

- [1035] D. M. Mwangangi and G. Mutungi. The effects of temperature acclimation on the oxygen consumption and enzyme activity of red and white muscle fibres isolated from the tropical freshwater fish *Oreochromis niloticus*. *Journal of Fish Biology*, 44(6):1033–1043, June 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rosenblum:1994:ACG

- [1036] P. M. Rosenblum, T. M. Brandt, K. B. Mayes, and P. Hutson. Annual cycles of growth and reproduction in hatchery-reared Florida largemouth bass, *Micropterus salmoides floridanus*, raised on forage or pelleted diets. *Journal of Fish Biology*, 44(6):1045–1059, June 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lloyd-Evans:1994:UIS

- [1037] P. Lloyd-Evans. An ultrastructural and immunocytochemical study on the lymphomyeloid tissue in the embryonic kidney of the dogfish, *Scyliorhinus canicula*. *Journal of Fish Biology*, 44(6):1061–1068, June 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jobling:1994:IEM

- [1038] M. Jobling and B. M. Baardvik. The influence of environmental manipulations on inter- and intra-individual variation in food acquisition and growth performance of Arctic charr, *Salvelinus alpinus*. *Journal of Fish Biology*, 44(6):1069–1087, June 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dahle:1994:MDF

- [1039] G. Dahle. Minisatellite DNA fingerprints of Atlantic cod (*Gadus morhua*). *Journal of Fish Biology*, 44(6):1089–1092, June 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sakamoto:1994:DRP

- [1040] T. Sakamoto, N. Okamoto, Y. Ikeda, Y. Nakamura, and T. Sato. Dinucleotide-repeat polymorphism in DNA of rainbow trout and its application in fisheries science. *Journal of Fish Biology*, 44(6):1093–1096, June 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Carroll:1994:ETD

- [1041] S. Carroll, C. Kelsall, N. Hazon, and F. B. Eddy. Effect of temperature on the drinking rates of two species of flatfish, flounder and turbot. *Journal of Fish Biology*, 44(6):1097–1099, June 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1994:Ad

- [1042] Anonymous. Announcement. *Journal of Fish Biology*, 44(6):1101, June 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Chigbu:1994:RBA

- [1043] P. Chigbu and T. H. Sibley. Relationship between abundance, growth, egg size and fecundity in a landlocked population of longfin smelt, *Spirinchus thaleichthys*. *Journal of Fish Biology*, 45(1):1–15, July 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Economou:1994:FLF

- [1044] A. N. Economou, Ch. Daoulas, Th. Psarras, and R. Barbieri-Tseliki. Freshwater larval fish from Lake Trichonis (Greece). *Journal of Fish Biology*, 45(1):17–35, July 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Waller:1994:FIO

- [1045] G. N. H. Waller and A. Baranes. Food of *Iago omanensis*, a deep water shark from the northern Red Sea. *Journal of Fish Biology*, 45(1):37–45, July 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Johnsen:1994:SFS

- [1046] B. O. Johnsen and A. J. Jensen. The spread of furunculosis in salmonids in Norwegian rivers. *Journal of Fish Biology*, 45(1):47–55, July 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Potter:1994:RBL

- [1047] I. C. Potter, F. J. Neira, B. S. Wise, and J. H. Wallace. Reproductive biology and larval development of the terapontid *Amniataba caudavittata*, including comparisons with the reproductive strategies of other estuarine teleosts in temperate Western Australia. *Journal of Fish Biology*, 45(1):57–74, July 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Løvholden:1994:ETI

- [1048] N. C. Løvholden, T. Gjøen, and T. Berg. The effect of temperature on intracellular transport of asialo-glycoproteins in rainbow trout liver. *Journal of Fish Biology*, 45(1):75–86, July 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wilkie:1994:EEA

- [1049] M. P. Wilkie and C. M. Wood. The effects of extremely alkaline water (pH 9.5) on rainbow trout gill function and morphology. *Journal of Fish Biology*, 45(1):87–98, July 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nagata:1994:DWD

- [1050] M. Nagata, M. Nakajima, and M. Fujiwara. Dispersal of wild and domestic masu salmon fry (*Oncorhynchus masou*) in an artificial channel. *Journal of Fish Biology*, 45(1):99–109, July 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Barbin:1994:BSP

- [1051] G. P. Barbin and W. H. Krueger. Behaviour and swimming performance of elvers of the American eel, *Anguilla rostrata*, in an experimental flume. *Journal of Fish Biology*, 45(1):111–121, July 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Keshavanath:1994:FGR

- [1052] P. Keshavanath, M. C. M. Beveridge, D. J. Baird, L. A. Lawton, A. Nimmo, and G. A. Codd. The functional grazing response of a phytoplanktivorous fish *Oreochromis mloticus* to mixtures of toxic and non-toxic strains of the cyanobacterium *Microcystis aeruginosa*. *Journal of Fish Biology*, 45(1):123–129, July 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ahlgren:1994:FAC

- [1053] G. Ahlgren, P. Blomqvist, M. Boberg, and I.-B. Gustafsson. Fatty acid content of the dorsal muscle — an indicator of fat quality in freshwater fish. *Journal of Fish Biology*, 45(1):131–157, July 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Crozier:1994:ASQ

- [1054] W. W. Crozier and G. J. A. Kennedy. Application of semi-quantitative electrofishing to juvenile salmonid stock surveys. *Journal of Fish Biology*, 45(1):159–164, July 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vassilopoulou:1994:OAR

- [1055] V. Vassilopoulou. Orientation anomalies (reversal) of the four-spotted megrim (*Lepidorhombus boscii*) in the Aegean Sea. *Journal of Fish Biology*, 45(1):165–166, July 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Chandran:1994:HID

- [1056] A. Chandran and P. Natarajan. Heavy infection of *Diodon hystrix* by the copepod *Peniculisa wilsoni* (Siphonostomatoida, Pennellidae). *Journal of Fish Biology*, 45(1):167–168, July 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brafield:1994:EHD

- [1057] A. E. Brafield and A. V. Koodie. The effect of high dietary zinc on trypsin activity in carp (*Cyprinus carpio*). *Journal of Fish Biology*, 45(1):169–

172, July 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1994:BRb

- [1058] Anonymous. Book reviews. *Journal of Fish Biology*, 45(1):173–176, July 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1994:BRc

- [1059] Anonymous. Books received. *Journal of Fish Biology*, 45(1):176, July 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mug-Villanueva:1994:ADC

- [1060] M. Mug-Villanueva, V. F. Gallucci, and Han-Lin Lai. Age determination of *Corvina reina* (*Cynoscion albus*) in the Gulf of Nicoya, Costa Rica, based on examination and analysis of hyaline zones, morphology and microstructure of otoliths. *Journal of Fish Biology*, 45(2):177–191, August 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Siddall:1994:PFR

- [1061] R. Siddall, A. W. Pike, and A. H. McVicar. Parasites of flatfish in relation to sewage sludge dumping. *Journal of Fish Biology*, 45(2):193–209, August 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Winemiller:1994:CEA

- [1062] Kirk O. Winemiller and Leslie C. Kelso-Winemiller. Comparative ecology of the African pike, *Hepsetus odoe*, and tigerfish, *Hydrocynus forskahlii*, in the Zambezi River floodplain. *Journal of Fish Biology*, 45(2):211–225, August 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Knudsen:1994:ARL

- [1063] F. R. Knudsen, P. S. Enger, and O. Sand. Avoidance responses to low frequency sound in downstream migrating Atlantic salmon smolt, *Salmo salar*. *Journal of Fish Biology*, 45(2):227–233, August 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Murayama:1994:COD

- [1064] T. Murayama, M. Shiraishi, and I. Aoki. Changes in ovarian development and plasma levels of sex steroid hormones in the wild female Japanese sardine (*Sardinops melanostictus*) during the spawning period. *Journal of Fish Biology*, 45(2):235–245, August 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Morgan:1994:BRU

- [1065] I. J. Morgan, P. Tytler, and M. V. Bell. Book review: *The use of a perfused, whole-body preparation to measure the branchial and intestinal influx of 137 -caesium in the rainbow trout (*Oncorhynchus mykiss*).* *Journal of Fish Biology*, 45(2):247–256, August 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ballabeni:1994:EDM

- [1066] Pierluigi Ballabeni. Experimental differences in mortality patterns between European minnows, *Phoxinus phoxinus*, infected with sympatric or allopatric trematodes, *Diplostomum phoxini*. *Journal of Fish Biology*, 45(2):257–267, August 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Val:1994:EEA

- [1067] Adalberto L. Val, Carl F. Mazur, Roberto H. de Salvo-Souza, and George K. Iwama. Effects of experimental anaemia on intra-erythrocytic phosphate levels in rainbow trout, *Oncorhynchus mykiss*. *Journal of Fish Biology*, 45(2):269–277, August 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mori:1994:NSC

- [1068] Seiichi Mori. Nest site choice by the three-spined stickleback, *Gasterosteus aculeatus* (form leirus), in spring-fed waters. *Journal of Fish Biology*, 45(2):279–289, August 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ashbaugh:1994:GDR

- [1069] Nicholas A. Ashbaugh, Anthony A. Echelle, and Alice F. Echelle. Genic diversity in Red River pupfish *Cyprinodon rubrofluviatilis* (Atheriniformes: Cyprinodontidae) and its implications for the conservation genetics of the species. *Journal of Fish Biology*, 45(2):291–302, August 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lim:1994:PFT

- [1070] K. E. K. Lim, N. H. Lam, V. P. E. Phang, and T. M. Lim. Pattern formation of the ‘*Tilapia* mark’ in the tilapia fish, *Oreochromis mossambicus*. *Journal of Fish Biology*, 45(2):303–311, August 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gamperl:1994:ENC

- [1071] A. K. Gamperl, M. M. Vijayan, and R. G. Boutilier. Epinephrine, norepinephrine, and cortisol concentrations in cannulated seawater-acclimated rainbow trout (*Oncorhynchus mykiss*) following black-box confinement and epinephrine injection. *Journal of Fish Biology*, 45(2):313–324, August 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mehner:1994:EMC

- [1072] T. Mehner and W. Wieser. Energetics and metabolic correlates of starvation in juvenile perch (*Perca fluviatilis*). *Journal of Fish Biology*, 45(2):325–333, August 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Moser:1994:ESF

- [1073] M. L. Moser and J. M. Miller. Effects of salinity fluctuation on routine metabolism of juvenile spot, *Leiostomus xanthurus*. *Journal of Fish Biology*, 45(2):335–340, August 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sims:1994:DSD

- [1074] D. W. Sims and S. J. Davies. Does specific dynamic action (SDA) regulate return of appetite in the lesser spotted dogfish, *Scyliorhinus canicula*? *Journal of Fish Biology*, 45(2):341–348, August 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Skiftesvik:1994:ASS

- [1075] A. B. Skiftesvik, Ø. Bergh, and I. Opstad. Activity and swimming speed at time of first feeding of halibut (*Hippoglossus hippoglossus*) larvae. *Journal of Fish Biology*, 45(2):349–351, August 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lysne:1994:DCS

- [1076] D. A. Lysne, W. Hemmingsen, and A. Skorping. The distribution of *Cryptocotyle* spp. *metacercariae* in the skin of caged Atlantic cod (*Gadus morhua*). *Journal of Fish Biology*, 45(2):352–355, August 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jonsson:1994:DRW

- [1077] N. Jonsson, B. Jonsson, J. Skurdal, and L. P. Hansen. Differential response to water current in offspring of inlet-and outlet-spawning brown

trout *Salmo trutta*. *Journal of Fish Biology*, 45(2):356–359, August 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Economou:1994:FDR

- [1078] A. N. Economou, C. Daoulas, T. Psarras, and R. Barbihri-Tseliki. Further data on the reproduction and larval development of *Knipowitschia caucasica* (Gobiidae). *Journal of Fish Biology*, 45(2):360–362, August 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1994:Ae

- [1079] Anonymous. Announcement. *Journal of Fish Biology*, 45(2):363, August 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Reid:1994:ERP

- [1080] Steve G. Reid, Marosh Furimsky, and Steve F. Perry. The effects of repeated physical stress or fasting on catecholamine storage and release in the rainbow trout, *Oncorhynchus mykiss*. *Journal of Fish Biology*, 45(3):365–378, September 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mikheev:1994:SRD

- [1081] V. N. Mikheev, N. B. Metcalfe, F. A. Huntingford, and J. E. Thorpe. Size-related differences in behaviour and spatial distribution of juvenile Atlantic salmon in a novel environment. *Journal of Fish Biology*, 45(3):379–386, September 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Helminen:1994:PRV

- [1082] Harri Helminen and Jouko Sarvala. Population regulation of vendace (*Coregonus albula*) in Lake Pyhäjärvi, southwest Finland. *Journal of Fish Biology*, 45(3):387–400, September 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Magurran:1994:SPF

- [1083] A. E. Magurran, B. H. Seghers, P. W. Shaw, and G. R. Carvalho. Schooling preferences for familiar fish in the guppy, *Poecilia reticulata*. *Journal of Fish Biology*, 45(3):401–406, September 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Baroudy:1994:RDE

- [1084] E. Baroudy and J. M. Elliott. Racial differences in eggs and juveniles of Windermere charr, *Salvelinus alpinus*. *Journal of Fish Biology*, 45(3):

407–415, September 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

deLeaniz:1994:IRJ

- [1085] Carlos Garcia de Leaniz, Neil Fraser, Victor Mikheev, and Felicity Huntingford. Individual recognition of juvenile salmonids using melanophore patterns. *Journal of Fish Biology*, 45(3):417–422, September 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brannas:1994:ERL

- [1086] E. Brännäs and A. Alanärä. Effect of reward level on individual variability in demand feeding activity and growth rate in Arctic charr and rainbow trout. *Journal of Fish Biology*, 45(3):423–434, September 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nissling:1994:SAF

- [1087] Anders Nissling, Per Solemdal, Mikael Svensson, and Lars Westin. Survival, activity and feeding ability of Baltic cod (*Gadus morhua*) yolk-sac larvae at different salinities. *Journal of Fish Biology*, 45(3):435–445, September 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Poncin:1994:BSH

- [1088] P. Poncin, J. Jeandarme, and P. Berrebi. A behavioural study of hybridization between *Barbus barbus* and *Barbus meridionalis*. *Journal of Fish Biology*, 45(3):447–451, September 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hara:1994:DPP

- [1089] Toshiaki J. Hara, Yasuyuki Kitada, and Robert E. Evans. Distribution patterns of palatal taste buds and their responses to amino acids in salmonids. *Journal of Fish Biology*, 45(3):453–465, September 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kazakov:1994:JAS

- [1090] R. V. Kazakov. Juvenile Atlantic salmon in the Varzuga River (White Sea Basin). *Journal of Fish Biology*, 45(3):467–477, September 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tzeng:1994:SEM

- [1091] W. N. Tzeng, H. F. Wu, and H. Wlckström. Scanning electron microscopic analysis of annulus microstructure in otolith of European eel, *An-*

guilla anguilla. *Journal of Fish Biology*, 45(3):479–492, September 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Moore:1994:ESE

- [1092] A. Moore. An electrophysiological study on the effects of pH on olfaction in mature male Atlantic salmon (*Salmo salar*) parr. *Journal of Fish Biology*, 45(3):493–502, September 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Golani:1994:NSB

- [1093] D. Golani. Niche separation between colonizing and indigenous goatfish (*Mullidae*) along the Mediterranean coast of Israel. *Journal of Fish Biology*, 45(3):503–513, September 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McCormack:1994:BRA

- [1094] C. A. McCormack and M. T. McDonnell. Book review: *Abnormal dorsal light response in teleost fish after intraocular injection of 6-hydroxydopamine*. *Journal of Fish Biology*, 45(3):515–525, September 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kandel:1994:VFA

- [1095] J. S. Kandel, M. H. Horn, and W. Van Antwerp. Volatile fatty acids in the hindguts of herbivorous fishes from temperate and tropical marine waters. *Journal of Fish Biology*, 45(3):527–529, September 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1994:BRd

- [1096] Anonymous. Book reviews. *Journal of Fish Biology*, 45(3):531–539, September 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Piferrer:1994:GMN

- [1097] F. Piferrer, T. J. Benfey, and E. M. Donaldson. Gonadal morphology of normal and sex-reversed triploid and gynogenetic diploid Coho salmon (*Oncorhynchus kisutch*). *Journal of Fish Biology*, 45(4):541–553, October 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Essler:1994:HRA

- [1098] H. Essler and K. Kotrschal. High resolution analysis of swim path patterns of intact and olfaction-deprived minnows (*Phoxinus phoxinus*) stimulated with food and potential predator odour. *Journal of Fish Biology*,

45(4):555–567, October 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gallego:1994:DSB

- [1099] A. Gallego and M. R. Heath. The development of schooling behaviour in Atlantic herring *Clupea harengus*. *Journal of Fish Biology*, 45(4):569–588, October 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gallego:1994:VLL

- [1100] A. Gallego and M. R. Heath. Vulnerability of late larval and early juvenile Atlantic herring, *Clupea harengus*, to predation by whiting, *Merlangius merlangus*. *Journal of Fish Biology*, 45(4):589–595, October 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brusle-Sicard:1994:GPD

- [1101] S. Bruslé-Sicard, R. Reinboth, and B. Fourcault. Germinal potentialities during sexual state changes in a protandric hermaphrodite, *Amphipnon frenatus* (Teleostei, Pomacentridae). *Journal of Fish Biology*, 45(4):597–611, October 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Luksiene:1994:RDR

- [1102] Dalia Luksiene and Olof Sandström. Reproductive disturbance in a roach (*Rutilus rutilus*) population affected by cooling water discharge. *Journal of Fish Biology*, 45(4):613–625, October 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bunton:1994:ETC

- [1103] Tracie E. Bunton and John M. Frazier. Extrahepatic tissue copper concentrations in white perch with hepatic copper storage. *Journal of Fish Biology*, 45(4):627–640, October 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vollestad:1994:ETE

- [1104] L. A. Vøllestad, B. Jonsson, N.-A. Hvidsten, and T. F. Næsje. Experimental test of environmental factors influencing the seaward migration of European silver eels. *Journal of Fish Biology*, 45(4):641–651, October 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Guan:1994:AGE

- [1105] Ruizhang Guan, Xuehong Wang, and Guozhen Ke. Age and growth of eels *Anguilla japonica* in a Chinese river. *Journal of Fish Biology*, 45

(4):653–660, October 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Micale:1994:FSS

- [1106] Valeria Micale and Francesco Perdichizzi. Further studies on the sexuality of the hermaphroditic teleost *Diplodus sargus*, with particular reference to protandrous sex inversion. *Journal of Fish Biology*, 45(4):661–670, October 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tzeng:1994:COM

- [1107] W. N. Tzeng and Y. C. Tsai. Changes in otolith microchemistry of the Japanese eel, *anguilla japonica*, during its migration from the ocean to the rivers of Taiwan. *Journal of Fish Biology*, 45(4):671–683, October 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Verneau:1994:PF

- [1108] O. Verneau, C. Moreau, F. M. Catzeflis, and F. Renaud. Phylogeny of flatfishes (Pleuronectiformes): comparisons and contradictions of molecular and morpho-anatomical data. *Journal of Fish Biology*, 45(4):685–696, October 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Burton:1994:EMO

- [1109] M. P. M. Burton and S. Biddiscombe. An effective method for oral administration of capsules to flatfish. *Journal of Fish Biology*, 45(4):697–698, October 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brooks:1994:TSE

- [1110] S. Brooks and I. A. Johnston. Temperature and somitogenesis in embryos of the plaice (*Pleuronectes platessa*). *Journal of Fish Biology*, 45(4):699–702, October 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1994:Af

- [1111] Anonymous. Announcement. *Journal of Fish Biology*, 45(4):703, October 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Goss:1994:GMD

- [1112] G. G. Goss, P. Laurent, and S. F. Perry. Gill morphology during hypercapnia in brown bullhead (*Ictalurus nebulosus*): role of chloride cells

and pavement cells in acid-base regulation. *Journal of Fish Biology*, 45 (5):705–718, November 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kjesbu:1994:TSS

- [1113] O. S. Kjesbu. Time of start of spawning in Atlantic cod (*Gadus morhua*) females in relation to vitellogenic oocyte diameter, temperature, fish length and condition. *Journal of Fish Biology*, 45(5):719–735, November 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Shuozeng:1994:TBA

- [1114] Dou Shuozeng and Chen Dagang. Taxonomy, biology and abundance of icefishes, or noodlefishes (*Salangidae*), in the Yellow River estuary of the Bohai Sea, China. *Journal of Fish Biology*, 45(5):737–748, November 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Teixeira:1994:ARP

- [1115] Rogério L. Teixeira. Abundance, reproductive period, and feeding habits of eleotrid fishes in estuarine habitats of north-east Brazil. *Journal of Fish Biology*, 45(5):749–761, November 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mol:1994:ESD

- [1116] Jan H. Mol. Effects of salinity on distribution, growth and survival of three neotropical armoured catfishes (Siluriformes — Callichthyidae). *Journal of Fish Biology*, 45(5):763–776, November 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Horppila:1994:FRR

- [1117] J. Horppila and H. Peltonen. The fate of a roach *Rutilus rutilus* stock under an extremely strong fishing pressure and its predicted development after the cessation of mass removal. *Journal of Fish Biology*, 45(5):777–786, November 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rowe:1994:VSS

- [1118] D. K. Rowe. Vertical segregation and seasonal changes in fish depth distributions between lakes of contrasting trophic status. *Journal of Fish Biology*, 45(5):787–800, November 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dabrowski:1994:PIS

- [1119] K. Dabrowski and A. Ciereszko. Proteinase inhibitor(s) in seminal plasma of teleost fish. *Journal of Fish Biology*, 45(5):801–809, November 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sarno:1994:CMT

- [1120] B. Sarno, C. W. Glass, G. W. Smith, A. D. F. Johnstone, and W. R. Mojsiewicz. A comparison of the movements of two species of gadoid in the vicinity of an underwater reef. *Journal of Fish Biology*, 45(5):811–817, November 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Almada:1994:BEN

- [1121] Vitor C. Almada, Emanuel J. Gonçalves, António J. Santos, and Céu Baptista. Breeding ecology and nest aggregations in a population of *Salaria pavo* (Pisces: Blenniidae) in an area where nest sites are very scarce. *Journal of Fish Biology*, 45(5):819–830, November 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Moran:1994:GVA

- [1122] Paloma Morán, Alberto M. Pendás, Eva García-Vazquez, and J. I. Izquierdo. Genetic variation among Atlantic salmon in six Spanish rivers. *Journal of Fish Biology*, 45(5):831–837, November 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lamas:1994:NSC

- [1123] J. Lamas, Y. Santos, D. W. Bruno, A. E. Toranzo, and R. Anadón. Non-specific cellular responses of rainbow trout to *Vibrio anguillarum* and its extracellular products (ECPs). *Journal of Fish Biology*, 45(5):839–854, November 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wang:1994:AMR

- [1124] Yuxiang Wang, Michael P. Wilkie, George J. F. Heigenhauser, and Chris M. Wood. The analysis of metabolites in rainbow trout white muscle: a comparison of different sampling and processing methods. *Journal of Fish Biology*, 45(5):855–873, November 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Shaw:1994:FAD

- [1125] P. W. Shaw, G. R. Carvalho, A. E. Magurran, and B. H. Seghers. Factors affecting the distribution of genetic variability in the guppy, *Poecilia*

reticulata. *Journal of Fish Biology*, 45(5):875–888, November 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Walsh:1994:GGM

- [1126] A. Walsh, P. Reav, J. O'Halloran, and K. Cahill. The growth of grey mullet in a rural and urbanized Irish estuary. *Journal of Fish Biology*, 45(5):889–897, November 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Erkinaro:1994:OAS

- [1127] J. Erkinaro, I. L. Shchurov, T. Saari, and E. Niemelä. Occurrence of Atlantic salmon parr in redds at spawning time. *Journal of Fish Biology*, 45(5):899–900, November 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Buchmann:1994:STP

- [1128] K. Buchmann and K. Pedersen. A study on teleost phylogeny using specific antisera. *Journal of Fish Biology*, 45(5):901–903, November 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Poncin:1994:FOM

- [1129] P. Poncin. Field observations on a mating attempt of a spawning grayling, *Thymallus thymallus* with a feeding barbel, *Barbus barbus*. *Journal of Fish Biology*, 45(5):904–906, November 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1994:Ag

- [1130] Anonymous. Announcement. *Journal of Fish Biology*, 45(5):907–908, November 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Alok:1994:POR

- [1131] Deoraj Alok, T. Krishnan, Dinakar Salunke, Hemamalini Gupta, G. P. Talwar, and Lalit C. Garg. Precocious ovarian recrudescence and induced off-season spawning of *Heteropneustes fossilis* by D-Lys⁶ salmon gonadotropin releasing hormone analog (sGnRH-A). *Journal of Fish Biology*, 45(6):909–915, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wise:1994:GMD

- [1132] B. S. Wise, I. C. Potter, and J. H. Wallace. Growth, movements and diet of the terapontid *Amniataba caudavittata* in an Australian estuary. *Jour-*

nal of Fish Biology, 45(6):917–931, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Laitinen:1994:CVT

- [1133] Markku Laitinen and Tapani Valtonen. Cardiovascular, ventilatory and total activity responses of brown trout to handling stress. *Journal of Fish Biology*, 45(6):933–942, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Congdon:1994:CDE

- [1134] Bradley C. Congdon. Characteristics of dispersal in the eastern mosquitofish *Gambusia holbrooki*. *Journal of Fish Biology*, 45(6):943–952, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Smith:1994:RBR

- [1135] G. W. Smith, I. P. Smith, and S. M. Armstrong. The relationship between river flow and entry to the Aberdeenshire Dee by returning adult Atlantic salmon. *Journal of Fish Biology*, 45(6):953–960, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Verreth:1994:MNP

- [1136] J. Verreth, G. Custers, and W. Melger. The metabolism of neutral and polar lipids in eleuthero-embryos and starving larvae of the African catfish *Clarias gariepinus*. *Journal of Fish Biology*, 45(6):961–971, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sverdrup:1994:EES

- [1137] A. Sverdrup, E. Kjellsby, P. G. Krüger, R. Fløysand, F. R. Knudsen, P. S. Enger, G. Serck-Hanssen, and K. B. Helle. Effects of experimental seismic shock on vasoactivity of arteries, integrity of the vascular endothelium and on primary stress hormones of the Atlantic salmon. *Journal of Fish Biology*, 45(6):973–995, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mattson:1994:DEM

- [1138] N. S. Mattson. Direct estimates of multi-mesh gillnet selectivity to *Oreochromis shiranus chilwae*. *Journal of Fish Biology*, 45(6):997–1012, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pankhurst:1994:ECR

- [1139] N. W. Pankhurst and M. Dedualj. Effects of capture and recovery on plasma levels of cortisol, lactate and gonadal steroids in a natural population of rainbow trout. *Journal of Fish Biology*, 45(6):1013–1025, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Armstrong:1994:RJS

- [1140] J. D. Armstrong, P. E. Shackley, and R. Gardiner. Redistribution of juvenile salmonid fishes after localized catastrophic depletion. *Journal of Fish Biology*, 45(6):1027–1039, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Baroudy:1994:CTL

- [1141] E. Baroudy and J. M. Elliott. The critical thermal limits for juvenile Arctic charr *Salvelinus alpinus*. *Journal of Fish Biology*, 45(6):1041–1053, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tzeng:1994:TEI

- [1142] W. N. Tzeng. Temperature effects on the incorporation of strontium in otolith of Japanese eel *Anguilla japonica*. *Journal of Fish Biology*, 45(6):1055–1066, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wootton:1994:LHS

- [1143] R. J. Wootton. Life histories as sampling devices: optimum egg size in pelagic fishes. *Journal of Fish Biology*, 45(6):1067–1077, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mehner:1994:ETA

- [1144] T. Mehner and W. Wieser. Effects of temperature on allocation of metabolic energy in perch (*Perca fluviatilis*) fed submaximal rations. *Journal of Fish Biology*, 45(6):1079–1086, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Torrissen:1994:DDA

- [1145] K. R. Torrissen, E. Lied, and M. Espe. Differences in digestion and absorption of dietary protein in Atlantic salmon (*Salmo salar*) with genetically different trypsin isozymes. *Journal of Fish Biology*, 45(6):1087–1104, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Munehara:1994:CIF

- [1146] Hiroyuki Munehara, Yasunori Koya, and Kazunori Takano. Conditions for initiation of fertilization of eggs in the copulating elkhorn sculpin. *Journal of Fish Biology*, 45(6):1105–1111, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Azuma:1994:III

- [1147] T. Azuma and M. Iwata. Influences of illumination intensity on the nearest neighbour distance in Coho salmon *Oncorhynchus kisutch*. *Journal of Fish Biology*, 45(6):1113–1118, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Iger:1994:CRSb

- [1148] Y. Iger, H. A. Jenner, and S. E. Wendelaar bonga. Cellular responses in the skin of rainbow trout (*Oncorhynchus mykiss*) exposed to Rhine water. *Journal of Fish Biology*, 45(6):1119–1132, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Silverstein:1994:ERF

- [1149] J. T. Silverstein and H. Shimma. Effect of restricted feeding on early maturation in female and male amago salmon, *Oncorhynchus mason ishikawae*. *Journal of Fish Biology*, 45(6):1133–1135, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sarno:1994:DDB

- [1150] Benedetto Sarno, Christopher W. Glass, and Gordon W. Smith. Differences in diet and behaviour of sympatric saithe and pollack in a Scottish sea loch. *Journal of Fish Biology*, 45(sA):1–11, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Galis:1994:RBM

- [1151] Frietson Galis, Arie Terlouw, and J. W. M. Osse. The relation between morphology and behaviour during ontogenetic and evolutionary changes. *Journal of Fish Biology*, 45(sA):13–26, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hart:1994:TRG

- [1152] Paul J. B. Hart. Theoretical reflections on the growth of three-spined stickleback morphs from island lakes. *Journal of Fish Biology*, 45(sA):27–40, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Juanes:1994:AOP

- [1153] Francis Juanes, Jeffrey A. Buckel, and David O. Conover. Accelerating the onset of piscivory: intersection of predator and prey phenologies. *Journal of Fish Biology*, 45(sA):41–54, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fuiman:1994:IOS

- [1154] L. A. Fuiman. The interplay of ontogeny and scaling in the interactions of fish larvae and their predators. *Journal of Fish Biology*, 45(sA):55–79, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mesa:1994:APC

- [1155] Matthew G. Mesa, Thomas P. Poe, Dena M. Gadomski, and James H. Petersen. Are all prey created equal? A review and synthesis of differential predation on prey in substandard condition. *Journal of Fish Biology*, 45(sA):81–96, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Domenici:1994:EMS

- [1156] Paolo Domenici and Robert S. Batty. Escape manoeuvres of schooling *Clupea harengus*. *Journal of Fish Biology*, 45(sA):97–110, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sih:1994:PRE

- [1157] Andrew Sih. Predation risk and the evolutionary ecology of reproductive behaviour. *Journal of Fish Biology*, 45(sA):111–130, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bardonnet:1994:IPP

- [1158] Agnes Bardonnet and Michel Heland. The influence of potential predators on the habitat preference of emerging brown trout. *Journal of Fish Biology*, 45(sA):131–142, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fraser:1994:ELI

- [1159] Neil H. C. Fraser, Felicity Auntingford, and John E. Thorpe. The effect of light intensity on the nightly movements of juvenile Atlantic salmon alevins away from the redd. *Journal of Fish Biology*, 45(sA):143–150, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hugie:1994:FGG

- [1160] Don M. Hugie and Lawrence M. Dill. Fish and game: a game theoretic approach to habitat selection by predators and prey. *Journal of Fish Biology*, 45(sA):151–169, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Burrows:1994:EER

- [1161] Michael T. Burrows, Robin N. Gibson, and Amanda Maclean. Effects of endogenous rhythms and light conditions on foraging and predator-avoidance in juvenile plaice. *Journal of Fish Biology*, 45(sA):171–180, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Amundsen:1994:PCA

- [1162] P.-A. Amundsen. Piscivory and cannibalism in Arctic charr. *Journal of Fish Biology*, 45(sA):181–189, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Horne:1994:LSC

- [1163] John K. Horne and David C. Schneider. Lack of spatial coherence of predators with prey: a bioenergetic explanation for Atlantic cod feeding on capelin. *Journal of Fish Biology*, 45(sA):191–207, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kitchell:1994:PPD

- [1164] James F. Kitchell, Lisa A. Eby, Xi He, Daniel E. Schindler, and Russell A. Wright. Predator-prey dynamics in an ecosystem context. *Journal of Fish Biology*, 45(sA):209–226, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Petersen:1994:LMP

- [1165] James H. Petersen and Dena M. Gadomski. Light-mediated predation by northern squawfish on juvenile Chinook salmon. *Journal of Fish Biology*, 45(sA):227–242, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1994:PA

- [1166] Anonymous. Poster abstracts. *Journal of Fish Biology*, 45(sA):243–256, December 1994. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1995:GA

- [1167] Anonymous. Guide for authors. *Journal of Fish Biology*, 46(1):i–ii, January 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

OKland:1995:MBW

- [1168] F. Økland, T. G. Heggberget, and B. Jonsson. Migratory behaviour of wild and farmed Atlantic salmon (*Salmo salar*) during spawning. *Journal of Fish Biology*, 46(1):1–7, January 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

desClers:1995:SPD

- [1169] S. des Clers and K. Andersen. Sealworm (*Pseudoterranova decipiens*) transmission to fish trawled from Hvaler, Oslofjord, Norway. *Journal of Fish Biology*, 46(1):8–17, January 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Karlsbakk:1995:OMB

- [1170] E. Karlsbakk. The occurrence of metacercariae of *Bucephaloides gracilescens* (Digenea: Gasterostomata) in an intermediate host, the four-bearded rockling, *Enchelyopus cimbrius* (Gadidae). *Journal of Fish Biology*, 46(1):18–27, January 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jennings:1995:CSC

- [1171] S. Jennings and N. V. C. Polunin. Comparative size and composition of yield from six Fijian reef fisheries. *Journal of Fish Biology*, 46(1):28–46, January 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Thiel:1995:EFF

- [1172] R. Thiel, A. Sepúlveda, R. Kafemann, and W. Nellen. Environmental factors as forces structuring the fish community of the Elbe Estuary. *Journal of Fish Biology*, 46(1):47–69, January 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jonsson:1995:BTS

- [1173] N. Jonsson, B. Jonsson, P. Aass, and L. P. Hansen. Brown trout *Salmo trutta* released to support recreational fishing in a Norwegian fjord. *Journal of Fish Biology*, 46(1):70–84, January 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Officer:1995:VDS

- [1174] R. A. Officer, J. G. Clement, and D. K. Rowler. Vertebral deformities in a school shark, *Galeorhinus galeus*: circumstantial evidence for endoskeletal resorption? *Journal of Fish Biology*, 46(1):85–98, January 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bry:1995:ELC

- [1175] C. Bry, F. Bonamy, J. Manelphe, and B. Duranthon. Early life characteristics of pike, *Esox lucius*, in rearing ponds: temporal survival pattern and ontogenetic diet shifts. *Journal of Fish Biology*, 46(1):99–113, January 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Yoshikawa:1995:ECB

- [1176] H. Yoshikawa, Y. Ishida, K. Kawata, F. Kawai, and M. Kanamori. Electroencephalograms and cerebral blood flow in carp, *Cyprinus carpio*, subjected to acute hypoxia. *Journal of Fish Biology*, 46(1):114–122, January 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fernandes:1995:ETS

- [1177] M. N. Fernandes, W. R. Barrionuevo, and F. T. Rantin. Effects of thermal stress on respiratory responses to hypoxia of a South American Prochilodontid fish, *Prochilodus scrofa*. *Journal of Fish Biology*, 46(1):123–133, January 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Blay:1995:FFH

- [1178] J. Blay, Jr. Food and feeding habits of four species of juvenile mullet (*Mugilidae*) in a tidal lagoon in Ghana. *Journal of Fish Biology*, 46(1):134–141, January 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lokkeborg:1995:BRS

- [1179] S. Løkkeborg, B. L. Olla, W. H. Pearson, and M. W. Davis. Behavioural responses of sablefish, *Anoplopoma fimbria*, to bait odour. *Journal of Fish Biology*, 46(1):142–155, January 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ranta:1995:SII

- [1180] E. Ranta. Schistocephalus infestation improves prey-size selection by three-spined sticklebacks, *Gasterosteus aculeatus*. *Journal of Fish Biol-*

ogy, 46(1):156–158, January 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lee:1995:GRF

- [1181] S. C. Lee, J. T. Chang, and Y. Y. Tsu. Genetic relationships of four Taiwan mullets (Pisces: Perciformes: Mugilidae). *Journal of Fish Biology*, 46(1):159–162, January 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kristjansson:1995:EGA

- [1182] B. A. Kristjansson, Th. Hardarson, S. Skulason, and T. Sveinsson. Effects on growth of Arctic charr of handling, anaesthesia and repeated formalin bathing shortly after first exogenous feeding. *Journal of Fish Biology*, 46(1):163–165, January 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1995:BRa

- [1183] Anonymous. Book reviews. *Journal of Fish Biology*, 46(1):166–167, January 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1995:BRb

- [1184] Anonymous. Book received. *Journal of Fish Biology*, 46(1):178, January 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1995:R

- [1185] Anonymous. Referees 1994. *Journal of Fish Biology*, 46(1):179–181, January 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1995:FSB

- [1186] Anonymous. Fisheries Society of the British Isles: Molecular Biology in Fish, Fisheries and Aquaculture: an International Symposium, University of Plymouth, U.K. July 10–13 1995. *Journal of Fish Biology*, 46(1):182–183, January 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tzeng:1995:RAS

- [1187] W.-N. Tzeng, P.-W. Cheng, and F.-Y. Lin. Relative abundance, sex ratio and population structure of the Japanese eel *Anguilla japonica* in the Tanshui River system of northern Taiwan. *Journal of Fish Biology*, 46(2):183–200, February 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Elliott:1995:MAO

- [1188] N. G. Elliott, K. Haskard, and J. A. Koslow. Morphometric analysis of orange roughy (*Hoplostethus atlanticus*) off the continental slope of southern Australia. *Journal of Fish Biology*, 46(2):202–220, February 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Peuhkuri:1995:SAG

- [1189] Nina Peuhkuri, Esa Ranta, Sanna-Kaisa Juvonen, and Kai Lindström. Schooling affects growth in the three-spined stickleback, *Gasterosteus aculeatus*. *Journal of Fish Biology*, 46(2):221–226, February 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sarkka:1995:CDR

- [1190] Jukka Särkkä, Aulis Jämsä, and Antti Luukko. Chernobyl-derived radiocaesium in fish as dependent on water quality and lake morphometry. *Journal of Fish Biology*, 46(2):227–240, February 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Smith:1995:ORC

- [1191] S. A. Smith, T. Caceci, H. E-S. Marei, and H. A. El-Habbak. Observations on rodlet cells found in the vascular system and extravascular space of angelfish (*Pterophyllum scalare scalare*). *Journal of Fish Biology*, 46(2):241–254, February 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Folmar:1995:HCT

- [1192] L. C. Folmar, N. D. Denslow, R. A. Wallace, G. LaFleur, T. S. Gross, S. Bonomelli, and C. V. Sullivan. A highly conserved N-terminal sequence for teleost vitellogenin with potential value to the biochemistry, molecular biology and pathology of vitellogenesis. *Journal of Fish Biology*, 46(2):255–263, February 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ryer:1995:IFD

- [1193] C. H. Ryer and B. L. Olla. The influence of food distribution upon the development of aggressive and competitive behaviour in juvenile chum salmon, *Oncorhynchus keta*. *Journal of Fish Biology*, 46(2):264–272, February 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Feltham:1995:CAS

- [1194] M. J. Feltham. Consumption of Atlantic salmon smolts and parr by goosanders: estimates from doubly-labelled water measurements of captive birds released on two Scottish rivers. *Journal of Fish Biology*, 46(2):273–281, February 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Schlenk:1995:BRE

- [1195] D. Schlenk, M. J. J. Ronis, C. Miranda, and D. R. Buhler. Book review: *Effects of 2-methylisoborneol (MIB), and ethanol on the expression and activity of cytochrome P450s from the channel catfish*. *Journal of Fish Biology*, 46(2):282–291, February 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kurokawa:1995:SEP

- [1196] T. Kurokawa and T. Suzuki. Structure of the exocrine pancreas of flounder (*Paralichthys olivaceus*): immunological localization of zymogen granules in the digestive tract using anti-trypsinogen antibody. *Journal of Fish Biology*, 46(2):292–301, February 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dumas:1995:SAD

- [1197] S. Dumas, C. Audet, J. M. Blanc, and J. De La Noüe. Seawater acclimation of diploid and triploid brook charr (*Salvelinus fontinalis*), diploid Arctic charr (*Salvelinus alpinus*), and their diploid and triploid hybrids. *Journal of Fish Biology*, 46(2):302–316, February 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sayer:1995:GDC

- [1198] M. D. J. Sayer, R. N. Gibson, and R. J. A. Atkinson. Growth, diet and condition of goldsinny on the west coast of Scotland. *Journal of Fish Biology*, 46(2):317–340, February 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Reddy:1995:DRM

- [1199] P. K. Reddy, M. M. Vijayan, J. F. Leatherland, and T. W. Moon. Does RU486 modify hormonal responses to handling stressor and cortisol treatment in fed and fasted rainbow trout? *Journal of Fish Biology*, 46(2):341–359, February 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hall:1995:RMD

- [1200] H. J. Hall and L. W. Nawrocki. A rapid method for detecting mitochondrial DNA variation in the brown trout, *Salmo trutta*. *Journal of Fish Biology*, 46(2):360–364, February 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McCormack:1995:MTO

- [1201] C. A. McCormack and M. T. McDonnell. Medium-term organ culture for teleost fish retinae. *Journal of Fish Biology*, 46(2):365–367, February 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ellis:1995:NPS

- [1202] J. R. Ellis and S. E. Shackley. Notes on porbeagle sharks, *Lamna nasus*, from the Bristol Channel. *Journal of Fish Biology*, 46(2):368–370, February 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fernandez-Delgado:1995:ASG

- [1203] C. Fernández-Delgado and M. Herrera. Age structure, growth and reproduction of *Leuciscus pyrenaicus* in an intermittent stream in the Guadalquivir River basin, southern Spain. *Journal of Fish Biology*, 46(3):371–380, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Greenlee:1995:ETR

- [1204] A. R. Greenlee, C. A. Kersten, and J. G. Cloud. Effects of triploidy on rainbow trout myogenesis in vitro. *Journal of Fish Biology*, 46(3):381–388, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Canino:1995:GEW

- [1205] M. F. Canino and K. M. Bailey. Gut evacuation of walleye pollock larvae in response to feeding conditions. *Journal of Fish Biology*, 46(3):389–403, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Zamal:1995:EFL

- [1206] H. Zamal and F. Ollevier. Effect of feeding and lack of food on the growth, gross biochemical and fatty acid composition of juvenile catfish. *Journal of Fish Biology*, 46(3):404–414, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jansen:1995:SBT

- [1207] P. A. Jansen and T. A. Bakke. Susceptibility of brown trout to *Gyrodactylus salaris* (Monogenea) under experimental conditions. *Journal of Fish Biology*, 46(3):415–422, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Roubal:1995:CMC

- [1208] F. R. Roubal. Changes in monogenean and copepod infestation on captive *Acanthopagrus australis* (Sparidae). *Journal of Fish Biology*, 46(3):423–431, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fisher:1995:EEC

- [1209] S. K. Fisher, J. T. Lingenfelter, C. H. Jagoe, and C. E. Dallas. Evaluation of the effects of cryopreservation of isolated erythrocytes and leukocytes of largemouth bass by flow cytometry. *Journal of Fish Biology*, 46(3):432–441, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Paul:1995:CGA

- [1210] A. J. Paul, J. M. Paul, and R. L. Smith. Compensatory growth in Alaska yellowfin sole, *Pleuronectes asper*, following food deprivation. *Journal of Fish Biology*, 46(3):442–448, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Robinson:1995:ESP

- [1211] R. L. Robinson, G. F. Turner, A. S. Grimm, and T. J. Pitcher. An experimental study of phytoplankton feeding in three tilapiine cichlids. *Journal of Fish Biology*, 46(3):449–456, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Horne:1995:BFB

- [1212] E. A. Horne and M. Itzkowitz. Behaviour of the female beaugregory damselfish (*Stegastes leucostictus*). *Journal of Fish Biology*, 46(3):457–461, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mork:1995:GVI

- [1213] J. Mork and M. Giæver. Genetic variation at isozyme loci in blue whiting from the north-east Atlantic. *Journal of Fish Biology*, 46(3):462–468, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bowker:1995:MPD

- [1214] D. W. Bowker. Modelling the patterns of dispersion of length at age in teleost fishes. *Journal of Fish Biology*, 46(3):469–484, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Takemura:1995:UMM

- [1215] A. Takemura, K. Takano, and H. Takahashi. The uptake of macromolecular materials in the hindgut of viviparous rockfish embryos. *Journal of Fish Biology*, 46(3):485–493, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mancera:1995:EDE

- [1216] J. M. Mancera, P. Fernandez-Llebrez, and J. M. Perez-Figares. Effect of decreased environmental salinity on growth hormone cells in the gilt-head sea bream (*Sparus aurata*). *Journal of Fish Biology*, 46(3):494–500, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tsai:1995:CSC

- [1217] Huai-Jen Tsai and Liang-Tung Yang. Cloning and sequencing of the cDNA encoding the pituitary gonadotropin II β -subunit of yellowfin porgy (*Acanthopagrus latus*). *Journal of Fish Biology*, 46(3):501–508, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Soengas:1995:EGT

- [1218] J. L. Soengas, J. Fuentes, M. D. Andrés, and M. Aldegunde. The effect of gradual transfer to sea water on muscle carbohydrate metabolism of rainbow trout. *Journal of Fish Biology*, 46(3):509–523, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brown:1995:CRI

- [1219] J. Anne Brown and Colin Whitehead. Catecholamine release and interrenal response of brown trout, *Salmo trutta*, exposed to aluminium in acidic water. *Journal of Fish Biology*, 46(3):524–535, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Blake:1995:TRY

- [1220] R. W. Blake, L. M. Chatters, and P. Domenici. Turning radius of yellowfin tuna (*Thunnus albacares*) in unsteady swimming manoeuvres. *Journal of Fish Biology*, 46(3):536–538, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Buchmann:1995:EIE

- [1221] K. Buchmann. Ecological implications of *Echinorhynchus gadi* parasitism of Baltic cod (*Gadus morhua*). *Journal of Fish Biology*, 46(3): 539–540, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Narayanan:1995:EMS

- [1222] K. Narayanan and A. A. Khan. Electron microscopic studies on the retinal photoreceptors of the spotted snakehead, *Channa punctatus*. *Journal of Fish Biology*, 46(3):541–544, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1995:BRc

- [1223] Anonymous. Book reviews. *Journal of Fish Biology*, 46(3):545–550, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1995:BRd

- [1224] Anonymous. Books received. *Journal of Fish Biology*, 46(3):550, March 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nonnotte:1995:EIA

- [1225] G. Nonnotte and G. Boeuf. Extracellular ionic and acid-base adjustments of Atlantic salmon psmolts and smolts in fresh water and after transfer to sea water: the effects of ovine growth hormone on the acquisition of euryhalinity. *Journal of Fish Biology*, 46(4):563–577, April 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Due:1995:PFR

- [1226] T. T. Due and M. A. Curtis. Parasites of freshwater resident and anadromous Arctic charr (*Salvelinus alpinus*) in Greenland. *Journal of Fish Biology*, 46(4):578–592, April 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Moran:1995:EGF

- [1227] P. Morán, A. M. Pendas, E. García-Vázquez, J. I. Izquierdo, and J. Lobón-Cervlá. Estimates of gene flow among neighbouring populations of brown trout. *Journal of Fish Biology*, 46(4):593–602, April 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rubin:1995:ESN

- [1228] J.-F. Rubin. Estimating the success of natural spawning of salmonids in streams. *Journal of Fish Biology*, 46(4):603–622, April 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vandewalle:1995:SMB

- [1229] P. Vandewalle, P. Saintin, and M. Chardon. Structures and movements of the buccal and pharyngeal jaws in relation to feeding in *Diplodus sargus*. *Journal of Fish Biology*, 46(4):623–656, April 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fletcher:1995:HRD

- [1230] D. A. Fletcher and R. J. Wootton. A hierarchical response to differences in ration size in the reproductive performance of female three-spined sticklebacks. *Journal of Fish Biology*, 46(4):657–668, April 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Venne:1995:III

- [1231] H. Venne and P. Magnan. The impact of intra- and interspecific interactions on young-of-the-year brook charr, in temperate lakes. *Journal of Fish Biology*, 46(4):669–686, April 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fouda:1995:LHS

- [1232] M. M. Fouda. Life history strategies of four small-size fishes in the Suez Canal, Egypt. *Journal of Fish Biology*, 46(4):687–702, April 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Crisp:1995:TST

- [1233] D. T. Crisp and W. R. C. Beaumont. The trout (*Salmo trutta*) population of the Afon Cwm, a small tributary of the Afon Dyfi, mid-Wales. *Journal of Fish Biology*, 46(4):703–716, April 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Campbell:1995:GVV

- [1234] W. B. Campbell. Genetic variation of vertebral fusion patterns in Coho salmon. *Journal of Fish Biology*, 46(4):717–720, April 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tierney:1995:SRA

- [1235] M. L. Tierney, G. Cramb, and N. Hazon. Stimulation of the renin-angiotensin system and drinking by papaverine in the seawater eel, *An-*

guilla anguilla. *Journal of Fish Biology*, 46(4):721–724, April 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Burke:1995:CTN

- [1236] Nancy C. Burke and Howard E. Winn. Cyalume tagging: a new method for tracking reef fishes at night. *Journal of Fish Biology*, 46(4):725–726, April 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Burgess:1995:FHR

- [1237] P. J. Burgess and R. A. Matthews. Fish host range of seven isolates of *Cryptocaryon irritans* (Ciliophora). *Journal of Fish Biology*, 46(4):727–729, April 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Greenlee:1995:VDM

- [1238] A. R. Greenlee, M. V. Dodson, Z. Yablonka-Reuveni, C. A. Kersten, and J. G. Cloud. In vitro differentiation of myoblasts from skeletal muscle of rainbow trout. *Journal of Fish Biology*, 46(5):731–747, May 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lund:1995:GVI

- [1239] T. Lund, T. Gjedrem, H. B. Bentsen, D. M. Eide, H. J. S. Larsen, and K. H. Røed. Genetic variation in immune parameters and associations to survival in Atlantic salmon. *Journal of Fish Biology*, 46(5):748–758, May 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McMahon:1995:FSL

- [1240] T. E. McMahon and S. H. Holanov. Foraging success of largemouth bass at different light intensities: implications for time and depth of feeding. *Journal of Fish Biology*, 46(5):759–767, May 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pavlov:1995:RDL

- [1241] D. S. Pavlov and S. N. Tjurjukov. Reactions of dace to linear accelerations. *Journal of Fish Biology*, 46(5):768–774, May 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pagees:1995:EDM

- [1242] T. Pagées, E. Gómez, O. Súñer, G. Viscor, and L. Tort. Effects of daily management stress on haematology and blood rheology of the gilthead seabream. *Journal of Fish Biology*, 46(5):775–786, May 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sirois:1995:IPB

- [1243] P. Sirois and D. Boisclair. The influence of prey biomass on activity and consumption rates of brook trout. *Journal of Fish Biology*, 46(5):787–805, May 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Baras:1995:SAB

- [1244] E. Baras. Seasonal activities of *Barbus barbus*: effect of temperature on time-budgeting. *Journal of Fish Biology*, 46(5):806–818, May 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Babiak:1995:CMN

- [1245] I. Babiak, J. Glogowski, M. J. Luczynski, D. Kucharczyk, and M. Luczynski. Cryopreservation of the milt of the northern pike. *Journal of Fish Biology*, 46(5):819–828, May 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Franklin:1995:SOC

- [1246] C. E. Franklin, I. A. Johnston, T. Crockford, and C. Kamunde. Scaling of oxygen consumption of Lake Magadi tilapia, a fish living at 37°C. *Journal of Fish Biology*, 46(5):829–834, May 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

G-Toth:1995:ATR

- [1247] Laszlo G.-Toth, Marianne Szabo, and Dennis J. Webb. Adaptation of the tetrazolium reduction test for the measurement of the electron transport system (ETS) activity during embryonic development of medaka. *Journal of Fish Biology*, 46(5):835–844, May 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Soengas:1995:GCM

- [1248] J. L. Soengas, P. Barciela, M. Aldegunde, and D. Andrés. Gill carbohydrate metabolism of rainbow trout is modified during gradual adaptation to sea water. *Journal of Fish Biology*, 46(5):845–856, May 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jensen:1995:DEG

- [1249] J. W. Jensen. A direct estimate of gillnet selectivity for brown trout. *Journal of Fish Biology*, 46(5):857–861, May 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jensen:1995:ECS

- [1250] J. W. Jensen. Evaluating catches of salmonids taken by gillnets. *Journal of Fish Biology*, 46(5):862–871, May 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Johnson:1995:EPD

- [1251] J. H. Johnson and D. S. Dropkin. Effects of prey density and short term food deprivation on the growth and survival of American shad larvae. *Journal of Fish Biology*, 46(5):872–879, May 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Beaumont:1995:GWV

- [1252] A. R. Beaumont, J. Bray, J. M. Murphy, and I. J. Winfield. Genetics of whitefish and vendace in England and Wales. *Journal of Fish Biology*, 46(5):880–890, May 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Martin:1995:ETR

- [1253] M. H. Martin. The effects of temperature, river flow, and tidal cycles on the onset of glass eel and elver migration into fresh water in the American eel. *Journal of Fish Biology*, 46(5):891–902, May 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ellis:1995:OEL

- [1254] J. R. Ellis and S. E. Shackley. Observations on egg-laying in the thornback ray. *Journal of Fish Biology*, 46(5):903–904, May 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Deeley:1995:LAT

- [1255] M. A. Deeley and T. J. Benfey. Learning ability of triploid brook trout. *Journal of Fish Biology*, 46(5):905–907, May 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Herrera:1995:RLP

- [1256] G. A. Herrera and R. J. Lavenberg. Record of a larval *Parataeniophorus brevis* from Hawaii. *Journal of Fish Biology*, 46(5):908–911, May 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Duston:1995:LRM

- [1257] J. Duston. A light-reflectance meter to quantify silvering during smolting in Atlantic salmon. *Journal of Fish Biology*, 46(5):912–914, May 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Baras:1995:TRV

- [1258] E. Baras. Thermal related variations of seasonal and daily spawning periodicity in *Barbus barbus*. *Journal of Fish Biology*, 46(5):915–917, May 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

El-Matbouli:1995:LEM

- [1259] M. El-Matbouli, R. W. Hoffmann, and C. Mandok. Light and electron microscopic observations on the route of the triactinomyxon-sporoplasm of *Myxobolus cerebralis* from epidermis into rainbow trout cartilage. *Journal of Fish Biology*, 46(6):919–935, June 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rasotto:1995:PMU

- [1260] M. B. Rasotto and Y. Sadovy. Peculiarities of the male urogenital apparatus of two grunt species (Teleostei, Haemulidae). *Journal of Fish Biology*, 46(6):936–948, June 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Chivers:1995:FLF

- [1261] D. P. Chivers and R. J. F. Smith. Free — living fathead minnows rapidly learn to recognize pike as predators. *Journal of Fish Biology*, 46(6):949–954, June 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ponwith:1995:IIS

- [1262] B. J. Ponwith and W. H. Neill. The influence of incubation salinity on the buoyancy of red drum eggs and yolk sac larvae. *Journal of Fish Biology*, 46(6):955–960, June 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sadovy:1995:SDS

- [1263] Y. Sadovy and P. L. Colin. Sexual development and sexuality in the Nassau grouper. *Journal of Fish Biology*, 46(6):961–976, June 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nelson:1995:GEL

- [1264] G. A. Nelson and M. R. Ross. Gastric evacuation in little skate. *Journal of Fish Biology*, 46(6):977–986, June 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Benetti:1995:SMR

- [1265] D. D. Benetti, R. W. Brill, and S. A. Kraul, Jr. The standard metabolic rate of dolphin fish. *Journal of Fish Biology*, 46(6):987–996, June 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Niva:1995:RVI

- [1266] T. Niva. Retention of visible implant tags by juvenile brown trout. *Journal of Fish Biology*, 46(6):997–1002, June 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Masuda:1995:MDD

- [1267] R. Masuda, T. Kamaishi, T. Kobayashi, K. Tsukamoto, and K. Numachi. Mitochondrial DNA differentiation between two sympatric morphs of striped jack near Japan. *Journal of Fish Biology*, 46(6):1003–1010, June 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mothersill:1995:GDE

- [1268] C. Mothersill, F. Lyng, M. Lyons, and D. Cottell. Growth and differentiation of epidermal cells from the rainbow trout established as explants and maintained in various media. *Journal of Fish Biology*, 46(6):1011–1025, June 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Haynes:1995:LHP

- [1269] J. L. Haynes and R. C. Cashner. Life history and population dynamics of the western mosquitofish: a comparison of natural and introduced populations. *Journal of Fish Biology*, 46(6):1026–1041, June 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bury:1995:ECM

- [1270] N. R. Bury, F. B. Eddy, and G. A. Codd. The effects of the cyanobacterium *Microcystis aeruginosa*, the cyanobacterial hepatotoxin microcystin-LR, and ammonia on growth rate and ionic regulation of brown trout. *Journal of Fish Biology*, 46(6):1042–1054, June 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Oliveira:1995:SDA

- [1271] R. F. Oliveira and V. C. Almada. Sexual dimorphism and allometry of external morphology in *Oreochromis mossambicus*. *Journal of Fish Biology*, 46(6):1055–1064, June 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Marc:1995:CSE

- [1272] A. M. Marc, C. Quentel, A. Severe, P. Y. Le Bail, and G. Boeuf. Changes in some endocrinological and non-specific immunological parameters during seawater exposure in the brown trout. *Journal of Fish Biology*, 46(6):1065–1081, June 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fernandes:1995:GFM

- [1273] M. N. Fernandes, S. A. Perna, C. T. C. Santos, and W. Severi. The gill filament muscles in two loricariid fish (genus *Hypostomus* and rhinelepis). *Journal of Fish Biology*, 46(6):1082–1085, June 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Riehl:1995:FRE

- [1274] R. Riehl and R. Bless. First report on egg deposition and egg morphology of the endangered endemic Romanian perch. *Journal of Fish Biology*, 46(6):1086–1090, June 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1995:BRe

- [1275] Anonymous. Book reviews. *Journal of Fish Biology*, 46(6):1091–1096, June 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Siddall:1995:SCE

- [1276] M. E. Siddall, L. N. Measures, and S. S. Desser. Seasonal changes in erythrocyte osmotic fragility and haematocrit in American plaice infected with *Haemohormidium terranova*. *Journal of Fish Biology*, 47(1):1–6, July 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dempster:1995:CFS

- [1277] P. Dempster, D. J. Baird, and M. C. M. Beveridge. Can fish survive by filter-feeding on microparticles? Energy balance in tilapia grazing on algal suspensions. *Journal of Fish Biology*, 47(1):7–17, July 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mangor-Jensen:1995:ELE

- [1278] A. Mangor-Jensen and K. G. Waiwood. The effect of light exposure on buoyancy of halibut eggs. *Journal of Fish Biology*, 47(1):18–25, July 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pouyaud:1995:PRB

- [1279] Laurent Pouyaud and Jean-François Agnès. Phylogenetic relationships between 21 species of three tilapiine genera *Tilapia*, *Sarotherodon* and *Oreochromis* using allozyme data. *Journal of Fish Biology*, 47(1):26–38, July 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Swinney:1995:CAF

- [1280] G. N. Swinney. Ceratioid anglerfish of the families Gigantactinidae and Linophrynidae (Lophiiformes, Ceratioidea) collected off Madeira, including two species new to the north-eastern Atlantic. *Journal of Fish Biology*, 47(1):39–49, July 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Beeching:1995:CPI

- [1281] S. C. Beeching. Colour pattern and inhibition of aggression in the cichlid fish *Astronotus ocellatus*. *Journal of Fish Biology*, 47(1):50–58, July 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Egginton:1995:EFP

- [1282] S. Egginton and S. Cordiner. Effect of fixation protocols on muscle preservation and in situ diffusion distances. *Journal of Fish Biology*, 47(1):59–69, July 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Woo:1995:TPI

- [1283] N. Y. S. Woo and K. C. Chung. Tolerance of *Pomacanthus imperator* to hypoosmotic salinities: changes in body composition and hepatic enzyme activities. *Journal of Fish Biology*, 47(1):70–81, July 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Adams:1995:NDM

- [1284] C. E. Adams, F. A. Huntingford, and M. Jobling. A non-destructive morphometric technique for estimation of body and mesenteric lipid in Arctic charr: a case study of its application. *Journal of Fish Biology*, 47(1):82–90, July 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lippitsch:1995:SSC

- [1285] E. Lippitsch. Scale and squamation character polarity and phyletic assessment in the family Cichlidae. *Journal of Fish Biology*, 47(1):91–106,

July 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Crozier:1995:AFA

- [1286] W. W. Crozier and G. J. A. Kennedy. Application of a fry (0+;) abundance index, based on semi-quantitative electrofishing, to predict Atlantic salmon smolt runs in the River Bush, Northern Ireland. *Journal of Fish Biology*, 47(1):107–114, July 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Raitaniemi:1995:GYP

- [1287] J. Raitaniemi. The growth of young pike in small Finnish lakes with different acidity-related water properties and fish species composition. *Journal of Fish Biology*, 47(1):115–125, July 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Otake:1995:FSF

- [1288] T. Otake, J. Hirokawai, H. Fujimoto, and K. Imaizumi. Fine structure and function of the gut epithelium of pike eel larvae. *Journal of Fish Biology*, 47(1):126–142, July 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Davenport:1995:OSC

- [1289] J. Davenport and C. Bradshaw. Observations on skin colour changes in juvenile lumpstickers. *Journal of Fish Biology*, 47(1):143–154, July 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ellis:1995:OCS

- [1290] J. R. Ellis and S. E. Shackley. Ontogenic changes and sexual dimorphism in the head, mouth and teeth of the lesser spotted dogfish. *Journal of Fish Biology*, 47(1):155–164, July 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Akster:1995:UTT

- [1291] H. A. Akster, J. T. M. Koumans, J. Cuelenaere, and J. W. M. Osse. Uptake of tritiated thymidine in muscle of juvenile carp. *Journal of Fish Biology*, 47(1):165–167, July 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

deAstarloa:1995:ATF

- [1292] J. M. Diaz de Astarloa. Ambicoloration in two flounders, *Paralichthys patagonicus* and *Xystreuris rasile*. *Journal of Fish Biology*, 47(1):168–

170, July 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Yao:1995:CSP

- [1293] Zuxu Yao and L. W. Crim. Copulation, spawning and parental care in captive ocean pout. *Journal of Fish Biology*, 47(1):171–173, July 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nylund:1995:STC

- [1294] A. Nylund and P. Jakobsen. Sea trout as a carrier of infectious salmon anaemia virus. *Journal of Fish Biology*, 47(1):174–176, July 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cone:1995:PAA

- [1295] D. K. Cone and D. J. Marcogliese. *Pseudodactylogyrus anguillae* on *Anguilla rostrata* in Nova Scotia: an endemic or an introduction? *Journal of Fish Biology*, 47(1):177–178, July 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cole:1995:EUS

- [1296] K. S. Cole and Y. Sadovy. Evaluating the use of spawning success to estimate reproductive success in a Caribbean reef fish. *Journal of Fish Biology*, 47(2):181–191, August 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Guegan:1995:NEH

- [1297] J. F. Guégan, P. Rab, A. Machordom, and I. Doadrio. New evidence of hexaploidy in ‘large’ African *Barbus* with some considerations on the origin of hexaploidy. *Journal of Fish Biology*, 47(2):192–198, August 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Palmer:1995:HSS

- [1298] E. E. Palmer, P. W. Sorensen, and I. R. Adelman. A histological study of seasonal ovarian development in freshwater drum in the Red Lakes, Minnesota. *Journal of Fish Biology*, 47(2):199–210, August 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Machordom:1995:PEG

- [1299] A. Machordom, I. Doadrio, and P. Berrebi. Phylogeny and evolution of the genus *Barbus* in the Iberian Peninsula as revealed by allozyme electrophoresis. *Journal of Fish Biology*, 47(2):211–236, August 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Belk:1995:VGA

- [1300] M. C. Belk. Variation in growth and age at maturity in bluegill sunfish: genetic or environmental effects? *Journal of Fish Biology*, 47(2):237–247, August 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ciccotti:1995:ICG

- [1301] E. Ciccotti, T. Ricci, M. Scardi, E. Fresi, and S. Cataudella. Intraseasonal characterization of glass eel migration in the River Tiber: space and time dynamics. *Journal of Fish Biology*, 47(2):248–255, August 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sempeski:1995:HSGa

- [1302] P. Sempeski and P. Gaudin. Habitat selection by grayling — I. Spawning habitats. *Journal of Fish Biology*, 47(2):256–265, August 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Henderson:1995:SCD

- [1303] P. A. Henderson and H. F. Hamilton. Standing crop and distribution of fish in drifting and attached floating meadow within an Upper Amazonian varzea lake. *Journal of Fish Biology*, 47(2):266–276, August 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bisbal:1995:DDT

- [1304] G. A. Bisbal and D. A. Bengtson. Development of the digestive tract in larval summer flounder. *Journal of Fish Biology*, 47(2):277–291, August 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Marconato:1995:MSX

- [1305] A. Marconato, V. Tessari, and G. Marin. The mating system of *Xyrichthys novacula*: sperm economy and fertilization success. *Journal of Fish Biology*, 47(2):292–301, August 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hamilton:1995:PAD

- [1306] W. J. Hamilton and R. Poulin. Parasites, aggression and dominance in male upland bullies. *Journal of Fish Biology*, 47(2):302–307, August 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Steeger:1995:MLT

- [1307] H.-U. Steeger and C. R. Bridges. A method for long-term measurement of respiration in intertidal fishes during simulated intertidal conditions.

Journal of Fish Biology, 47(2):308–320, August 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sodsuk:1995:ERL

- [1308] P. K. Sodsuk, B. J. McAndrew, and G. F. Turner. Evolutionary relationships of the Lake Malaŵi *Oreochromis* species: evidence from allozymes. *Journal of Fish Biology*, 47(2):321–333, August 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Matena:1995:ISB

- [1309] J. Matěna, K. Šimek, and C. H. Fernando. Ingestion of suspended bacteria by fish: a modified approach. *Journal of Fish Biology*, 47(2):334–336, August 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Haywood:1995:RWP

- [1310] M. D. E. Haywood. Rates at which post-larval prawns are digested by a small predatory fish and the implications for predation studies. *Journal of Fish Biology*, 47(2):337–340, August 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bonfil:1995:RTS

- [1311] R. Bonfil. Is the ragged-tooth shark cosmopolitan? First record from the western North Atlantic. *Journal of Fish Biology*, 47(2):341–344, August 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sempeski:1995:HSGb

- [1312] P. Sempeski and P. Gaudin. Habitat selection by grayling. II. Preliminary results on larval and juvenile daytime habitats. *Journal of Fish Biology*, 47(2):345–349, August 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Santos:1995:ACR

- [1313] R. S. Santos. Allopaternal care in the redlip blenny. *Journal of Fish Biology*, 47(2):350–353, August 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Burke:1995:RFP

- [1314] J. S. Burke. Role of feeding and prey distribution of summer and southern flounder in selection of estuarine nursery habitats. *Journal of Fish Biology*, 47(3):355–366, September 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Narayanan:1995:VCC

- [1315] K. Narayanan and A. A. Khan. The visual cells of the corsula mullet. *Journal of Fish Biology*, 47(3):367–376, September 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Reidy:1995:PEM

- [1316] S. P. Reidy, J. A. Nelson, Y. Tang, and S. R. Kerr. Post-exercise metabolic rate in Atlantic cod and its dependence upon the method of exhaustion. *Journal of Fish Biology*, 47(3):377–386, September 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brown:1995:FMA

- [1317] G. E. Brown, D. P. Chivers, and R. J. F. Smith. Fathead minnows avoid conspecific and heterospecific alarm pheromones in the faeces of northern pike. *Journal of Fish Biology*, 47(3):387–393, September 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Colombo:1995:SDE

- [1318] G. Colombo and G. Grandi. Sex differentiation in the European eel: histological analysis of the effects of sex steroids on the gonad. *Journal of Fish Biology*, 47(3):394–413, September 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gisbert:1995:CBM

- [1319] E. Gisbert, L. Cardona, and F. Castello. Competition between mullet fry. *Journal of Fish Biology*, 47(3):414–420, September 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

DOnghia:1995:ODD

- [1320] G. Đonghia, A. Matarrese, A. Tursi, and L. Sion. Observations on the depth distribution pattern of the small-spotted catshark in the North Aegean Sea. *Journal of Fish Biology*, 47(3):421–426, September 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Guyot:1995:OLS

- [1321] E. Guyot, J. P. Diaz, and R. Connes. Organogenesis of the liver in sea bream. *Journal of Fish Biology*, 47(3):427–437, September 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hall:1995:HEC

- [1322] K. C. Hall and D. R. Bellwood. Histological effects of cyanide, stress and starvation on the intestinal mucosa of *Pomacentrus coelestis*, a marine

aquarium fish species. *Journal of Fish Biology*, 47(3):438–454, September 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Polunin:1995:CAF

- [1323] N. V. C. Polunin, M. Harmelin-Vivien, and R. Galzin. Contrasts in algal food processing among five herbivorous coral-reef fishes. *Journal of Fish Biology*, 47(3):455–465, September 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Soengas:1995:GTS

- [1324] J. L. Soengas, M. Aldegunde, and M. D. Andrés. Gradual transfer to sea water of rainbow trout: effects on liver carbohydrate metabolism. *Journal of Fish Biology*, 47(3):466–478, September 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fishelson:1995:OCS

- [1325] L. Fishelson. Ontogenesis of cytological structures around the yolk sac during embryologic and early larval development of some cichlid fishes. *Journal of Fish Biology*, 47(3):479–491, September 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lahnsteiner:1995:FSM

- [1326] F. Lahnsteiner, B. Berger, T. Weismann, and R. Patzner. Fine structure and motility of spermatozoa and composition of the seminal plasma in the perch. *Journal of Fish Biology*, 47(3):492–508, September 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Janssen:1995:AOC

- [1327] P. A. H. Janssen, J. G. D. Lambert, and H. J. Th. Goos. The annual ovarian cycle and the influence of pollution on vitellogenesis in the flounder, *Pleuronectes flesus*. *Journal of Fish Biology*, 47(3):509–523, September 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Arber:1995:EHC

- [1328] B. Arber, F. A. Huntingford, and D. W. T. Crompton. The effect of hunger and cestode parasitism on the shoaling decisions of small freshwater fish. *Journal of Fish Biology*, 47(3):524–536, September 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Griffiths:1995:SVG

- [1329] D. Griffiths and R. C. Kirkwood. Seasonal variation in growth, mortality and fat stores of roach and perch in Lough Neagh, Northern Ire-

land. *Journal of Fish Biology*, 47(3):537–554, September 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ramnarine:1995:INB

- [1330] I. W. Ramnarine. Induction of nest building and spawning in *Hoplosternum littorale*. *Journal of Fish Biology*, 47(3):555–557, September 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Allen:1995:APL

- [1331] P. Allen. Accumulation profiles of lead and cadmium in the edible tissues of *Oreochromis aureus* during acute exposure. *Journal of Fish Biology*, 47(4):559–568, October 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kimura:1995:GCF

- [1332] S. Kimura. Growth of the clupeid fishes, *Stolothrissa tanganyicae* and *Limnothrissa miodon*, in the Zambian waters of Lake Tanganyika. *Journal of Fish Biology*, 47(4):569–575, October 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Richardson:1995:TGB

- [1333] M. J. Richardson, F. G. Whoriskey, and L. H. Roy. Turbidity generation and biological impacts of an exotic fish *Carassius auratus*, introduced into shallow seasonally anoxic ponds. *Journal of Fish Biology*, 47(4):576–585, October 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Berglund:1995:SIE

- [1334] I. Berglund, E. Antonopoulou, I. Mayer, and B. Borg. Stimulatory and inhibitory effects of testosterone on testes in Atlantic salmon male parr. *Journal of Fish Biology*, 47(4):586–598, October 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jansson:1995:GRA

- [1335] H. Jansson, P.-I. Wyöni, B. Fernholm, M. Bredwad, A. Mierzykowska, and H. Tegelström. Genetic relationships among species of hagfish revealed by protein electrophoresis. *Journal of Fish Biology*, 47(4):599–608, October 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cataldi:1995:ATJ

- [1336] E. Cataldi, E. Ciccotti, P. Dimarco, O. Disanto, P. Bronzi, and S. Cataudella. Acclimation trials of juvenile Italian sturgeon to different

salinities: morpho-physiological descriptors. *Journal of Fish Biology*, 47(4):609–618, October 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nanda:1995:CEL

- [1337] I. Nanda, M. Scharfl, W. Feichtinger, I. Schlupp, J. Parzefall, and M. Schmid. Chromosomal evidence for laboratory synthesis of a triploid hybrid between the gynogenetic teleost *Poecilia formosa* and its host species. *Journal of Fish Biology*, 47(4):619–623, October 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nordlie:1995:BWC

- [1338] F. G. Nordlie, W. A. Wahl II, J. Binello, and D. C. Haney. Body water content over a range of ambient salinities in the sheepshead minnow. *Journal of Fish Biology*, 47(4):624–630, October 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nathanailides:1995:TDI

- [1339] C. Nathanailides, O. Lopez-Albors, and N. C. Stickland. Temperature- and developmentally-induced variation in the histochemical profile of myofibrillar ATPase activity in carp. *Journal of Fish Biology*, 47(4):631–640, October 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fernandes:1995:PCC

- [1340] M. N. Fernandes, F. B. Eddy, and W. S. Penrice. Primary cell culture from gill explants of rainbow trout. *Journal of Fish Biology*, 47(4):641–651, October 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sandstrom:1995:ETL

- [1341] O. Sandström, E. Neuman, and G. Thoresson. Effects of temperature on life history variables in perch. *Journal of Fish Biology*, 47(4):652–670, October 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bailey:1995:TDI

- [1342] K. M. Bailey, A. L. Brown, A. Nishimura, and M. T. Reilly. Three-dimensional imaging of walleye pollock otoliths: reconstruction from serial sections and fluorescent laser cytometry. *Journal of Fish Biology*, 47(4):671–678, October 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Salvanes:1995:SDG

- [1343] A. G. V. Salvanes, D. L. Aksnes, and J. Giske. A surface-dependent gastric evacuation model for fish. *Journal of Fish Biology*, 47(4):679–695, October 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Buckel:1995:ETS

- [1344] J. A. Buckel, N. D. Steinberg, and D. O. Conover. Effects of temperature, salinity, and fish size on growth and consumption of juvenile bluefish. *Journal of Fish Biology*, 47(4):696–706, October 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Perdices:1995:AVA

- [1345] A. Perdices, A. Machordom, and I. Doadrio. Allozyme variation of African and Iberian populations of the genus *Cobitis*. *Journal of Fish Biology*, 47(4):707–718, October 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Langeland:1995:GRS

- [1346] A. Langeland and T. Nøst. Gill raker structure and selective predation on zooplankton by particulate feeding fish. *Journal of Fish Biology*, 47(4):719–732, October 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jennings:1995:BUV

- [1347] S. Jennings and N. V. C. Polunin. Biased underwater visual census biomass estimates for target-species in tropical reef fisheries. *Journal of Fish Biology*, 47(4):733–736, October 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bernardi:1995:OSP

- [1348] G. Bernardi, C. Fernandez-Delgado, M. Gomez-Chiarri, and D. A. Powers. Origin of a Spanish population of *Fundulus heteroclitus* inferred by cytochrome *b* sequence analysis. *Journal of Fish Biology*, 47(4):737–740, October 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tagliavini:1995:DBA

- [1349] J. Tagliavini, I. J. Harrison, and G. Gandolfi. Discrimination between *Anguilla anguilla* and *a. rostrata* by polymerase chain reaction-restriction fragment length polymorphism analysis. *Journal of Fish Biology*, 47(4):

741–743, October 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McGauley:1995:PCR

- [1350] K. McGauley and T. J. Mulligan. Polymerase chain reaction-restriction fragment length polymorphism analysis of mitochondrial rRNA genes from yellowtail rockfish. *Journal of Fish Biology*, 47(4):744–747, October 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Skelton:1995:PHG

- [1351] P. Skelton. Peter Humphry Greenwood, 1927–1995 — a personal tribute. *Journal of Fish Biology*, 47(5):749–752, November 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pillar:1995:DFP

- [1352] S. C. Pillar and M. Barange. Diel feeding periodicity, daily ration and vertical migration of juvenile Cape hake off the west coast of South Africa. *Journal of Fish Biology*, 47(5):753–768, November 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Munoz-Chapuli:1995:EPS

- [1353] R. Muñoz-Chápuli, A. Gallego, D. Macías, C. Ramos, and A. V. De Andrés. Endocardial pores in the sinus venosus and atrium of the dogfish. *Journal of Fish Biology*, 47(5):769–774, November 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Chellappa:1995:CFH

- [1354] S. Chellappa, F. A. Huntingford, R. H. C. Strang, and R. Y. Thomson. Condition factor and hepatosomatic index as estimates of energy status in male three-spined stickleback. *Journal of Fish Biology*, 47(5):775–787, November 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mol:1995:ODS

- [1355] J. H. Mol. Ontogenetic diet shifts and diet overlap among three closely related neotropical armoured catfishes. *Journal of Fish Biology*, 47(5):788–807, November 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Morgan:1995:LCG

- [1356] D. L. Morgan, H. S. Gill, and I. C. Potter. Life cycle, growth and diet of Balston's pygmy perch in its natural habitat of acidic pools in south-

western Australia. *Journal of Fish Biology*, 47(5):808–825, November 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ruchon:1995:AMR

- [1357] F. Ruchon, T. Laugier, and J. P. Quignard. Alternative male reproductive strategies in the peacock blenny. *Journal of Fish Biology*, 47(5):826–840, November 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mazzoni:1995:SSS

- [1358] R. Mazzoni and E. P. Caramaschi. Size structure, sex ratio and onset of sexual maturity of two species of *Hypostomus*. *Journal of Fish Biology*, 47(5):841–849, November 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Berrebi:1995:EGD

- [1359] P. Berrebi, M. M. Kraiem, I. Doadrio, S. El Gharbi, and G. Cattaneo-Berrebi. Ecological and genetic differentiation of *Barbus callensis* populations in Tunisia. *Journal of Fish Biology*, 47(5):850–864, November 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gaumet:1995:ESI

- [1360] F. Gaumet, G. Boeuf, A. Severe, A. Le Roux, and N. Mayer-Gostan. Effects of salinity on the ionic balance and growth of juvenile turbot. *Journal of Fish Biology*, 47(5):865–876, November 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Robinson:1995:DVO

- [1361] C. J. Robinson, F. V. Arenas, and G. J. Gomez. Diel vertical and offshore-inshore movements of anchovies off the central Baja California coast. *Journal of Fish Biology*, 47(5):877–892, November 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Elliott:1995:FED

- [1362] J. M. Elliott. Fecundity and egg density in the redd for sea trout. *Journal of Fish Biology*, 47(5):893–901, November 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Linhart:1995:MSS

- [1363] O. Linhart, S. D. Mims, and W. L. Shelton. Motility of spermatozoa from shovelnose sturgeon and paddlefish. *Journal of Fish Biology*, 47(5):902–909, November 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

OConnell:1995:ARS

- [1364] M. O'Connell, D. O. F. Skibinski, and J. A. Beardmore. Absence of restriction site variation in the mitochondrial ND5 and ND6 genes of Atlantic salmon amplified by the polymerase chain reaction. *Journal of Fish Biology*, 47(5):910–913, November 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Marrero:1995:QEP

- [1365] C. Marrero and H. Lopez-Rojas. Quantitative evaluation of the point method for fish stomach contents analysis. *Journal of Fish Biology*, 47(5):914–916, November 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Elliott:1995:ERT

- [1366] J. M. Elliott and J. A. Elliott. The effect of the rate of temperature increase on the critical thermal maximum for parr of Atlantic salmon and brown trout. *Journal of Fish Biology*, 47(5):917–919, November 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pelletier:1995:DGR

- [1367] D. Pelletier, P. U. Blier, Y. Lambert, and J-D. Dutil. Deviation from the general relationship between RNA concentration and growth rate in fish. *Journal of Fish Biology*, 47(5):920–922, November 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Heins:1995:EOF

- [1368] D. C. Heins, J. A. Baker, R. W. King, and K. Lahti. Evaluation of ovum fixation and storage in three-spined stickleback. *Journal of Fish Biology*, 47(5):923–925, November 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1995:SSE

- [1369] Anonymous. Symposium on Social, Economic and Management Aspects of Recreational Fisheries Dublin, Ireland 11–14 June 1996 European Inland Fisheries Advisory Commission. *Journal of Fish Biology*, 47(5):926, November 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cushing:1995:RBP

- [1370] David Cushing. Ray Beverton, 1922–1995: a personal tribute. *Journal of Fish Biology*, 47(6):929–930, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Batty:1995:RSO

- [1371] R. S. Batty and R. D. Hoyt. The role of sense organs in the feeding behaviour of juvenile sole and plaice. *Journal of Fish Biology*, 47(6):931–939, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fuiman:1995:NVE

- [1372] L. A. Fuiman and G. R. Hoff. Natural variation in elemental composition of sagittae from red drum. *Journal of Fish Biology*, 47(6):940–955, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Phillips:1995:ESP

- [1373] R. B. Phillips, T. H. Oakley, and E. L. Davis. Evidence supporting the paraphyly of *Hucho* (Salmonidae) based on ribosomal DNA restriction maps. *Journal of Fish Biology*, 47(6):956–961, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Griffiths:1995:LHA

- [1374] M. H. Griffiths and T. Hecht. On the life-history of *Atractoscion aequidens*, a migratory sciaenid off the east coast of southern Africa. *Journal of Fish Biology*, 47(6):962–985, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Toth:1995:CAM

- [1375] G. P. Toth, S. A. Christ, H. W. McCarthy, J. A. Torsella, and M. K. Smith. Computer-assisted motion analysis of sperm from the common carp. *Journal of Fish Biology*, 47(6):986–1003, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Collins:1995:REE

- [1376] A. L. Collins and T. A. Anderson. The regulation of endogeneous energy stores during starvation and refeeding in the somatic tissues of the golden perch. *Journal of Fish Biology*, 47(6):1004–1015, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Zhang:1995:CLC

- [1377] Quiyang Zhang and T. R. Tiersch. Cryopreservation of leucocytes of channel catfish for subsequent cytogenetic analysis. *Journal of Fish Biology*, 47(6):1016–1025, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brooks:1995:MDL

- [1378] S. Brooks, V. L. A. Vieira, I. A. Johnston, and P. Macheru. Muscle development in larvae of a fast growing tropical freshwater fish, the curimatã-pacú. *Journal of Fish Biology*, 47(6):1026–1037, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dorucu:1995:HFH

- [1379] M. Dorucu, C. E. Adams, F. A. Huntingford, and D. W. T. Crompton. How fish-helminth associations arise: an example from Arctic charr in Loch Rannoch. *Journal of Fish Biology*, 47(6):1038–1043, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Shimizu:1995:ECO

- [1380] M. Shimizu, H. Ueda, H. Kawamura, K. Shimazaki, and K. Yamauchi. Electrophoretic changes in olfactory system proteins in masu salmon during parr-smolt transformation. *Journal of Fish Biology*, 47(6):1044–1054, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Crozier:1995:RBS

- [1381] W. W. Crozier and G. J. A. Kennedy. The relationship between a summer fry (0+) abundance index, derived from semi-quantitative electrofishing, and egg deposition of Atlantic salmon, in the River Bush, Northern Ireland. *Journal of Fish Biology*, 47(6):1055–1062, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Koslow:1995:FVO

- [1382] J. A. Koslow, J. Bell, P. Virtue, and D. C. Smith. Fecundity and its variability in orange roughy: effects of population density, condition, egg size, and senescence. *Journal of Fish Biology*, 47(6):1063–1080, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

DeVries:1995:BRL

- [1383] M. C. De Vries, R. B. Forward, Jr., and W. F. Hettler. Behavioural response of larval Atlantic menhaden to different rates of temperature change. *Journal of Fish Biology*, 47(6):1081–1095, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Erkinaro:1995:EGF

- [1384] J. Erkinaro, Yu. Shustov, and E. Niemelä. Enhanced growth and feeding rate in Atlantic salmon parr occupying a lacustrine habitat in the River Utsjoki, northern Scandinavia. *Journal of Fish Biology*, 47(6):1096–1098,

December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brito:1995:OOT

- [1385] A. Brito, J. M. Falcon, and R. Herrera. Occurrence of the ocean triggerfish in the Eastern Atlantic (Canary Islands). *Journal of Fish Biology*, 47(6):1099–1101, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hughes:1995:PMS

- [1386] G. M. Hughes. Preliminary morphometric study of the gills of *Oreochromis alcalicus grahami* from Lake Magadi and a comparison with *O. niloticus*. *Journal of Fish Biology*, 47(6):1102–1105, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ostlund:1995:BRF

- [1387] Sara Östlund. Book review: *Female 15-spined sticklebacks detect males with empty nests by non-visual cues*. *Journal of Fish Biology*, 47(6):1106–1109, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1995:BRf

- [1388] Anonymous. Book reviews. *Journal of Fish Biology*, 47(6):1110–1112, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1995:BRg

- [1389] Anonymous. Book received. *Journal of Fish Biology*, 47(6):1112, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1995:FSP

- [1390] Anonymous. Further symposium presentations not published in this supplement. *Journal of Fish Biology*, 47(sA):v–vii, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1995:PP

- [1391] Anonymous. Poster presentations. *Journal of Fish Biology*, 47(sA):ix–xiv, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hew:1995:TST

- [1392] C. L. Hew, G. L. Fletcher, and P. L. Davies. Transgenic salmon: tailoring the genome for food production. *Journal of Fish Biology*, 47(sA):1–19, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sin:1995:EAS

- [1393] F. Y. T. Sin, U. K. Mukherjee, J. C. McKenzie, and I. L. Sin. Electroporation of abalone sperm enhances sperm-DNA association. *Journal of Fish Biology*, 47(sA):20–28, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

O'Reilly:1995:ETD

- [1394] P. O'Reilly and J. M. Wright. The evolving technology of DNA fingerprinting and its application to fisheries and aquaculture. *Journal of Fish Biology*, 47(sA):29–55, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fyhn:1995:OHP

- [1395] U. E. H. Fyhn, T. Johansen, G. Nævdal, and S. Thorkildsen. Ontogeny of haemoglobin polymorphism in cod. *Journal of Fish Biology*, 47(sA):56–60, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Leong:1995:MBT

- [1396] J. C. Leong. Molecular biological tools to detect fish pathogens. *Journal of Fish Biology*, 47(sA):61–75, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Evans:1995:CLR

- [1397] D. L. Evans, J. H. Leary iii, and L. Jaso-Friedmann. Cross-linkage of a receptor on nonspecific cytotoxic cells or treatment with calcium ionophore triggers increased phosphorylation of serine residues. *Journal of Fish Biology*, 47(sA):76–84, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Grayson:1995:IAS

- [1398] T. H. Grayson, R. J. John, S. Wadsworth, K. Greaves, D. Cox, J. Roper, A. B. Wrathmell, M. L. Gilpin, and J. E. Harris. Immunization of Atlantic salmon against the salmon louse: identification of antigens and effects on louse fecundity. *Journal of Fish Biology*, 47(sA):85–94, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jaso-Friedmann:1995:PME

- [1399] L. Jaso-Friedmann, J. H. Leary III, J. Warren, and D. L. Evans. Peptide mapping of the epitope on target cells recognized by nonspecific cytotoxic cells (NCC) from channel catfish. *Journal of Fish Biology*, 47(sA):95–102, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ferguson:1995:AMM

- [1400] A. Ferguson, J. B. Taggart, P. A. Prodöhl, O. McMeel, C. Thompson, C. Stone, P. McGinnity, and R. A. Hynes. The application of molecular markers to the study and conservation of fish populations, with special reference to *Salmo*. *Journal of Fish Biology*, 47(sA):103–126, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hauser:1995:MGD

- [1401] L. Hauser, G. R. Carvalho, and T. J. Pitcher. Morphological and genetic differentiation of the African clupeid *Limnothrissa miodon* 34 years after its introduction to Lake Kivu. *Journal of Fish Biology*, 47(sA):127–144, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hartley:1995:MDA

- [1402] S. E. Hartley. Mitochondrial DNA analysis distinguishes between British populations of the whitefish. *Journal of Fish Biology*, 47(sA):145–155, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tessier:1995:GDA

- [1403] N. Tessier, L. Bernatchez, P. Presa, and B. Angers. Gene diversity analysis of mitochondrial DNA, microsatellites and allozymes in landlocked Atlantic salmon. *Journal of Fish Biology*, 47(sA):156–163, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Togan:1995:GST

- [1404] I. Togan, A. Z. Fidan, E. Yain, A. Ergüven, and Y. Emre. Genetic structure of two Turkish brown trout populations. *Journal of Fish Biology*, 47(sA):164–169, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Arias:1995:LSI

- [1405] J. Arias, L. Sánchez, and P. Martínez. Low stocking incidence in brown trout populations from northwestern Spain monitored by LDH-5* diag-

nostic marker. *Journal of Fish Biology*, 47(sA):170–176, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Angers:1995:SML

- [1406] B. Angers, L. Bernatchez, A. Angers, and L. Desgroseillers. Specific microsatellite loci for brook charr reveal strong population subdivision on a microgeographic scale. *Journal of Fish Biology*, 47(sA):177–185, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Galvin:1995:GSI

- [1407] P. Galvin, S. McKinnell, J. B. Taggart, A. Ferguson, M. O’Farrell, and T. F. Cross. Genetic stock identification of Atlantic salmon using single locus minisatellite DNA profiles. *Journal of Fish Biology*, 47(sA):186–199, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Galvin:1995:PGA

- [1408] P. Galvin, T. Sadusky, D. McGregor, and T. Cross. Population genetics of Atlantic cod using amplified single locus minisatellite VNTR analysis. *Journal of Fish Biology*, 47(sA):200–208, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Largiadèr:1995:ESG

- [1409] C. R. Largiadèr and A. Scholl. Effects of stocking on the genetic diversity of brown trout populations of the Adriatic and Danubian drainages in Switzerland. *Journal of Fish Biology*, 47(sA):209–225, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Johansen:1995:GAP

- [1410] T. Johansen and G. Nævdal. Genetic analysis of population structure of tusk in the North Atlantic. *Journal of Fish Biology*, 47(sA):226–242, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Coelho:1995:GVD

- [1411] M. M. Coelho, R. M. Brito, T. R. Pacheco, D. Figueiredo, and A. M. Pires. Genetic variation and divergence of *Leuciscus pyrenaicus* and *L. carolitertii* (Pisces, Cyprinidae). *Journal of Fish Biology*, 47(sA):243–258, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ward:1995:PGT

- [1412] R. D. Ward. Population genetics of tunas. *Journal of Fish Biology*, 47(sA):259–280, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1995:RS

- [1413] Anonymous. Referees for this supplement. *Journal of Fish Biology*, 47(sA):281, December 1995. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Friedland:1996:MPS

- [1414] K. D. Friedland and R. E. Haas. Marine post-smolt growth and age at maturity of Atlantic salmon. *Journal of Fish Biology*, 48(1):1–15, January 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sakakura:1996:ODC

- [1415] Y. Sakakura and K. Tsukamoto. Onset and development of cannibalistic behaviour in early life stages of yellowtail. *Journal of Fish Biology*, 48(1):16–29, January 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mooij:1996:FYC

- [1416] W. M. Mooij, W. L. T. Van Densen, and E. H. R. R. Lammens. Formation of year-class strength in the bream population in the shallow eutrophic Lake Tjeukemeer. *Journal of Fish Biology*, 48(1):30–39, January 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Trudel:1996:EFA

- [1417] M. Trudel and D. Boisclair. Estimation of fish activity costs using underwater video cameras. *Journal of Fish Biology*, 48(1):40–53, January 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hynes:1996:VMD

- [1418] R. A. Hynes, A. Ferguson, and M. A. McCann. Variation in mitochondrial DNA and post-glacial colonization of north western Europe by brown trout. *Journal of Fish Biology*, 48(1):54–67, January 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Yamamoto:1996:GDB

- [1419] S. Yamamoto and S. Nakano. Growth and development of a bimodal length-frequency distribution during smolting in a wild population of

white-spotted charr in northern Japan. *Journal of Fish Biology*, 48(1): 68–79, January 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Irving:1996:SDC

- [1420] P. W. Irving. Sexual dimorphism in club cell distribution in the European minnow and immunocompetence signaling. *Journal of Fish Biology*, 48(1):80–88, January 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kennedy:1996:RDH

- [1421] C. R. Kennedy and T. Pojmanska. Richness and diversity of helminth parasite communities in the common carp and in three more recently introduced carp species. *Journal of Fish Biology*, 48(1):89–100, January 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Merrett:1996:PSE

- [1422] N. R. Merrett and S. H. Barnes. Preliminary survey of egg envelope morphology in the *Macrouridae* and the possible implications of its ornamentation. *Journal of Fish Biology*, 48(1):101–119, January 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dunson:1996:ESM

- [1423] W. A. Dunson and C. L. Rowe. The effects of species manipulation on growth and survival of an assemblage of juvenile estuarine fish. *Journal of Fish Biology*, 48(1):120–130, January 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Peterson:1996:STV

- [1424] N. P. Peterson and T. P. Quinn. Spatial and temporal variation in dissolved oxygen in natural egg pockets of chum salmon, in Kennedy Creek, Washington. *Journal of Fish Biology*, 48(1):131–143, January 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dannewitz:1996:TPF

- [1425] J. Dannewitz and H. Jansson. Triploid progeny from a female Atlantic salmon \times brown trout hybrid backcrossed to a male brown trout. *Journal of Fish Biology*, 48(1):144–146, January 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Balm:1996:TIG

- [1426] P. H. M. Balm, T. R. Carrick, A. J. M. Coenen, and T. G. Pottinger. *Trychophrya intermedia* on the gills of rainbow trout acclimating to low

ambient pH. *Journal of Fish Biology*, 48(1):147–150, January 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hartley:1996:HIA

- [1427] S. E. Hartley. High incidence of Atlantic salmon \times brown trout hybrids in a Lake District stream. *Journal of Fish Biology*, 48(1):151–154, January 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1996:Aa

- [1428] Anonymous. Announcements. *Journal of Fish Biology*, 48(1):158–160, January 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Waring:1996:PRH

- [1429] C. P. Waring, R. M. Stagg, and M. G. Poxton. Physiological responses to handling in the turbot. *Journal of Fish Biology*, 48(2):161–173, February 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gallahar:1996:FIS

- [1430] N. K. Gallahar and M. J. Kingsford. Factors influencing Sr/Ca ratios in otoliths of *Girella elevata*: an experimental investigation. *Journal of Fish Biology*, 48(2):174–186, February 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Murray:1996:CHH

- [1431] H. M. Murray, G. M. Wright, and G. P. Goff. A comparative histological and histochemical study of the post-gastric alimentary canal from three species of pleuronectid, the Atlantic halibut, the yellowtail flounder and the winter flounder. *Journal of Fish Biology*, 48(2):187–206, February 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Franklin:1996:MRH

- [1432] C. E. Franklin, I. A. Johnston, R. S. Batty, and M. C. Yin. Metabolic recovery in herring larvae following strenuous activity. *Journal of Fish Biology*, 48(2):207–216, February 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nissling:1996:ABC

- [1433] A. Nissling and L. Vallin. The ability of Baltic cod eggs to maintain neutral buoyancy and the opportunity for survival in fluctuating conditions in the Baltic Sea. *Journal of Fish Biology*, 48(2):217–227, February 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Laitinen:1996:BMP

- [1434] M. Laitinen, R. Siddall, and E. T. Valtonen. Bioelectronic monitoring of parasite-induced stress in brown trout and roach. *Journal of Fish Biology*, 48(2):228–241, February 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Alanara:1996:DDF

- [1435] A. Alanärä and E. Brännäs. Dominance in demand-feeding behaviour in Arctic charr and rainbow trout: the effect of stocking density. *Journal of Fish Biology*, 48(2):242–254, February 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Corti:1996:GVG

- [1436] M. Corti and D. Crosetti. Geographic variation in the grey mullet: a geometric morphometric analysis using partial warp scores. *Journal of Fish Biology*, 48(2):255–269, February 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Feltham:1996:CTR

- [1437] M. J. Feltham and J. C. MacLean. Carlin tag recoveries as an indicator of predation on salmon smolts by goosanders and red-breasted mergansers. *Journal of Fish Biology*, 48(2):270–282, February 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Stott:1996:PPC

- [1438] M. K. Stott and R. Poulin. Parasites and parental care in male upland bullies (Eleotridae). *Journal of Fish Biology*, 48(2):283–291, February 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sægvog:1996:NRA

- [1439] H. Sægvog, K. Hindar, and K. Urdal. Natural reproduction of anadromous rainbow trout in Norway. *Journal of Fish Biology*, 48(2):292–294, February 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Almada:1996:BSC

- [1440] V. C. Almada, H. Carreiro, C. Faria, and E. J. Gonçalves. The breeding season of *Coryphoblennius galerita* in Portuguese waters. *Journal of Fish Biology*, 48(2):295–297, February 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Crampton:1996:GFI

- [1441] W. G. R. Crampton. Gymnotiform fish: an important component of Amazonian floodplain fish communities. *Journal of Fish Biology*, 48(2): 298–301, February 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Moffett:1996:STG

- [1442] I. J. J. Moffett and W. W. Crozifr. A study of temporal genetic variation in a natural population of Atlantic salmon in the River Bush, Northern Ireland. *Journal of Fish Biology*, 48(2):302–306, February 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1996:BRa

- [1443] Anonymous. Book reviews. *Journal of Fish Biology*, 48(2):307–309, February 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1996:BRb

- [1444] Anonymous. Books received. *Journal of Fish Biology*, 48(2):309, February 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1996:E

- [1445] Anonymous. Errata. *Journal of Fish Biology*, 48(2):310, February 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1996:Ab

- [1446] Anonymous. Announcement. *Journal of Fish Biology*, 48(2):311, February 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brown:1996:EKG

- [1447] G. E. Brown, J. A. Brown, and W. R. Wilson. The effects of kinship on the growth of juvenile Arctic charr. *Journal of Fish Biology*, 48(3):313–320, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Soldatov:1996:EHR

- [1448] A. A. Soldatov. The effect of hypoxia on red blood cells of flounder: a morphologic and autoradiographic study. *Journal of Fish Biology*, 48(3):321–328, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dempson:1996:RPA

- [1449] J. B. Dempson, M. F. O'Connell, and M. Shears. Relative production of Atlantic salmon from fluvial and lacustrine habitats estimated from analyses of scale characteristics. *Journal of Fish Biology*, 48(3):329–341, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Svedaung:1996:MPF

- [1450] H. Svedaung, E. Neuman, and H. Wickström. Maturation patterns in female European eel: age and size at the silver eel stage. *Journal of Fish Biology*, 48(3):342–351, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Luzzana:1996:SVF

- [1451] U. Luzzana, G. Serrini, V. M. Moretti, P. Grimaldi, M. A. Paleari, and F. Valfrè. Seasonal variations in fat content and fatty acid composition of male and female coregonid 'bondella' from Lake Maggiore and landlocked shad from Lake Como (Northern Italy). *Journal of Fish Biology*, 48(3):352–366, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Garner:1996:MUD

- [1452] P. Garner. Microhabitat use and diet of 0+ cyprinid fishes in a lentic, regulated reach of the River Great Ouse, England. *Journal of Fish Biology*, 48(3):367–382, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mina:1996:LTL

- [1453] M. V. Mina, A. N. Mironovsky, and Yu. Dgebuadze. Lake Tana large barbs: phenetics, growth and diversification. *Journal of Fish Biology*, 48(3):383–404, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Swanson:1996:EDM

- [1454] C. Swanson. Early development of milkfish: effects of salinity on embryonic and larval metabolism, yolk absorption and growth. *Journal of Fish Biology*, 48(3):405–421, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hansen:1996:GDA

- [1455] M. M. Hansen and V. Loeschcke. Genetic differentiation among Danish brown trout populations, as detected RFLP analysis of PCR amplified

mitochondrial DNA segments. *Journal of Fish Biology*, 48(3):422–436, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Elvira:1996:PRS

- [1456] B. Elvira, G. Gnicola, and A. Almodovar. Pike and red swamp crayfish: a new case on predator–prey relationship between aliens in central Spain. *Journal of Fish Biology*, 48(3):437–446, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Alexandrino:1996:GPH

- [1457] P. J. Alexandrino, N. Ferrand, and J. Rocha. Genetic polymorphism of a haemoglobin chain and adenosine deaminase in European shads: evidence for the existence of two distinct genetic entities with natural hybridization. *Journal of Fish Biology*, 48(3):447–456, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Thorsen:1996:PMB

- [1458] A. Thorsen, O. S. Kjesbu, H. J. Fyhndr, and P. Solemdal. Physiological mechanisms of buoyancy in eggs from brackish water cod. *Journal of Fish Biology*, 48(3):457–477, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gulbrandsen:1996:ESD

- [1459] J. Gulbrandsen. Effects of spatial distribution of light on prey ingestion of Atlantic halibut larvae. *Journal of Fish Biology*, 48(3):478–483, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Andersen:1996:EOE

- [1460] D. Andersen, I. Boeutius, L. Olesen Larsen, and P. Hjulmann Seidler. Effects of oestradiol — enriched diet and of feeding with porcine testicular tissue on macroscopic gonadal sex in European eels. *Journal of Fish Biology*, 48(3):484–492, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Colombo:1996:HSD

- [1461] G. Colombo and G. Grandidr. Histological study of the development and sex differentiation of the gonad in the European eel. *Journal of Fish Biology*, 48(3):493–512, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Egginton:1996:BRA

- [1462] S. Egginton. Blood rheology of Antarctic fishes: viscosity adaptations at very low temperatures. *Journal of Fish Biology*, 48(3):513–521, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Henderson:1996:LCT

- [1463] R. J. Henderson, M. M. Tillmanns, and J. R. Sargent. The lipid composition of two species of serrasalmid fish in relation to dietary polyunsaturated fatty acids. *Journal of Fish Biology*, 48(3):522–538, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Armstrong:1996:FBP

- [1464] J. D. Armstrong, V. A. Braithwaite, and P. Rycroft. A flat-bed passive integrated transponder antenna array for monitoring behaviour of Atlantic salmon parr and other fish. *Journal of Fish Biology*, 48(3):539–541, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sims:1996:EBS

- [1465] D. W. Sims. The effect of body size on the standard metabolic rate of the lesser spotted dogfish. *Journal of Fish Biology*, 48(3):542–544, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McCarthy:1996:PAF

- [1466] I. D. McCarthy, C. G. Carter, D. F. Houlihan, R. Johnstone, and A. I. Mitchell. The performance of all-female diploid and triploid Atlantic salmon smolts on transfer together to sea water. *Journal of Fish Biology*, 48(3):545–548, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nathanailides:1996:ACC

- [1467] C. Nathanailides and N. C. Stickland. Activity of cytochrome c oxidase and lactate dehydrogenase in muscle tissue of slow growing (lower modal group) and fast growing (upper modal group) Atlantic salmon. *Journal of Fish Biology*, 48(3):549–551, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1996:BRc

- [1468] Anonymous. Book reviews. *Journal of Fish Biology*, 48(3):552–555, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1996:SIS

- [1469] Anonymous. Second International Symposium on the Biology of the Genus *Chondrostoma agassiz*, 1835 Bonn, Germany 10–13 October 1996. *Journal of Fish Biology*, 48(3):556, March 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

George-Nascimento:1996:PAP

- [1470] M. George-Nascimento. Populations and assemblages of parasites in hake, *Merluccius gayi*, from the southeastern Pacific Ocean: stock implications. *Journal of Fish Biology*, 48(4):557–568, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fontoura:1996:GSV

- [1471] N. F. Fontoura and A. A. Agostinho. Growth with seasonally varying temperatures: an expansion of the von Bertalanffy growth model. *Journal of Fish Biology*, 48(4):569–584, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rubin:1996:EFS

- [1472] J.-F. Rubin and C. Glimsäter. Egg-to-fry survival of the sea trout in some streams of gotland. *Journal of Fish Biology*, 48(4):585–606, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Amundsen:1996:NAG

- [1473] P.-A. Amundsen, H.-M. Gabler, and F. J. Staldvik. A new approach to graphical analysis of feeding strategy from stomach contents data — modification of the costello (1990) method. *Journal of Fish Biology*, 48(4):607–614, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dunbrack:1996:PLD

- [1474] R. L. Dunbrack, L. Clarke, and C. Bassler. Population level differences in aggressiveness and their relationship to food density in a stream salmonid (*Salvelinus fontinalis*). *Journal of Fish Biology*, 48(4):615–622, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tharakan:1996:EMG

- [1475] B. Tharakan and K. P. Joy. Effects of mammalian gonadotropin-releasing hormone analogue, pimozide, and the combination on plasma gonadotropin levels in different seasons and induction of ovulation in female catfish. *Journal of Fish Biology*, 48(4):623–632, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Poole:1996:GRA

- [1476] W. Russell Poole and J. D. Reynolds. Growth rate and age at migration of *Anguilla anguilla*. *Journal of Fish Biology*, 48(4):633–642, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Struussmann:1996:ETS

- [1477] C. A. Struussmann, S. Moriyama, E. F. Hanke, J. C. Calsina Cota, and F. Takashima. Evidence of thermolabile sex determination in pejerrey. *Journal of Fish Biology*, 48(4):643–651, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wklund:1996:FAP

- [1478] T. Wklund and G. Bylund. Fin abnormalities of pikeperch in coastal areas off the Finnish south coast. *Journal of Fish Biology*, 48(4):652–657, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Saat:1996:DSC

- [1479] T. Saat and A. Veersalu. Duration of synchronous cleavage cycles and rate of development at different temperatures in the Baltic herring. *Journal of Fish Biology*, 48(4):658–663, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kaseloo:1996:ERI

- [1480] P. A. Kaseloo, A. H. Weatherley, P. E. Ihssen, D. A. Anstey, and M. D. Gare. Electromyograms from radiotelemetry as indicators of reproductive activity in lake trout. *Journal of Fish Biology*, 48(4):664–674, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Weatherley:1996:FAL

- [1481] A. H. Weatherley, P. A. Kaseloo, M. D. Gare, J. M. Gunndr, and B. Llpicnik. Field activity of lake trout during the reproductive period monitored by electromyogram radiotelemetry. *Journal of Fish Biology*, 48(4):675–685, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ryer:1996:GDA

- [1482] C. H. Ryer and B. L. Olla. Growth depensation and aggression in laboratory reared Coho salmon: the effect of food distribution and ration size. *Journal of Fish Biology*, 48(4):686–694, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Whitmore:1996:MDC

- [1483] D. H. Whitmore and C. M. Craft. Mitochondrial DNA cytochrome *b* gene variation reveals different largemouth bass genealogies. *Journal of Fish Biology*, 48(4):695–705, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Exley:1996:ABH

- [1484] C. Exley. Aluminium in the brain and heart of the rainbow trout. *Journal of Fish Biology*, 48(4):706–713, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Romer:1996:EDS

- [1485] U. Römer and W. Beisenherz. Environmental determination of sex in *Apistogrammai* (*Cichlidae*) and two other freshwater fishes (Teleostei). *Journal of Fish Biology*, 48(4):714–725, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bisazza:1996:SBI

- [1486] A. Bisazza, A. Pilastro, R. Palazzi, and G. Marin. Sexual behaviour of immature male eastern mosquitofish: a way to measure intensity of intra-sexual selection? *Journal of Fish Biology*, 48(4):726–737, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

OConnell:1996:STD

- [1487] M. F. O’Connell and J. B. Dempson. Spatial and temporal distributions of salmonids in two ponds in Newfoundland, Canada. *Journal of Fish Biology*, 48(4):738–757, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Moore:1996:SEP

- [1488] A. Moore and C. P. Waring. Sublethal effects of the pesticide Diazinon on olfactory function in mature male Atlantic salmon parr. *Journal of Fish Biology*, 48(4):758–775, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Petersson:1996:EDS

- [1489] E. Petersson, T. Jaurvi, N. G. Steffner, and B. Ragnarsson. The effect of domestication on some life history traits of sea trout and Atlantic salmon. *Journal of Fish Biology*, 48(4):776–791, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Schlupp:1996:LVH

- [1490] I. Schlupp, J. Parzefall, J. T. Epplen, and M. Scharl. *Limia vittata* as host species for the Amazon molly: no evidence for sexual reproduction. *Journal of Fish Biology*, 48(4):792–795, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Uribe-Alcocer:1996:CCG

- [1491] M. Uribe-Alcocer and P. Dfíz-Jaimes. Chromosome complements of *Gobionellus microdon* and *Eleotris picta* collected in Mexico. *Journal of Fish Biology*, 48(4):796–798, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bergersen:1996:SG

- [1492] R. Bergersen. Sticklebacks from Greenland. *Journal of Fish Biology*, 48(4):799–801, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Poncin:1996:FOI

- [1493] P. Poncin. A field observation on the influence of aggressive behaviour on mating success in the European grayling. *Journal of Fish Biology*, 48(4):802–804, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Llpej:1996:PMN

- [1494] L. Llpej, M. Spoto, and J. Dulcic. *Plectorhinchus mediterraneus* from off north east Italy and Slovenia — the first records of fish of the family *Haemulidae* from the Adriatic Sea. *Journal of Fish Biology*, 48(4):805–806, April 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Perez-España:1996:DDT

- [1495] H. Pérez-España and L. A. Abitia-Cárdenas. Description of the digestive tract and feeding habits of the king angelfish and the Cortes angelfish. *Journal of Fish Biology*, 48(5):807–817, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Paszkowski:1996:PRF

- [1496] C. A. Paszkowski, O.-P. Penttinen, I. J. Holopainen, and W. M. Tonn. Predation risk and feeding patterns of crucian carp. *Journal of Fish Biology*, 48(5):818–828, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Smith:1996:VFA

- [1497] T. B. Smith, D. H. Wahl, and R. I. Mackie. Volatile fatty acids and anaerobic fermentation in temperate piscivorous and omnivorous freshwater fish. *Journal of Fish Biology*, 48(5):829–841, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Santos:1996:RPA

- [1498] R. S. Santos, S. J. Hawkins, and R. D. M. Nash. Reproductive phenology of the Azorean rock pool blenny a fish with alternative mating tactics. *Journal of Fish Biology*, 48(5):842–858, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Perrow:1996:FAH

- [1499] M. R. Perrow, A. J. D. Jowitt, and S. R. Johnson. Factors affecting the habitat selection of tench in a shallow eutrophic lake. *Journal of Fish Biology*, 48(5):859–870, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

LAbée-Lund:1996:POP

- [1500] J. H. L'Abée-Lund, P. Aass, and H. Sægrov. Prey orientation in piscivorous brown trout. *Journal of Fish Biology*, 48(5):871–877, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gill:1996:HFP

- [1501] A. B. Gill and P. J. B. Hartf. How feeding performance and energy intake change with a small increase in the body size of the three-spined stickleback. *Journal of Fish Biology*, 48(5):878–890, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Griffiths:1996:SDT

- [1502] S. W. Griffiths. Sex differences in the trade-off between feeding and mating in the guppy. *Journal of Fish Biology*, 48(5):891–898, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

vlBrykov:1996:GTM

- [1503] A. vl. Brykov, N. Polyakova, L. A. Skurikhina, and A. D. Kukhlevsky. Geographical and temporal mitochondrial DNA variability in populations of pink salmon. *Journal of Fish Biology*, 48(5):899–909, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tveiten:1996:IMS

- [1504] H. Tveiten, H. K. Johnsen, and M. Jobling. Influence of maturity status on the annual cycles of feeding and growth in Arctic charr reared at constant temperature. *Journal of Fish Biology*, 48(5):910–924, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Trepanier:1996:SML

- [1505] S. Trépanier, M. A. Rodríguez, and P. Magnan. Spawning migrations in landlocked Atlantic salmon: time series modelling of river discharge and water temperature effects. *Journal of Fish Biology*, 48(5):925–936, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hanel:1996:GSM

- [1506] R. Hanel and W. Wieser. Growth of swimming muscles and its metabolic cost in larvae of whitefish at different temperatures. *Journal of Fish Biology*, 48(5):937–951, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Job:1996:VAF

- [1507] S. D. Job and D. R. Bellwood. Visual acuity and feeding in larval *Premnas biaculeatus*. *Journal of Fish Biology*, 48(5):952–963, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Haugen:1996:IIL

- [1508] T. O. Haugen and T. A. Rygg. Intra- and interspecific life history differences in sympatric grayling and brown trout in a Norwegian reservoir. *Journal of Fish Biology*, 48(5):964–978, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hlgs:1996:LIS

- [1509] D. M. Hlgs and L. A. Fuiman. Light intensity and schooling behaviour in larval gulf menhaden. *Journal of Fish Biology*, 48(5):979–991, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Backiel:1996:RSV

- [1510] T. Backiel and S. Bontemps. The recruitment success of *Vimba vimba* transferred over a dam. *Journal of Fish Biology*, 48(5):992–995, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hall:1996:PES

- [1511] S. J. Hall, I. D. Tuck, M. R. Robertson, D. J. Basford, and S. D. Heaney. Patch exploitation by small gadoids: evidence for an asymmetric tidal

effect. *Journal of Fish Biology*, 48(5):996–1005, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Allison:1996:LFD

- [1512] E. H. Allison, K. Irvine, and A. B. Thompson. Lake flies and the deep-water demersal fish community of Lake Malaŵi. *Journal of Fish Biology*, 48(5):1006–1010, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Porter:1996:EPR

- [1513] M. J. R. Porter, C. F. Randall, and N. R. Bromage. The effect of pineal removal on circulating melatonin levels in Atlantic salmon parr. *Journal of Fish Biology*, 48(5):1011–1013, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nagai:1996:DAA

- [1514] T. Nagai, M. Hamada, N. Kai, Y. Tanoue, and F. Nagayama. Distribution of aromatic l-amino acid decarboxylase in tissues of skipjack tuna using l-DOPA as the substrate. *Journal of Fish Biology*, 48(5):1014–1017, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dunel-Erb:1996:MCI

- [1515] S. Dunel-Erb, P. Sébert, C. Chevalier, B. Simon, and L. Barthélémy. Morphological changes induced by acclimation to high pressure in the gill epithelium of the freshwater yellow eel. *Journal of Fish Biology*, 48(5):1018–1022, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

OConnell:1996:AMD

- [1516] M. O’Connell, D. O. F. Skibinski, and J. A. Beardmore. Allozyme and mtDNA divergence between Atlantic salmon populations in North Wales. *Journal of Fish Biology*, 48(5):1023–1026, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Essington:1996:OSB

- [1517] T. E. Essington and P. W. Sorensen. Overlapping sensitivities of brook trout and brown trout to putative hormonal pheromones. *Journal of Fish Biology*, 48(5):1027–1029, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Elliott:1996:RBS

- [1518] J. M. Elliott. The relationship between smolt density and fry density in salmonids. *Journal of Fish Biology*, 48(5):1030–1032, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1996:BRd

- [1519] Anonymous. Book reviews. *Journal of Fish Biology*, 48(5):1033–1036, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1996:Ac

- [1520] Anonymous. Announcements. *Journal of Fish Biology*, 48(5):1037, May 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Amiri:1996:TDS

- [1521] B. Mojazi Amiri, M. Maebayashi, S. Adachi, and K. Yamauchi. Testicular development and serum sex steroid profiles during the annual sexual cycle of the male sturgeon hybrid the bester. *Journal of Fish Biology*, 48(6):1039–1050, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Alfei:1996:NDC

- [1522] L. Alfei, D. Cavallo, P. Eleuteri, M. G. Grollino, P. T. Colombari, A. Ferri, A. Onali, and R. De Vita. Nuclear DNA content in *Salmo fibveni* in Lake Posta Fibreno, Italy. *Journal of Fish Biology*, 48(6):1051–1058, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Helser:1996:GSH

- [1523] T. E. Helser. Growth of silver hake within the U.S. continental shelf ecosystem of the northwest Atlantic Ocean. *Journal of Fish Biology*, 48(6):1059–1073, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lobon-Cervia:1996:RTD

- [1524] J. Lobón-Cerviá, Y. Dgebuadze, C. G. Utrilla, P. A. Rincón, and C. Granado-Lorencio. The reproductive tactics of dace in central Siberia: evidence for temperature regulation of the spatio-temporal variability of its life history. *Journal of Fish Biology*, 48(6):1074–1087, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ferguson:1996:VEC

- [1525] M. M. Ferguson. Variation at enzyme coding loci and correlates of fitness in rainbow trout: a cohort analysis. *Journal of Fish Biology*, 48(6):1088–1096, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Morales-Nin:1996:DBA

- [1526] B. Morales-Nin, E. Massutí, and C. Stefanescu. Distribution and biology of *Alepocephalus rostratus* from the Mediterranean Sea. *Journal of Fish Biology*, 48(6):1097–1112, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Saether:1996:SCF

- [1527] B.-S. Sæther, H. K. Johnsen, and M. Jobling. Seasonal changes in food consumption and growth of Arctic charr exposed to either simulated natural or a 12:12 LD photoperiod at constant water temperature. *Journal of Fish Biology*, 48(6):1113–1122, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Baker:1996:ULT

- [1528] S. C. Baker and R. C. Heidinger. Upper lethal temperature tolerance of fingerling black crappie. *Journal of Fish Biology*, 48(6):1123–1129, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nelson:1996:SGR

- [1529] J. S. Nelson, V. P. E. Phang, and L. M. Chou. Survival and growth rates of the anemonefish *Amphiprion ocellanris*: a transfer experiment. *Journal of Fish Biology*, 48(6):1130–1138, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lowerre-Barbieri:1996:MSP

- [1530] S. K. Lowerre-Barbieri, M. E. Chittenden, Jr., and L. R. Barbieri. The multiple spawning pattern of weakfish in the Chesapeake Bay and Middle Atlantic Bight. *Journal of Fish Biology*, 48(6):1139–1163, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Amiri:1996:ODS

- [1531] B. Mojazi Amiri, M. Maebayashi, A. Hara, S. Adachi, and K. Yamauchi. Ovarian development and serum sex steroid and vitellogenin profiles in the female cultured sturgeon hybrid, the bester. *Journal of Fish Biology*, 48(6):1164–1178, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Grimnes:1996:PES

- [1532] A. Grimnes and P. J. Jakobsen. The physiological effects of salmon lice infection on post-smolt of Atlantic salmon. *Journal of Fish Biology*, 48(6):1179–1194, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Thorsen:1996:FOM

- [1533] A. Thorsen and H. J. Fyhn. Final oocyte maturation in vivo and in vitro in marine fishes with pelagic eggs; yolk protein hydrolysis and free amino acid content. *Journal of Fish Biology*, 48(6):1195–1209, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Christ:1996:MVS

- [1534] S. A. Christ, G. P. Toth, H. W. McCarthy, J. A. Torsella, and M. K. Smith. Monthly variation in sperm motility in common carp assessed using computer-assisted sperm analysis (CASA). *Journal of Fish Biology*, 48(6):1210–1222, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Grant:1996:RDR

- [1535] G. C. Grant. RNA-DNA ratios in white muscle tissue biopsies reflect recent growth rates of adult brown trout. *Journal of Fish Biology*, 48(6):1223–1230, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sims:1996:ERA

- [1536] D. W. Sims and P. L. R. Andrews. The emetic reflex in African walking catfish develops with age. *Journal of Fish Biology*, 48(6):1231–1237, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Radtke:1996:EEP

- [1537] R. Radtke and D. P. Fey. Environmental effects on primary increment formation in the otoliths of newlyhatched Arctic charr. *Journal of Fish Biology*, 48(6):1238–1255, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Knudsen:1996:PII

- [1538] R. Knudsen, A. Klemetsen, and F. Staldvik. Parasites as indicators of individual feeding specialization in Arctic charr during winter in northern Norway. *Journal of Fish Biology*, 48(6):1256–1265, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Appleby:1996:SOT

- [1539] C. Appleby. Seasonal occurrence, topographical distribution and transmission of *Gyrodactylus callanatis* (Monogenea) infecting juvenile Atlantic cod in the Oslo Fjord, Norway. *Journal of Fish Biology*, 48(6):1266–1274, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Schlee:1996:GPI

- [1540] P. Schlee, H. Fuchs, J. Blusch, T. Werner, O. Rottmann, and H. Stein. Genetic polymorphism in the intron of the growth hormone gene of the bleak. *Journal of Fish Biology*, 48(6):1275–1277, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fernandez-Pedrosa:1996:EMR

- [1541] V. Fernández-Pedrosa, A. Latorre, and A. González. Evidence from mtDNA RFLP analysis for the introduction of *Fundulus heteroclitus* to southwestern Spain. *Journal of Fish Biology*, 48(6):1278–1282, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gross:1996:DAV

- [1542] R. Gross, P-Schlee, H. Stein, and O. Rottmann. Detection of allelic variation within the growth hormone gene in common bream using heteroduplex analysis. *Journal of Fish Biology*, 48(6):1283–1287, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1996:BRe

- [1543] Anonymous. Book reviews. *Journal of Fish Biology*, 48(6):1288–1289, June 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Imbrock:1996:DSD

- [1544] F. Imbrock, A. Appenzeller, and R. Eckmann. Diel and seasonal distribution of perch in Lake Constance: a hydroacoustic study and in situ observations. *Journal of Fish Biology*, 49(1):1–13, July 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hyndes:1996:CBA

- [1545] G. A. Hyndes and I. C. Potter. Comparisons between the age structures, growth and reproductive biology of two co-occurring sillaginids, *Sillago robusta* and *S. bassensis*, in temperate coastal waters of Australia. *Journal of Fish Biology*, 49(1):14–32, July 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jensen:1996:DES

- [1546] J. W. Jensen and T. Hesthagen. Direct estimates of the selectivity of a multimesh and a series of single gillnets for brown trout. *Journal of Fish Biology*, 49(1):33–40, July 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sayer:1996:EGR

- [1547] M. D. J. Sayer and J. P. Reader. Exposure of goldsinny, rock cook and corkwing wrasse to low temperature and low salinity: survival, blood physiology and seasonal variation. *Journal of Fish Biology*, 49(1):41–63, July 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sayer:1996:HTG

- [1548] M. D. J. Sayer and J. Davenport. Hypometabolism in torpid goldsinny wrasse subjected to rapid reductions in seawater temperature. *Journal of Fish Biology*, 49(1):64–75, July 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sayer:1996:GDC

- [1549] M. D. J. Sayer, R. N. Gibson, and R. J. A. Atkinson. Growth, diet and condition of corkwing wrasse and rock cook on the west coast of Scotland. *Journal of Fish Biology*, 49(1):76–94, July 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Northcott:1996:UGE

- [1550] S. J. Northcott and M. A. James. Ultrastructure of the glandular epidermis on the fins of male estuarine triplefins *Forsterygion nigripenne*. *Journal of Fish Biology*, 49(1):95–107, July 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Svaasand:1996:DGP

- [1551] T. Svåsand, K. E. Jørstad, H. Otterå, and O. S. Kjesbu. Differences in growth performance between arcto-Norwegian and Norwegian coastal cod reared under identical conditions. *Journal of Fish Biology*, 49(1):108–119, July 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gibson:1996:PPJ

- [1552] R. N. Gibson and L. Robb. Piscine predation on juvenile fishes on a Scottish sandy beach. *Journal of Fish Biology*, 49(1):120–138, July 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ikebe:1996:CBE

- [1553] Y. Ikebe and T. Oishi. Correlation between environmental parameters and behaviour during high tides in *Periophthalmus modestus*. *Journal of Fish Biology*, 49(1):139–147, July 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Barnett:1996:EGE

- [1554] R. R. Barnett, T. Akindele, C. Orte, and K. L. Shephard. Eosinophilic granulocytes in the epidermis of *Oreochromis mossambicus* gill filaments studied in situ. *Journal of Fish Biology*, 49(1):148–156, July 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bohlin:1996:DSM

- [1555] T. Bohlin, C. Dellefors, and U. Faremo. Date of smolt migration depends on body-size but not age in wild sea-run brown trout. *Journal of Fish Biology*, 49(1):157–164, July 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Knoph:1996:PAU

- [1556] M. B. Knoph and K. Måsøval. Plasma ammonia and urea levels in Atlantic salmon farmed in sea water. *Journal of Fish Biology*, 49(1):165–168, July 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lee:1996:MDM

- [1557] W.-J. Lee and T. D. Kocher. Microsatellite DNA markers for genetic mapping in *Oreochromis niloticus*. *Journal of Fish Biology*, 49(1):169–171, July 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Saborowski:1996:ACN

- [1558] R. Saborowski and F. Buchholz. Annual changes in the nutritive state of North Sea dab. *Journal of Fish Biology*, 49(2):173–194, August 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Alikin:1996:PTV

- [1559] Yu. S. Alikin, I. S. Shchelkunov, T. I. Shchelkunova, O. A. Kupinskaya, V. I. Masycheva, V. P. Klimenko, and V. A. Fadina. Prophylactic treatment of viral diseases in fish using native RNA linked to soluble and corpuscular carriers. *Journal of Fish Biology*, 49(2):195–205, August 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Russell:1996:FGJ

- [1560] N. R. Russell, J. D. Fish, and R. J. Wootton. Feeding and growth of juvenile sea bass: the effect of ration and temperature on growth rate and efficiency. *Journal of Fish Biology*, 49(2):206–220, August 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Krause:1996:SAM

- [1561] J. Krause, J.-G. J. Godin, and D. Brown. Size-assortativeness in multi-species fish shoals. *Journal of Fish Biology*, 49(2):221–225, August 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Thorarensen:1996:LHR

- [1562] H. Thorarensen, P. E. Gallagher, and A. P. Farrell. The limitations of heart rate as a predictor of metabolic rate in fish. *Journal of Fish Biology*, 49(2):226–236, August 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gregory:1996:ABU

- [1563] J. S. Gregory and J. S. Griffith. Aggressive behaviour of underyearling rainbow trout in simulated winter concealment habitat. *Journal of Fish Biology*, 49(2):237–245, August 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ota:1996:SRB

- [1564] D. Ota, M. Marchesan, and E. A. Ferrero. Sperm release behaviour and fertilization in the grass goby. *Journal of Fish Biology*, 49(2):246–256, August 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Arndt:1996:ETR

- [1565] S. K. A. Arndt, T. J. Benfey, and R. A. Cunjak. Effect of temporary reductions in feeding on protein synthesis and energy storage of juvenile Atlantic salmon. *Journal of Fish Biology*, 49(2):257–276, August 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Basiao:1996:SPA

- [1566] Z. U. Basiao, R. W. Doyle, and A. L. Arago. A statistical power analysis of the ‘internal reference’ technique for comparing growth and growth depensation of tilapia strains. *Journal of Fish Biology*, 49(2):277–286, August 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lowe:1996:PSS

- [1567] T. E. Lowe and R. M. G. Wells. Primary and secondary stress responses to line capture in the blue mao mao. *Journal of Fish Biology*, 49(2):287–300, August 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Haugen:1996:FHS

- [1568] T. O. Haugen and T. A. Rygg. Food- and habitat-segregation in sympatric grayling and brown trout. *Journal of Fish Biology*, 49(2):301–318, August 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gordon:1996:HPT

- [1569] M. S. Gordon, I. Plaut, and D. Kim. How puffers (Teleostei: Tetraodontidae) swim. *Journal of Fish Biology*, 49(2):319–328, August 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Horppila:1996:EFY

- [1570] J. Horppila, K. Nyberg, H. Peltonen, and T. Turunen. Effects of five years of intensive trawling on a previously unexploited smelt stock. *Journal of Fish Biology*, 49(2):329–340, August 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bakke:1996:DSA

- [1571] T. A. Bakke, P. A. Jansen, and P. D. Harris. Differences in susceptibility of anadromous and resident stocks of Arctic charr to infections of *Gyrodactylus salaris*, under experimental conditions. *Journal of Fish Biology*, 49(2):341–351, August 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sasal:1996:PSG

- [1572] P. Sasal, E. Faliex, and S. Morand. Population structure of *Gobius bucchichii*, in a Mediterranean marine reserve and in an unprotected area. *Journal of Fish Biology*, 49(2):352–356, August 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Moron:1996:PCU

- [1573] S. E. Moron and M. N. Fernandes. Pavement cell ultrastructural differences on *Hoplias malabaricus*, gill epithelia. *Journal of Fish Biology*, 49(2):357–362, August 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Almada:1996:ABS

- [1574] V. C. Almada, M. C. P. Amorim, E. Pereira, F. Almada, R. Matos, and R. Godinho. Agonistic behaviour and sound production in *Gaidropsarus mediterraneus*, (Gadidae). *Journal of Fish Biology*, 49(2):363–366, August 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gonçálves:1996:OAB

- [1575] E. J. Gonçálves, V. C. Almada, S. P. Almeida, D. M. Gonçálves, M. Repas, and N. Simões. Observations on the agonistic behaviour of *Lepadogaster lepadogaster purpurea* (Pisces: Gobiesocidae). *Journal of Fish Biology*, 49(2):367–369, August 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pettersson:1996:CAL

- [1576] J. Pettersson, J. I. Johnsson, and T. Bohlin. The competitive advantage of large body size declines with increasing group size in rainbow trout. *Journal of Fish Biology*, 49(2):370–372, August 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1996:BRf

- [1577] Anonymous. Book review. *Journal of Fish Biology*, 49(2):373–374, August 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Johnston:1996:GEA

- [1578] T. A. Johnston and J. A. Mathias. Gut evacuation and absorption efficiency of walleye larvae. *Journal of Fish Biology*, 49(3):375–389, September 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bels:1996:CFC

- [1579] V. L. Bels and J. Davenport. A comparison of food capture and ingestion in juveniles of two flatfish species, *Pleuronectes platessa* and *Limanda limanda* (Teleostei: Pleuronectiformes). *Journal of Fish Biology*, 49(3):390–401, September 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Appleby:1996:PDG

- [1580] C. Appleby. Population dynamics of *Gyrodactylus* sp. (Monogenea) infecting the sand goby in the Oslo Fjord, Norway. *Journal of Fish Biol-*

ogy, 49(3):402–410, September 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Beacham:1996:MDV

- [1581] T. D. Beacham, K. M. Miller, and R. E. Withler. Minisatellite DNA variation and stock identification of Coho salmon. *Journal of Fish Biology*, 49(3):411–429, September 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Keckeis:1996:ERO

- [1582] H. Keckeis, E. Bauer-Nemeschkal, and E. Kamler. Effects of reduced oxygen level on the mortality and hatching rate of *Chondrostoma nasus* embryos. *Journal of Fish Biology*, 49(3):430–440, September 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Huusko:1996:TLM

- [1583] A. Huusko, O. Vuorimies, and T. Sutela. Temperature- and light-mediated predation by perch on vendace larvae. *Journal of Fish Biology*, 49(3):441–457, September 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Stoumboudi:1996:SPB

- [1584] M. Th. Stoumboudi and M. Abraham. The spermatogenetic process in *Barbus longiceps*, *Capoeta damascina* and their natural sterile hybrid (Teleostei, Cyprinidae). *Journal of Fish Biology*, 49(3):458–468, September 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Beddow:1996:PBA

- [1585] T. A. Beddow and L. G. Ross. Predicting biomass of Atlantic salmon from morphometric lateral measurements. *Journal of Fish Biology*, 49(3):469–482, September 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tierney:1996:BCR

- [1586] J. F. Tierney, F. A. Huntingford, and D. W. T. Crompton. Body condition and reproductive status in sticklebacks exposed to a single wave of *Schistocephalus solidus* infection. *Journal of Fish Biology*, 49(3):483–493, September 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mikheev:1996:BRB

- [1587] V. N. Mikheev, C. E. Adams, F. A. Huntingford, and J. E. Thorpe. Behavioural responses of benthic and pelagic Arctic charr to substratum heterogeneity. *Journal of Fish Biology*, 49(3):494–500, September 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ruohonen:1996:GRR

- [1588] K. Ruohonen and D. J. Grove. Gastrointestinal responses of rainbow trout to dry pellet and low-fat herring diets. *Journal of Fish Biology*, 49(3):501–513, September 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Paxton:1996:IDS

- [1589] C. G. M. Paxton. Isolation and the development of shoaling in two populations of the guppy. *Journal of Fish Biology*, 49(3):514–520, September 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rombout:1996:CCT

- [1590] J. H. W. M. Rombout, J. C. E. Koumans van Diepen, P. M. Emmer, J. J. Taverne-Thiele, and N. Taverne. Characterization of carp thrombocytes with specific monoclonal antibodies. *Journal of Fish Biology*, 49(3):521–531, September 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Douglas:1996:GUV

- [1591] R. H. Douglas. Goldfish use the visual angle of a familiar landmark to locate a food source. *Journal of Fish Biology*, 49(3):532–536, September 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gross:1996:NSS

- [1592] R. Gross, J. Nilsson, and M. Schmitz. A new species-specific nuclear DNA marker for identification of hybrids between Atlantic salmon and brown trout. *Journal of Fish Biology*, 49(3):537–540, September 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Crockford:1996:CPI

- [1593] T. Crockford, I. A. Johnston, B. J. McAndrew, and G. Mutungi. Contractile properties and the inheritance of myosin heavy chains in *Oreochromis* species with different temperature tolerances. *Journal of Fish Biology*, 49(3):541–544, September 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Saboia-Moraes:1996:MCT

- [1594] S. M. T. Saboia-Moraes, F. J. Hernandez-Blazquez, D. L. Mota, and A. M. Bittencourt. Mucous cell types in the branchial epithelium of the euryhaline fish *Poecilia vivipara*. *Journal of Fish Biology*, 49(3):545–548, September 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1996:BRg

- [1595] Anonymous. Book reviews. *Journal of Fish Biology*, 49(3):549–558, September 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1996:ISR

- [1596] Anonymous. International symposium on the role of forage fishes in marine ecosystems. *Journal of Fish Biology*, 49(3):559–560, September 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Stergiou:1996:SRS

- [1597] K. I. Stergiou, P. Economidis, and A. Sinis. Sex ratio, spawning season and size at maturity of red bandfish in the western Aegean Sea. *Journal of Fish Biology*, 49(4):561–572, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Merchie:1996:DAA

- [1598] G. Merchie, P. Lavens, Ph. Dhert, M. García Ulloa Góamez, H. Nelis, A. De Leenheer, and P. Sorgeloos. Dietary ascorbic acid requirements during the hatchery production of turbot larvae. *Journal of Fish Biology*, 49(4):573–583, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Scocco:1996:GTS

- [1599] P. Scocco, P. Ceccarelli, and G. Menghi. Glycohistochemistry of the *Tilapia* spp. stomach. *Journal of Fish Biology*, 49(4):584–593, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tomasini:1996:FRB

- [1600] J. A. Tomasini, D. Collart, and J. P. Quignard. Female reproductive biology of the sand smelt in brackish lagoons of southern France. *Journal of Fish Biology*, 49(4):594–612, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lenfant:1996:GDW

- [1601] P. Lenfant and S. Planes. Genetic differentiation of white sea bream within the Lion's Gulf and the Ligurian Sea (Mediterranean Sea). *Journal of Fish Biology*, 49(4):613–621, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Poncin:1996:TNT

- [1602] P. Poncin, J. C. Philippart, and J. C. Ruwet. Territorial and non-territorial spawning behaviour in the bream. *Journal of Fish Biology*, 49(4):622–626, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lorenzen:1996:RBB

- [1603] K. Lorenzen. The relationship between body weight and natural mortality in juvenile and adult fish: a comparison of natural ecosystems and aquaculture. *Journal of Fish Biology*, 49(4):627–642, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lugli:1996:BSM

- [1604] M. Lugli, P. Torricelli, G. Pavan, and P. J. Miller. Breeding sounds of male *Padogobius nigricans* with suggestions for further evolutionary study of vocal behaviour in gobioid fishes. *Journal of Fish Biology*, 49(4):648–657, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jobling:1996:IVF

- [1605] M. Jobling and J. Koskela. Interindividual variations in feeding and growth in rainbow trout during restricted feeding and in a subsequent period of compensatory growth. *Journal of Fish Biology*, 49(4):658–667, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Toften:1996:DSD

- [1606] H. Toften and M. Jobling. Development of spinal deformities in Atlantic salmon and Arctic charr fed diets supplemented with oxytetracycline. *Journal of Fish Biology*, 49(4):668–677, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Burel:1996:ETG

- [1607] C. Burel, J. Person-Le Ruyet, F. Gaumet, A. Le Roux, A. Sévère, and G. Boeuf. Effects of temperature on growth and metabolism in juvenile

turbot. *Journal of Fish Biology*, 49(4):678–692, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Buttle:1996:EEH

- [1608] L. G. Buttle, R. F. Uglow, and I. G. Cowx. The effect of emersion and handling on the nitrogen excretion rates of *Clarias gariepinus*. *Journal of Fish Biology*, 49(4):693–701, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Singh-Renton:1996:ETP

- [1609] S. Singh-Renton and P. J. Bromley. Effects of temperature, prey type and prey size on gastric evacuation in small cod and whiting. *Journal of Fish Biology*, 49(4):702–713, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Guinand:1996:SAG

- [1610] B. Guinand, Y. Bouvet, and B. Brohon. Spatial aspects of genetic differentiation of the European chub in the Rhône River basin. *Journal of Fish Biology*, 49(4):714–726, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Faria:1996:JRG

- [1611] C. Faria, V. C. Almada, and E. J. Gonçalves. Juvenile recruitment, growth and maturation of *Lipophrys pholis* (Pisces: Blenniidae), from the west coast of Portugal. *Journal of Fish Biology*, 49(4):727–730, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Martin-Smith:1996:LWR

- [1612] K. M. Martin-Smith. Length/weight relationships of fishes in a diverse tropical freshwater community, Sabah, Malaysia. *Journal of Fish Biology*, 49(4):731–734, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fernandez:1996:CFC

- [1613] F. Fernández, A. G. Miquel, L. R. Cumplido, J. Guinea, and E. Ros. Comparisons of faecal collection methods for digestibility determinations in gilthead sea bream. *Journal of Fish Biology*, 49(4):735–738, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Thomason:1996:ETP

- [1614] J. C. Thomason, W. Conn, E. Le Comte, and J. Davenport. Effect of temperature and photoperiod on the growth of the embryonic dogfish,

Scyliorhinus canicula. *Journal of Fish Biology*, 49(4):739–742, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bowker:1996:BAD

- [1615] D. W. Bowker. The bias associated with the dispersion of length at age in the estimation of growth and mortality parameters from uni-modal length-frequency data. *Journal of Fish Biology*, 49(4):743–747, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Baker:1996:IPD

- [1616] R. T. M. Baker and S. J. Davies. Increased production of docosahexaenoic acid (22: 6 n-3, DHA) in catfish nutritionally stressed by the feeding of oxidized oils and the modulatory effect of dietary α -tocopheryl acetate. *Journal of Fish Biology*, 49(4):748–752, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Egginton:1996:ETO

- [1617] S. Egginton. Effect of temperature on the optimal substrate for β -oxidation. *Journal of Fish Biology*, 49(4):753–758, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1996:BRh

- [1618] Anonymous. Book reviews. *Journal of Fish Biology*, 49(4):759–761, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1996:EAF

- [1619] Anonymous. European Association of Fish Pathologists, Edinburgh Conference Centre, Heriot-Watt University Edinburgh, Scotland 14–19 September 1997. *Journal of Fish Biology*, 49(4):762, October 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ferreri:1996:CIG

- [1620] C. P. Ferreri and W. W. Taylor. Compensation in individual growth rates and its influence on lake trout population dynamics in the Michigan waters of Lake Superior. *Journal of Fish Biology*, 49(5):763–777, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cardoso:1996:MCG

- [1621] E. L. Cardoso, H. Chiarini-Garcia, R. M. A. Ferreira, and C. R. Poli. Morphological changes in the gills of *Lophiosilurus alexandri* exposed to un-ionized ammonia. *Journal of Fish Biology*, 49(5):778–787, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nostro:1996:PPS

- [1622] F. L. Lo Nostro and G. A. Guerrero. Presence of primary and secondary males in a population of the protogynous *Synbranchius marmoratus*. *Journal of Fish Biology*, 49(5):788–800, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wales:1996:CCC

- [1623] W. Wales and P. Tytler. Changes in chloride cell distribution during early larval stages of *Clupea harengus*. *Journal of Fish Biology*, 49(5):801–814, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Shedko:1996:ETR

- [1624] S. V. Shed'ko, L. K. Ginatulina, I. Z. Parpura, and A. V. Ermolenko. Evolutionary and taxonomic relationships among far-Eastern salmonid fishes inferred from mitochondrial DNA divergence. *Journal of Fish Biology*, 49(5):815–829, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Reubush:1996:MRA

- [1625] K. J. Reubush and A. G. Heath. Metabolic responses to acute handling by fingerling inland and anadromous striped bass. *Journal of Fish Biology*, 49(5):830–841, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vieira:1996:MDT

- [1626] V. L. A. Vieira and I. A. Johnston. Muscle development in the tambaqui, an important Amazonian food fish. *Journal of Fish Biology*, 49(5):842–853, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wardle:1996:MAM

- [1627] C. S. Wardle, N. M. Soofiani, F. G. O'Neill, C. W. Glass, and A. D. F. Johnstone. Measurements of aerobic metabolism of a school of horse mackerel at different swimming speeds. *Journal of Fish Biology*, 49(5):854–862, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cui:1996:ERB

- [1628] Y. Cui, S. S. O. Hung, and X. Zhu. Effect of ration and body size on the energy budget of juvenile white sturgeon. *Journal of Fish Biology*, 49

(5):863–876, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mangel:1996:CER

- [1629] M. Mangel. Computing expected reproductive success of female Atlantic salmon as a function of salmon size. *Journal of Fish Biology*, 49(5):877–882, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rinchar:1996:CSR

- [1630] J. Rinchar and P. Kestemont. Comparative study of reproductive biology in single- and multiple-spawner cyprinid fish. I. Morphological and histological features. *Journal of Fish Biology*, 49(5):883–894, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Yamamoto:1996:FEL

- [1631] T. S. Yamamoto and W. Kobayashi. Formation of the enveloping layer of the chum salmon egg in isotonic salt solutions. *Journal of Fish Biology*, 49(5):895–909, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Holmgren:1996:IIG

- [1632] K. Holmgren and H. Mosegaard. Implications of individual growth status on the future sex of the European eel. *Journal of Fish Biology*, 49(5):910–925, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Imsland:1996:ITF

- [1633] A. K. Imsland, L. M. Sunde, A. Folkvord, and S. O. Stefansson. The interaction of temperature and fish size on growth of juvenile turbot. *Journal of Fish Biology*, 49(5):926–940, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bell:1996:DDP

- [1634] M. V. Bell, L. A. Mcevoy, and J. C. Navarro. Deficit of didocosahexaenoyl phospholipid in the eyes of larval sea bass fed an essential fatty acid deficient diet. *Journal of Fish Biology*, 49(5):941–952, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cavalli:1996:DGR

- [1635] L. Cavalli and R. Chappaz. Diet, growth and reproduction of the Arctic charr in a high alpine lake. *Journal of Fish Biology*, 49(5):953–964,

November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Thomason:1996:VME

- [1636] J. C. Thomason, J. Davenport, and E. Le Comte. Ventilatory mechanisms and the effect of hypoxia and temperature on the embryonic lesser spotted dogfish. *Journal of Fish Biology*, 49(5):965–972, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Smedstad:1996:VBC

- [1637] O. M. Smedstad and J. C. Holm. Validation of back-calculation formulae for cod otoliths. *Journal of Fish Biology*, 49(5):973–985, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Peters:1996:AEA

- [1638] L. D. Peters and D. R. Livingstone. Antioxidant enzyme activities in embryologic and early larval stages of turbot. *Journal of Fish Biology*, 49(5):986–997, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Koljonen:1996:ASC

- [1639] M.-L. Koljonen and S. McKinnell. Assessing seasonal changes in stock composition of Atlantic salmon catches in the Baltic Sea with genetic stock identification. *Journal of Fish Biology*, 49(5):998–1018, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Everson:1996:ODA

- [1640] I. Everson, K.-H. Kock, and G. Parkes. Ovarian development associated with first maturity in three Antarctic channichthyid species. *Journal of Fish Biology*, 49(5):1019–1026, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Simonovic:1996:VNP

- [1641] P. D. Simonović, V. P. Nikolić, and K. E. Skora. Vertebral number in Ponto-Caspian gobies: phylogenetic relevance. *Journal of Fish Biology*, 49(5):1027–1029, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McKinnon:1996:RCM

- [1642] J. S. McKinnon. Red coloration and male parental behaviour in the three-spine stickleback. *Journal of Fish Biology*, 49(5):1030–1033, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tahara:1996:DVB

- [1643] D. Tahara and Y. Mugiya. Diel variation in branchial calcium uptake by the rainbow trout. *Journal of Fish Biology*, 49(5):1034–1037, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Armstrong:1996:RBF

- [1644] J. D. Armstrong and D. C. Stewart. The relationship between first vertebra width and body length of Atlantic salmon differs between parr and smolts. *Journal of Fish Biology*, 49(5):1038–1040, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1996:Ad

- [1645] Anonymous. Announcements. *Journal of Fish Biology*, 49(5):1041, November 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Winemiller:1996:CEC

- [1646] K. O. Winemiller and L. C. Kelso-Winemiller. Comparative ecology of catfishes of the Upper Zambezi River floodplain. *Journal of Fish Biology*, 49(6):1043–1061, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hartney:1996:SFH

- [1647] K. B. Hartney. Site fidelity and homing behaviour of some kelp-bed fishes. *Journal of Fish Biology*, 49(6):1062–1069, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Modin:1996:SSD

- [1648] J. Modin and L. Pihl. Small-scale distribution of juvenile plaice and flounder in relation to predatory shrimp in a shallow Swedish bay. *Journal of Fish Biology*, 49(6):1070–1085, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lacroix:1996:MBP

- [1649] G. L. Lacroix and P. McCurdy. Migratory behaviour of post-smolt Atlantic salmon during initial stages of seaward migration. *Journal of Fish Biology*, 49(6):1086–1101, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Castillo-Rivera:1996:FRP

- [1650] M. Castillo-Rivera, A. Kobelkowsky, and V. Zamayoa. Food resource partitioning and trophic morphology of *Brevoortia gunteri* and *B. pa-*

tronus. *Journal of Fish Biology*, 49(6):1102–1111, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Perdices:1996:AVR

- [1651] A. Perdices, A. Machordom, and I. Doadrio. Allozymic variation and relationships of the endangered cyprinodontid genus *Valencia* and its implications for conservation. *Journal of Fish Biology*, 49(6):1112–1127, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vitturi:1996:CMC

- [1652] R. Vitturi, A. Libertini, A. Mazzola, M. S. Colomba, and G. Sara. Characterization of mitotic chromosomes of four species of the genus *Diplodus*: karyotypes and chromosomal nucleolar organizer region phenotypes. *Journal of Fish Biology*, 49(6):1128–1137, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hanson:1996:SDJ

- [1653] J. M. Hanson. Seasonal distribution of juvenile Atlantic cod in the southern Gulf of St Lawrence. *Journal of Fish Biology*, 49(6):1138–1152, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

DeSilva:1996:DFP

- [1654] S. S. De Silva, U. S. Amarasinghe, and N. D. N. S. Wijegoonawardena. Diel feeding patterns and daily ration of cyprinid species in the wild determined using an iterative method, MAXIMS. *Journal of Fish Biology*, 49(6):1153–1162, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Serventi:1996:UPM

- [1655] M. Serventi, I. J. Harrison, P. Torricelli, and G. Gandolfi. The use of pigmentation and morphological characters to identify Italian mullet fry. *Journal of Fish Biology*, 49(6):1163–1173, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bourke:1996:DLA

- [1656] P. Bourke, P. Magnan, and M. A. Rodríguez. Diel locomotor activity of brook charr, as determined by radiotelemetry. *Journal of Fish Biology*, 49(6):1174–1185, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wetherbee:1996:DRS

- [1657] B. M. Wetherbee. Distribution and reproduction of the southern lantern shark from New Zealand. *Journal of Fish Biology*, 49(6):1186–1196, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kjesbu:1996:OSS

- [1658] O. S. Kjesbu, H. Kryvi, and B. Norberg. Oocyte size and structure in relation to blood plasma steroid hormones in individually monitored, spawning Atlantic cod. *Journal of Fish Biology*, 49(6):1197–1215, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brown:1996:BEA

- [1659] B. Brown, L. M. Benveniste, and P. Moller. Basal expansion of anal-fin rays: a new osteological character in weakly discharging electric fish (Mormyridae). *Journal of Fish Biology*, 49(6):1216–1225, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nordlie:1996:SRF

- [1660] F. G. Nordlie and A. Mirandi. Salinity relationships in a freshwater population of eastern mosquitofish. *Journal of Fish Biology*, 49(6):1226–1232, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gu:1996:SIC

- [1661] B. Gu, C. L. Schelske, and M. V. Hoyer. Stable isotopes of carbon and nitrogen as indicators of diet and trophic structure of the fish community in a shallow hypereutrophic lake. *Journal of Fish Biology*, 49(6):1233–1243, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nagelkerke:1996:RSA

- [1662] L. A. J. Nagelkerke and F. A. Sibbing. Reproductive segregation among the *Barbus intermedius* complex of Lake Tana, Ethiopia. An example of intralacustrine speciation? *Journal of Fish Biology*, 49(6):1244–1266, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Caltran:1996:GFL

- [1663] H. Caltran and P. Silan. Gill filaments of *Liza ramada*, a biotope for ectoparasites: surface area acquisition using image analysis and growth

models. *Journal of Fish Biology*, 49(6):1267–1279, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kilarski:1996:STT

- [1664] W. M. Kilarski, M. Romek, M. Kozłowska, and A. Gorlich. Short-term thermal acclimation induces adaptive changes in the inner mitochondrial membranes of fish skeletal muscle. *Journal of Fish Biology*, 49(6):1280–1290, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Alkindi:1996:EOR

- [1665] A. Y. A. Alkindi, J. A. Brown, C. P. Waring, and J. E. Collins. Endocrine, osmoregulatory, respiratory and haematological parameters in flounder exposed to the water soluble fraction of crude oil. *Journal of Fish Biology*, 49(6):1291–1305, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gillis:1996:ESP

- [1666] T. E. Gillis and J. S. Ballantyne. The effects of starvation on plasma free amino acid and glucose concentrations in lake sturgeon. *Journal of Fish Biology*, 49(6):1306–1316, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Arculeo:1996:PDA

- [1667] M. Arculeo, A. Mauro, G. Scelsa, S. Lo Brutto, M. Cammarata, and N. Parrinello. Protein differences among the Mediterranean species of the genus *Spicara*. *Journal of Fish Biology*, 49(6):1317–1322, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Radchenko:1996:PDI

- [1668] V. I. Radchenko and A. Yu. Semenchenko. Predation of doggertooth on immature Pacific salmon. *Journal of Fish Biology*, 49(6):1323–1325, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Presas:1996:CMT

- [1669] P. Presa and R. Guyomard. Conservation of microsatellites in three species of salmonids. *Journal of Fish Biology*, 49(6):1326–1329, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Barton:1996:EAE

- [1670] B. A. Barton and R. S. Grosh. Effect of AC electroshock on blood features in juvenile rainbow trout. *Journal of Fish Biology*, 49(6):1330–1333, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1996:FSP

- [1671] Anonymous. Further symposium presentations not published in this supplement. *Journal of Fish Biology*, 49(sA):v–vii, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Merrett:1996:ALP

- [1672] Nigel Merrett. Appreciation of the late Professor N. B. (Freddy) Marshall F.R.S. (1915–1996). *Journal of Fish Biology*, 49(sA):1–4, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kelly:1996:MOD

- [1673] C. J. Kelly, P. L. Connolly, and J. J. Bracken. Maturity, oocyte dynamics and fecundity of the roundnose grenadier from the Rockall Trough. *Journal of Fish Biology*, 49(sA):5–17, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Afonso-Dias:1996:RAL

- [1674] I. P. Afonso-Dias and J. R. G. Hislop. The reproduction of anglerfish *Lophius piscatorius* Linnaeus from the north-west coast of Scotland. *Journal of Fish Biology*, 49(sA):18–39, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Haedrich:1996:DWF

- [1675] R. L. Haedrich. Deep-water fishes: evolution and adaptation in the earth's largest living spaces. *Journal of Fish Biology*, 49(sA):40–53, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Koslow:1996:ELH

- [1676] J. A. Koslow. Energetic and life-history patterns of deep-sea benthic, benthopelagic and seamount-associated fish. *Journal of Fish Biology*, 49(sA):54–74, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Uiblein:1996:DAD

- [1677] F. Uiblein, F. Bordes, and R. Castillo. Diversity, abundance and depth distribution of demersal deep-water fishes off Lanzarote and Fuerteventura, Canary Islands. *Journal of Fish Biology*, 49(sA):75–90, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sulak:1996:LBF

- [1678] K. J. Sulak and S. W. Ross. Lilliputian bottom fish fauna of the Hatteras upper middle continental slope. *Journal of Fish Biology*, 49(sA):91–113, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Clark:1996:BEO

- [1679] M. R. Clark. Biomass estimation of orange roughy: a summary and evaluation of techniques for measuring stock size of a deep-water fish species in New Zealand. *Journal of Fish Biology*, 49(sA):114–131, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Connolly:1996:CDE

- [1680] P. L. Connolly and C. J. Kelly. Catch and discards from experimental trawl and longline fishing in the deep water of the Rockall Trough. *Journal of Fish Biology*, 49(sA):132–144, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

desClers:1996:PSA

- [1681] S. des Clers, C. P. Nolan, R. Baranowski, and J. Pompert. Preliminary stock assessment of the Patagonian toothfish longline fishery around the Falkland Islands. *Journal of Fish Biology*, 49(sA):145–156, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Collin:1996:RSE

- [1682] S. P. Collin and J. C. Partridge. Retinal specializations in the eyes of deep-sea teleosts. *Journal of Fish Biology*, 49(sA):157–174, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Somiya:1996:BGD

- [1683] H. Somiya, T. Yamakawa, and M. Okiyama. *Bathysauropsis gigas*, a deep-sea aulopiform fish with a peculiar iris process and a pure-cone retina. *Journal of Fish Biology*, 49(sA):175–181, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Magnusson:1996:DSL

- [1684] J. Magnússon. The deep scattering layers in the Irminger Sea. *Journal of Fish Biology*, 49(sA):182–191, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sideleva:1996:CCD

- [1685] V. G. Sideleva. Comparative character of the deep-water and inshore cottoid fishes endemic to Lake Baikal. *Journal of Fish Biology*, 49(sA):192–206, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Priede:1996:EAA

- [1686] I. G. Priede and N. R. Merrett. Estimation of abundance of abyssal demersal fishes; a comparison of data from trawls and baited cameras. *Journal of Fish Biology*, 49(sA):207–216, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gordon:1996:CDW

- [1687] J. D. M. Gordon, N. R. Merrett, O. A. Bergstad, and S. C. Swan. A comparison of the deep-water demersal fish assemblages of the Rockall Trough and Porcupine Seabight, eastern North Atlantic: continental slope to rise. *Journal of Fish Biology*, 49(sA):217–238, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Marshall:1996:VSP

- [1688] N. J. Marshall. Vision and sensory physiology: the lateral line systems of three deep-sea fish. *Journal of Fish Biology*, 49(sA):239–258, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Magnusson:1996:GSS

- [1689] J. V. Magnússon. Greater silver smelt, *Argentina silus* in Icelandic waters. *Journal of Fish Biology*, 49(sA):259–275, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Morales-Nin:1996:BDG

- [1690] B. Morales-Nin, E. Massutí, and C. Stefanescu. Bathymetric distribution and growth patterns of *Bathypterois mediterraneus* from the north-western Mediterranean Sea. *Journal of Fish Biology*, 49(sA):276–288, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gordon:1996:VAR

- [1691] J. D. M. Gordon and S. C. Swan. Validation of age readings from otoliths of juvenile roundnose grenadier, *Coryphaenoides rupestris*, a deep-water macrourid fish. *Journal of Fish Biology*, 49(sA):289–297, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Coggan:1996:EDS

- [1692] R. A. Coggan, C. P. Nolan, and M. J. A. George. Exploratory deep-sea fishing in the Falkland Islands, south-western Atlantic. *Journal of Fish Biology*, 49(sA):298–310, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

DOnghia:1996:RMU

- [1693] G. D’Onghia, A. Tursi, and M. Basanisi. Reproduction of macrourids in the upper slope of the north-western Ionian Sea. *Journal of Fish Biology*, 49(sA):311–317, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sedberry:1996:PSP

- [1694] G. R. Sedberry, J. L. Carlin, R. W. Chapman, and B. Eleby. Population structure in the pan-oceanic wreckfish, *Polyprion americanus* (Teleostei: Polyprionidae), as indicated by mtDNA variation. *Journal of Fish Biology*, 49(sA):318–329, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Yau:1996:PST

- [1695] C. Yau, M. J. A. George, R. A. Coggan, and J. A. Criado-Delgado. A preliminary study of two species of flatfish (family: Bothidae) from the south-west Atlantic. *Journal of Fish Biology*, 49(sA):330–336, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1996:PA

- [1696] Anonymous. Poster abstracts. *Journal of Fish Biology*, 49(sA):337–341, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1996:RS

- [1697] Anonymous. Referees for this supplement. *Journal of Fish Biology*, 49(sA):343, December 1996. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kelly:1997:AEG

- [1698] C. J. Kelly, P. L. Connolly, and J. J. Bracken. Age estimation, growth, maturity and distribution of the roundnose grenadier from the Rockall Trough. *Journal of Fish Biology*, 50(1):1–17, January 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Zelennikov:1997:EAO

- [1699] O. V. Zelennikov. The effect of acidification on oogenesis of rainbow trout during sex differentiation. *Journal of Fish Biology*, 50(1):18–21, January 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tobin:1997:EPH

- [1700] A. J. Tobin, M. J. Sheaves, and B. W. Molony. Evidence of protandrous hermaphroditism in the tropical sparid *Acanthopagrus berda*. *Journal of Fish Biology*, 50(1):22–33, January 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mylonas:1997:CHE

- [1701] C. C. Mylonas, L. C. Woods III, and Y. Zohar. Cyto-histological examination of post-vitellogenesis and final oocyte maturation in captive-reared striped bass. *Journal of Fish Biology*, 50(1):34–49, January 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Matthews:1997:RTR

- [1702] K. R. Matthews and N. H. Berg. Rainbow trout responses to water temperature and dissolved oxygen stress in two southern California stream pools. *Journal of Fish Biology*, 50(1):50–67, January 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Douglas:1997:VPD

- [1703] R. H. Douglas and J. C. Partridge. On the visual pigments of deep-sea fish. *Journal of Fish Biology*, 50(1):68–85, January 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sunyem:1997:CGA

- [1704] P. S. Sunyem and C. M. Vooren. On cloacal gestation in angel sharks from southern Brazil. *Journal of Fish Biology*, 50(1):86–94, January 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Garner:1997:SSL

- [1705] P. Garner. Sample sizes for length and density estimation of 0+ fish when using point sampling by electrofishing. *Journal of Fish Biology*,

50(1):95–106, January 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vermeirssen:1997:BRF

- [1706] E. L. M. Vermeirssen, A. P. Scott, and N. R. Liley. Book review: *Female rainbow trout urine contains a pheromone which causes a rapid rise in plasma 17,20 β -dihydroxy-4-pregnen-3-one levels and milt amounts in males*. *Journal of Fish Biology*, 50(1):107–119, January 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Morrison:1997:CED

- [1707] C. M. Morrison, D. J. Martell, and C. Leggiadro. Ciliated epithelium in the developing digestive tract of the larva of the Atlantic halibut, and comparison with that of the cod. *Journal of Fish Biology*, 50(1):120–126, January 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Severi:1997:RGS

- [1708] W. Severi, F. T. Rantin, and M. N. Fernandes. Respiratory gill surface of the serrasalmid fish, *Piaractus mesopotamicus*. *Journal of Fish Biology*, 50(1):127–136, January 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Williams:1997:CRF

- [1709] E. M. Williams, J. A. Nelson, and N. Heisler. Cardio-respiratory function in carp exposed to environmental nitrite. *Journal of Fish Biology*, 50(1):137–149, January 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jons:1997:OWI

- [1710] G. D. Jons and L. E. Miranda. Ovarian weight as an index of fecundity, maturity, and spawning periodicity. *Journal of Fish Biology*, 50(1):150–156, January 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Royero:1997:PAC

- [1711] R. Royero and A. C. Neville. Polarizing analysis of the crimped collagen ligament of the maxillary barbel in *Parauchenipterus galeatus*, and the functional implications. *Journal of Fish Biology*, 50(1):157–168, January 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rinchar:1997:CSR

- [1712] J. Rinchar, P. Kestemont, and R. Heine. Comparative study of reproductive biology in single and multiple-spawner cyprinid fish. II. Sex steroid and plasma protein phosphorus concentrations. *Journal of Fish Biology*, 50(1):169–180, January 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Swain:1997:EAS

- [1713] D. P. Swain and R. Morin. Effects of age, sex and abundance on the bathymetric pattern of American plaice in the southern Gulf of St Lawrence. *Journal of Fish Biology*, 50(1):181–200, January 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hashimoto:1997:ECS

- [1714] H. Hashimoto, H. Toyohara, Y. Yokoyama, M. Sakaguchi, K. Ozato, and Y. Wakamatsu. Effects of carp serum on the growth of goldfish fin cells in early passage. *Journal of Fish Biology*, 50(1):201–207, January 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gauthier:1997:EVA

- [1715] S. Gauthier, D. Boisclair, and P. Legendre. Evaluation of a variable angle scanning method to estimate relative abundance and distribution of fish using a single-beam echosounder in shallow lakes. *Journal of Fish Biology*, 50(1):208–221, January 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Thorpe:1997:FON

- [1716] T. Thorpe. First occurrence and new length record for the bigeye thresher shark in the north-east Atlantic. *Journal of Fish Biology*, 50(1):222–224, January 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:BRa

- [1717] Anonymous. Book reviews. *Journal of Fish Biology*, 50(1):225–226, January 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vandewalle:1997:PDC

- [1718] P. Vandewalle, I. Gluckmann, E. Baras, F. Huriaux, and B. Focant. Postembryonic development of the cephalic region in *Heterobranchus longifilis*. *Journal of Fish Biology*, 50(2):227–253, February 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gysels:1997:FHF

- [1719] E. Gysels, L. Janssens de Bisthoven, L. De Vos, and F. Ollevier. Food and habitat of four *Xenotilapia* species (Teleostei, Cichlidae) in a sandy bay of northern Lake Tanganyika (Burundi). *Journal of Fish Biology*, 50(2):254–266, February 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kadri:1997:DFRa

- [1720] S. Kadri, N. B. Metcalfe, F. A. Huntingford, and J. E. Thorpe. Daily feeding rhythms in Atlantic salmon i: feeding and aggression in parr under ambient environmental conditions. *Journal of Fish Biology*, 50(2):267–272, February 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kadri:1997:DFRb

- [1721] S. Kadri, N. B. Metcalfe, F. A. Huntingford, and J. E. Thorpe. Daily feeding rhythms in Atlantic salmon II: size-related variation in feeding patterns of post-smolts under constant environmental conditions. *Journal of Fish Biology*, 50(2):273–279, February 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Henderson:1997:RTC

- [1722] P. A. Henderson and M. Corps. The role of temperature and cannibalism in interannual recruitment variation of bass in British waters. *Journal of Fish Biology*, 50(2):280–295, February 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fauconneau:1997:CSM

- [1723] B. Fauconneau, S. Andre, J. Chmaitilly, P.-Y. Le Bail, F. Krieg, and S. J. Kaushik. Control of skeletal muscle fibres and adipose cells size in the flesh of rainbow trout. *Journal of Fish Biology*, 50(2):296–314, February 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Labropoulou:1997:FET

- [1724] M. Labropoulou and A. Eleftheriou. The foraging ecology of two pairs of congeneric demersal fish species: importance of morphological characteristics in prey selection. *Journal of Fish Biology*, 50(2):324–340, February 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sarre:1997:HRB

- [1725] G. A. Sarre, G. A. Hyndes, and I. C. Potter. Habitat, reproductive biology and size composition of *Parequula melbournensis*, a gerreid with a

temperate distribution. *Journal of Fish Biology*, 50(2):341–357, February 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Overnell:1997:TED

- [1726] J. Overnell. Temperature and efficiency of development during endogenous feeding in herring embryos and yolk-sac larvae. *Journal of Fish Biology*, 50(2):358–365, February 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Louarn:1997:IPP

- [1727] H. Le Louarn and A. Cloarec. Insect predation on pike fry. *Journal of Fish Biology*, 50(2):366–370, February 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Balshine-Earn:1997:BUV

- [1728] S. Balshine-Earn. The benefits of uniparental versus biparental mouth brooding in Galilee St. Peter's fish. *Journal of Fish Biology*, 50(2):371–381, February 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lucas:1997:EFG

- [1729] M. C. Lucas and P. A. Frear. Effects of a flow-gauging weir on the migratory behaviour of adult barbel, a riverine cyprinid. *Journal of Fish Biology*, 50(2):382–396, February 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bisazza:1997:SMM

- [1730] A. Bisazza and A. Pilastro. Small male mating advantage and reversed size dimorphism in poeciliid fishes. *Journal of Fish Biology*, 50(2):397–406, February 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Murphy:1997:PAM

- [1731] K. E. Murphy and T. J. Pitcher. Predator attack motivation influences the inspection behaviour of European minnows. *Journal of Fish Biology*, 50(2):407–417, February 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Powell:1997:RAB

- [1732] M. D. Powell and S. F. Perry. Respiratory and acid-base disturbances in rainbow trout blood during exposure to chloramine-t under hypoxia and hyperoxia. *Journal of Fish Biology*, 50(2):418–428, February 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Clearwater:1997:RCC

- [1733] S. J. Clearwater and N. W. Pankhurst. The response to capture and confinement stress of plasma cortisol, plasma sex steroids and vitellogenic oocytes in the marine teleost, red gurnard. *Journal of Fish Biology*, 50(2):429–441, February 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Aprahamian:1997:SMA

- [1734] M. W. Aprahamian and G. O. Jones. The seaward movement of Atlantic salmon smolts in the Usk estuary, Wales, as inferred from power station catches. *Journal of Fish Biology*, 50(2):442–444, February 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Armstrong:1997:HMD

- [1735] J. D. Armstrong and N. A. Herbert. Homing movements of displaced stream-dwelling brown trout. *Journal of Fish Biology*, 50(2):445–449, February 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Waldron:1997:CTS

- [1736] M. E. Waldron and D. A. Gerneke. Comparison of two scanning electron microscope techniques for examining daily growth increments on fish otoliths. *Journal of Fish Biology*, 50(2):450–454, February 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bean:1997:FRL

- [1737] C. W. Bean and R. C. Kirkwood. First record of *Ligula intestinalis* from stone loach. *Journal of Fish Biology*, 50(2):455–456, February 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:Aa

- [1738] Anonymous. Announcements. *Journal of Fish Biology*, 50(2):461–462, February 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Smith:1997:TDT

- [1739] I. P. Smith and G. W. Smith. Tidal and diel timing of river entry by adult Atlantic salmon returning to the Aberdeenshire Dee, Scotland. *Journal of Fish Biology*, 50(3):463–474, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Svedang:1997:LFC

- [1740] H. Svedäng and H. Wickström. Low fat contents in female silver eels: indications of insufficient energetic stores for migration and gonadal development. *Journal of Fish Biology*, 50(3):475–486, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sanger:1997:CTM

- [1741] A. M. Sängér. The so-called tonic muscle fibre type in cyprinid axial muscle: their morphology and response to endurance exercise training. *Journal of Fish Biology*, 50(3):487–497, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bull:1997:RHR

- [1742] C. D. Bull and N. B. Metcalfe. Regulation of hyperphagia in response to varying energy deficits in overwintering juvenile Atlantic salmon. *Journal of Fish Biology*, 50(3):498–510, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Encina:1997:SVP

- [1743] L. Encina and C. Granado-Lorencio. Seasonal variations in the physiological status and energy content of somatic and reproductive tissues of chub. *Journal of Fish Biology*, 50(3):511–522, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wilde:1997:MVI

- [1744] G. R. Wilde and A. A. Echelle. Morphological variation in intergrade pupfish populations from the Pecos River, Texas, U.S.A. *Journal of Fish Biology*, 50(3):523–539, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bremer:1997:OUP

- [1745] J. R. Alvarado Bremer, I. Naseri, and B. Ely. Orthodox and unorthodox phylogenetic relationships among tunas revealed by the nucleotide sequence analysis of the mitochondrial DNA control region. *Journal of Fish Biology*, 50(3):540–554, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Paakkonen:1997:GER

- [1746] J.-P. J. Pääkkönen and T. J. Marjomäki. Gastric evacuation rate of burbot fed single-fish meals at different temperatures. *Journal of Fish Biology*, 50(3):555–563, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lahnsteiner:1997:SSM

- [1747] F. Lahnsteiner, B. Berger, T. Weismann, and R. A. Patzner. Sperm structure and motility of the freshwater teleost *Cottus gobio*. *Journal of Fish Biology*, 50(3):564–574, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Haaparanta:1997:GAP

- [1748] A. Haaparanta, E. T. Valtonen, and R. W. Hoffmann. Gill anomalies of perch and roach from four lakes differing in water quality. *Journal of Fish Biology*, 50(3):575–591, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mattson:1997:PDO

- [1749] N. S. Mattson and E. K. W. H. Kaunda. Population dynamics of *Oreochromis shiranus* in two small water bodies in Malaëi. *Journal of Fish Biology*, 50(3):592–607, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tang:1997:CES

- [1750] S. Tang and B. A. McKeown. Cloning and expression of the SPARC cDNA from rainbow trout. *Journal of Fish Biology*, 50(3):608–619, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ottesen:1997:ODC

- [1751] O. H. Ottesen and J. A. Olafsen. Ontogenetic development and composition of the mucous cells and the occurrence of saccular cells in the epidermis of Atlantic halibut. *Journal of Fish Biology*, 50(3):620–633, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Einum:1997:GDI

- [1752] S. Einum and I. A. Fleming. Genetic divergence and interactions in the wild among native, farmed and hybrid Atlantic salmon. *Journal of Fish Biology*, 50(3):634–651, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Holst:1997:FIS

- [1753] J. C. Holst, A. G. V. Salvanes, and T. Johansen. Feeding, *Ichthyophonus* sp. infection, distribution and growth history of Norwegian spring-spawning herring in summer. *Journal of Fish Biology*, 50(3):652–664,

March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Andrade:1997:FNP

- [1754] D. V. Andrade and A. S. Abe. Foam nest production in the armoured catfish. *Journal of Fish Biology*, 50(3):665–667, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Salvadori:1997:DBP

- [1755] S. Salvadori, A. M. Deiana, E. Coluccia, A. Milia, and A. Cau. The different banding patterns produced by restriction endonuclease digestion in mitotic chromosomes of the American and European eel. *Journal of Fish Biology*, 50(3):668–671, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mezzera:1997:DNI

- [1756] M. Mezzera, C. R. Largiadèr, and A. Scholl. Discrimination of native and introduced brown trout in the River Doubs (Rhône drainage) by number and shape of parr marks. *Journal of Fish Biology*, 50(3):672–677, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pirhonen:1997:DFB

- [1757] J. Pirhonen, J. Koskela, and M. Jobling. Differences in feeding between 1+ and 2+ hatchery brown trout exposed to low water temperature. *Journal of Fish Biology*, 50(3):678–681, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:BRb

- [1758] Anonymous. Book reviews. *Journal of Fish Biology*, 50(3):682–686, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:BRc

- [1759] Anonymous. Book received. *Journal of Fish Biology*, 50(3):686, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:Ab

- [1760] Anonymous. Announcements. *Journal of Fish Biology*, 50(3):687–689, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:Ea

- [1761] Anonymous. Erratum. *Journal of Fish Biology*, 50(3):690, March 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Levy:1997:PPO

- [1762] A. Levy and B. I. Baker. Penetration of phosphorothioate oligodeoxynucleotides into rainbow trout brain in vivo. A technique for chronic infusion of substances into the brain of free-living adult fish. *Journal of Fish Biology*, 50(4):691–702, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hollis:1997:IDO

- [1763] L. Hollis, L. Muench, and R. C. Playle. Influence of dissolved organic matter on copper binding, and calcium on cadmium binding, by gills of rainbow trout. *Journal of Fish Biology*, 50(4):703–720, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Chenoweth:1997:GPS

- [1764] S. F. Chenoweth and J. M. Hughes. Genetic population structure of the catadromous Perciform: *Macquaria novemaculeata* (Percichthyidae). *Journal of Fish Biology*, 50(4):721–733, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kozlova:1997:SCT

- [1765] T. A. Kozlova. Seasonal cycles in total chemical composition of two Lake Baikal benthic-pelagic sculpins (*Cottocomephorus*, Cottoidei). *Journal of Fish Biology*, 50(4):734–743, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Burkhardt-Holm:1997:WWM

- [1766] P. Burkhardt-Holm, M. Escher, and W. Meier. Waste-water management plant effluents cause cellular alterations in the skin of brown trout. *Journal of Fish Biology*, 50(4):744–758, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cruz-Neto:1997:EAH

- [1767] A. P. Cruz-Neto and J. F. Steffensen. The effects of acute hypoxia and hypercapnia on oxygen consumption of the freshwater European eel. *Journal of Fish Biology*, 50(4):759–769, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

LeaMaster:1997:CSI

- [1768] B. R. LeaMaster, W. A. Walsh, J. A. Brock, and R. S. Fujioka. Cold stress-induced changes in the aerobic heterotrophic gastrointestinal tract bacterial flora of red hybrid tilapia. *Journal of Fish Biology*, 50(4):770–780, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Holopainen:1997:PPP

- [1769] I. J. Holopainen, J. Aho, M. Vornanen, and H. Huuskonen. Phenotypic plasticity and predator effects on morphology and physiology of crucian carp in nature and in the laboratory. *Journal of Fish Biology*, 50(4):781–798, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wisenden:1997:EPC

- [1770] B. D. Wisenden and R. J. F. Smith. The effect of physical condition and shoalmate familiarity on proliferation of alarm substance cells in the epidermis of fathead minnows. *Journal of Fish Biology*, 50(4):799–808, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tibbetts:1997:DFM

- [1771] I. R. Tibbetts. The distribution and function of mucous cells and their secretions in the alimentary tract of *Arrhamphus sclerolepis krefftii*. *Journal of Fish Biology*, 50(4):809–820, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Huriaux:1997:CPI

- [1772] F. Huriaux, S. Collin, P. Vandewalle, J. C. Philippart, and B. Focant. Characterization of parvalbumin isotypes in white muscle from the barbel and expression during development. *Journal of Fish Biology*, 50(4):821–836, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Koskela:1997:VFI

- [1773] J. Koskela, J. Pirhonen, and M. Jobling. Variations in feed intake and growth of Baltic salmon and brown trout exposed to continuous light at constant low temperatures. *Journal of Fish Biology*, 50(4):837–845, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sagnes:1997:SMT

- [1774] P. Sagnes, P. Gaudin, and B. Statzner. Shifts in morphometrics and their relation to hydrodynamic potential and habitat use during grayling ontogenesis. *Journal of Fish Biology*, 50(4):846–858, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Damsgaard:1997:SDF

- [1775] B. Damsgård, A. M. Arnesen, B. M. Baardvik, and M. Jobling. State-dependent feed acquisition among two strains of hatchery-reared Arctic charr. *Journal of Fish Biology*, 50(4):859–869, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Elliott:1997:ESN

- [1776] J. M. Elliott. An experimental study on the natural removal of dead trout fry in a Lake District stream. *Journal of Fish Biology*, 50(4):870–877, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jachner:1997:RBP

- [1777] A. Jachner. The response of bleak to predator odour of unfed and recently fed pike. *Journal of Fish Biology*, 50(4):878–886, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Patzner:1997:SDS

- [1778] R. A. Patzner and G. Kaurin. Sexual differentiation in *Salaria* (= *Blennius*) *pavo*. *Journal of Fish Biology*, 50(4):887–894, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Treasurer:1997:PWL

- [1779] J. W. Treasurer. Parasites of wrasse (Labridae) in inshore waters of west Scotland stocked as cleaner fish of sea lice (Caligidae) on farmed Atlantic salmon. *Journal of Fish Biology*, 50(4):895–899, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

deAstarloa:1997:CRP

- [1780] J. M. Díaz de Astarloa. A case of reversal in *Paralichthys orbignyanus* a shallow-water flounder from the south-western Atlantic. *Journal of Fish Biology*, 50(4):900–902, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Armstrong:1997:EIL

- [1781] J. D. Armstrong and D. C. Stewart. The effects of initial length and body curvature on shrinkage of juvenile Atlantic salmon during freezing. *Journal of Fish Biology*, 50(4):903–905, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Padhi:1997:IHC

- [1782] B. K. Padhi and R. K. Mandal. Inadvertent hybridization in a carp hatchery as detected by nuclear DNA RFLP. *Journal of Fish Biology*, 50(4):906–909, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sagnes:1997:PAM

- [1783] P. Sagnes. Potential artefacts in morphometric analyses of fish: effects of formalin preservation on 0+ grayling. *Journal of Fish Biology*, 50(4):910–914, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:BRd

- [1784] Anonymous. Book reviews. *Journal of Fish Biology*, 50(4):915–916, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:BRe

- [1785] Anonymous. Book received. *Journal of Fish Biology*, 50(4):916, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:Eb

- [1786] Anonymous. Erratum. *Journal of Fish Biology*, 50(4):917, April 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Yamamura:1997:SDS

- [1787] O. Yamamura. Scavenging on discarded saury by demersal fishes off Sendai Bay, northern Japan. *Journal of Fish Biology*, 50(5):919–925, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Utne:1997:ETI

- [1788] A. C. W. Utne. The effect of turbidity and illumination on the reaction distance and search time of the marine planktivore *Gobiusculus flavescens*. *Journal of Fish Biology*, 50(5):926–938, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Caceci:1997:SON

- [1789] T. Caceci, H. A. El-Habback, S. A. Smith, and B. J. Smith. The stomach of *Oreochromis niloticus* has three regions. *Journal of Fish Biology*, 50(5):939–952, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Stephens:1997:CTR

- [1790] S. M. Stephens, A. Y. A. Alkindi, C. P. Waring, and J. A. Brown. Corticosteroid and thyroid responses of larval and juvenile turbot exposed to the water-soluble fraction of crude oil. *Journal of Fish Biology*, 50(5):953–964, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Huusko:1997:MPV

- [1791] A. Huusko and T. Sutela. Minnow predation on vendace larvae: intersection of alternative prey phenologies and size-based vulnerability. *Journal of Fish Biology*, 50(5):965–977, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cinquetti:1997:HEH

- [1792] R. Cinquetti. Histochemical, enzyme histochemical and ultrastructural investigation on the sperm-duct glands of *Padogobius martensi* (Pisces, Gobiidae). *Journal of Fish Biology*, 50(5):978–991, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

DeSilva:1997:CFA

- [1793] S. S. De Silva, R. M. Gunasekera, R. Collins, B. A. Ingram, and C. M. Austin. Changes in the fatty acid profile of the Australian shortfin eel in relation to development. *Journal of Fish Biology*, 50(5):992–998, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tytler:1997:SAF

- [1794] P. Tytler, J. Ireland, and L. Murray. A study of the assimilation of fluorescent pigments of microalgae *Isochrysis galbana* by the early larval stages of turbot and herring. *Journal of Fish Biology*, 50(5):999–1009, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Watkins:1997:MUO

- [1795] M. S. Watkins, S. Doherty, and G. H. Copp. Microhabitat use by 0+ and older fishes in a small English chalk stream. *Journal of Fish Biology*,

50(5):1010–1024, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Galbreath:1997:CAS

- [1796] P. F. Galbreath, K. J. Adams, P. A. Wheeler, and G. H. Thorgaard. Clonal Atlantic salmon \times brown trout hybrids produced by gynogenesis. *Journal of Fish Biology*, 50(5):1025–1033, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Heupel:1997:HDT

- [1797] M. R. Heupel and M. B. Bennett. Histology of dart tag insertion sites in the epaulette shark. *Journal of Fish Biology*, 50(5):1034–1041, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Courtenay:1997:FAR

- [1798] S. C. Courtenay, T. P. Quinn, H. M. C. Dupuis, C. Groot, and P. A. Larkin. Factors affecting the recognition of population-specific odours by juvenile Coho salmon. *Journal of Fish Biology*, 50(5):1042–1060, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Iwama:1997:DCE

- [1799] G. K. Iwama, J. C. McGeer, P. A. Wright, M. P. Wilkie, and C. M. Wood. Divalent cations enhance ammonia excretion in Lahontan cutthroat trout in highly alkaline water. *Journal of Fish Biology*, 50(5):1061–1073, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ciali:1997:SSW

- [1800] S. Ciali, J. Gordon, and P. Moller. Spectral sensitivity of the weakly discharging electric fish *Gnathonemus petersi* using its electric organ discharges as the response measure. *Journal of Fish Biology*, 50(5):1074–1087, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vladić:1997:SMF

- [1801] T. Vladić and T. Jätrevi. Sperm motility and fertilization time span in Atlantic salmon and brown trout — the effect of water temperature. *Journal of Fish Biology*, 50(5):1088–1093, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brusléa-Sicard:1997:RSI

- [1802] S. Brusléa-Sicard and B. Fourcault. Recognition of sex-inverting protandric *Sparus aurata*: ultrastructural aspects. *Journal of Fish Biology*, 50

(5):1094–1103, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

White:1997:EFA

- [1803] E. M. White and B. Knights. Environmental factors affecting migration of the European eel in the Rivers Severn and Avon, England. *Journal of Fish Biology*, 50(5):1104–1116, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Clough:1997:DMS

- [1804] S. Clough and M. Ladle. Diel migration and site fidelity in a stream-dwelling cyprinid, *Leuciscus leuciscus*. *Journal of Fish Biology*, 50(5):1117–1119, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Einarsson:1997:MSC

- [1805] S. Einarsson and P. S. Davies. A multiductal system conveys digestive enzymes from the pancreas into the intestine in the Atlantic salmon. *Journal of Fish Biology*, 50(5):1120–1123, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ellis:1997:MDB

- [1806] T. Ellis, B. R. Howell, and J. Hayes. Morphological differences between wild and hatchery-reared turbot. *Journal of Fish Biology*, 50(5):1124–1128, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Elliott:1997:SCA

- [1807] J. M. Elliott. Stomach contents of adult sea trout caught in six English rivers. *Journal of Fish Biology*, 50(5):1129–1132, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Harvey:1997:MTS

- [1808] C. J. Harvey, G. T. Ruggerone, and D. E. Rogers. Migrations of three-spined stickleback, nine-spined stickleback, and pond smelt in the Chignik catchment, Alaska. *Journal of Fish Biology*, 50(5):1133–1137, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:BRf

- [1809] Anonymous. Book reviews. *Journal of Fish Biology*, 50(5):1138–1139, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:Ac

- [1810] Anonymous. Announcement. *Journal of Fish Biology*, 50(5):1140, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:Ec

- [1811] Anonymous. Erratum. *Journal of Fish Biology*, 50(5):1141, May 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Agnese:1997:MGC

- [1812] J. F. Agnèse, G. G. Teugels, P. Galbusera, R. Guyomard, and F. Volckaert. Morphometric and genetic characterization of sympatric populations of *Clarias gariepinus* and *C. anguillaris* from Senegal. *Journal of Fish Biology*, 50(6):1143–1157, June 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Collins:1997:ICF

- [1813] A. L. Collins and T. A. Anderson. The influence of changes in food availability on the activities of key degradative and metabolic enzymes in the liver and epaxial muscle of the golden perch. *Journal of Fish Biology*, 50(6):1158–1165, June 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Schurmann:1997:ETH

- [1814] H. Schurmann and J. F. Steffensen. Effects of temperature, hypoxia and activity on the metabolism of juvenile Atlantic cod. *Journal of Fish Biology*, 50(6):1166–1180, June 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Olla:1997:EST

- [1815] B. L. Olla, M. W. Davis, and C. B. Schreck. Effects of simulated trawling on sablefish and walleye pollock: the role of light intensity, net velocity and towing duration. *Journal of Fish Biology*, 50(6):1181–1194, June 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ellis:1997:PSH

- [1816] T. Ellis and R. D. M. Nash. Predation by sprat and herring on pelagic fish eggs in a plaice spawning area in the Irish Sea. *Journal of Fish Biology*, 50(6):1195–1202, June 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Castonguay:1997:APT

- [1817] M. Castonguay, M. Levasseur, J.-L. Beaulieu, F. Grégoire, S. Michaud, E. Bonneau, and S. S. Bates. Accumulation of PSP toxins in Atlantic mackerel: seasonal and ontogenetic variations. *Journal of Fish Biology*, 50(6):1203–1213, June 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Garner:1997:EVD

- [1818] P. Garner. Effects of variable discharge on the velocity use and shoaling behaviour of *Phoxinus phoxinus*. *Journal of Fish Biology*, 50(6):1214–1220, June 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Adriaens:1997:OCC

- [1819] D. Adriaens and W. Verraes. The ontogeny of the chondrocranium in *Clarias gariepinus*: trends in siluroids. *Journal of Fish Biology*, 50(6):1221–1257, June 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Serafy:1997:FSU

- [1820] J. E. Serafy, T. E. Hopkins, and P. J. Walsh. Field studies on the ureogenic gulf toadfish in a subtropical bay. I. Patterns of abundance, size composition and growth. *Journal of Fish Biology*, 50(6):1258–1270, June 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hopkins:1997:FSU

- [1821] T. E. Hopkins, J. E. Serafy, and P. J. Walsh. Field studies on the ureogenic gulf toadfish, in a subtropical bay. II. Nitrogen excretion physiology. *Journal of Fish Biology*, 50(6):1271–1284, June 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Alami-Durante:1997:GMW

- [1822] H. Alami-Durante, B. Fauconneau, M. Rouel, A. M. Escaffre, and P. Bergot. Growth and multiplication of white skeletal muscle fibres in carp larvae in relation to somatic growth rate. *Journal of Fish Biology*, 50(6):1285–1302, June 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Grutter:1997:SSP

- [1823] A. S. Grutter. Size-selective predation by the cleaner fish *Labroides dimidiatus*. *Journal of Fish Biology*, 50(6):1303–1308, June 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ravinder:1997:CAM

- [1824] K. Ravinder, K. Nasaruddin, K. C. Majumdar, and S. Shivaji. Computerized analysis of motility, motility patterns and motility parameters of spermatozoa of carp following short-term storage of semen. *Journal of Fish Biology*, 50(6):1309–1328, June 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Waters:1997:IPC

- [1825] J. M. Waters and J. A. Cambrey. Intraspecific phylogeography of the Cape galaxias from South Africa: evidence from mitochondrial DNA sequences. *Journal of Fish Biology*, 50(6):1329–1338, June 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

vanSnik:1997:LGP

- [1826] G. M. J. van Snik, J. G. M. van den Boogaart, and J. W. M. Osse. Larval growth patterns in *Cyprinus carpio* and *Clarias gariepinus* with attention to the finfold. *Journal of Fish Biology*, 50(6):1339–1352, June 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ruiz-Gutierrez:1997:LFA

- [1827] V. Ruiz-Gutierrez, M. C. Perez-Zarza, F. J. G. Muriana, and L. Bravo. Lipid and fatty acid composition of muscle and internal organs from *ruvettus pretiosus*. *Journal of Fish Biology*, 50(6):1353–1357, June 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fraser:1997:HAC

- [1828] D. Fraser. A hermaphroditic Arctic charr from Loch Rannoch, Scotland. *Journal of Fish Biology*, 50(6):1358–1359, June 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:BRg

- [1829] Anonymous. Book reviews. *Journal of Fish Biology*, 50(6):1360–1362, June 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Thorpe:1997:ORV

- [1830] John Thorpe. Obituary: Rostislav Viktorovich Kazakov: 1941–1997. *Journal of Fish Biology*, 51(1):1–2, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Laroche:1997:TPF

- [1831] J. Laroche, E. Baran, and N. B. Rasoanandrasana. Temporal patterns in a fish assemblage of a semiarid mangrove zone in Madagascar. *Journal of Fish Biology*, 51(1):3–20, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rotllant:1997:CGR

- [1832] J. Rotllant and L. Tort. Cortisol and glucose responses after acute stress by net handling in the sparid red porgy previously subjected to crowding stress. *Journal of Fish Biology*, 51(1):21–28, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jones:1997:GRA

- [1833] M. W. Jones, R. G. Danzmann, and D. Clay. Genetic relationships among populations of wild resident, and wild and hatchery anadromous brook charr. *Journal of Fish Biology*, 51(1):29–40, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Canino:1997:NAC

- [1834] M. F. Canino. Nucleic acid contents and growth of first-feeding walleye pollock larvae in response to prey densities typical of sub-Arctic ecosystems. *Journal of Fish Biology*, 51(1):41–52, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Trajano:1997:FRT

- [1835] E. Trajano. Food and reproduction of *Trichomycterus itacarambiensis*, cave catfish from south-eastern Brazil. *Journal of Fish Biology*, 51(1):53–63, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Prenda:1997:HUF

- [1836] J. Prenda, P. D. Armitage, and A. Grayston. Habitat use by the fish assemblages of two chalk streams. *Journal of Fish Biology*, 51(1):64–79, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fernandez-Delgado:1997:RBM

- [1837] C. Fernández-Delgado and S. Rossomanno. Reproductive biology of the mosquitofish in a permanent natural lagoon in south-west Spain: two tactics for one species. *Journal of Fish Biology*, 51(1):80–92, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ruohonen:1997:AFI

- [1838] K. Ruohonen, D. J. Grove, and J. T. McIlroy. The amount of food ingested in a single meal by rainbow trout offered chopped herring, dry and wet diets. *Journal of Fish Biology*, 51(1):93–105, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Poizat:1997:USF

- [1839] G. Poizat and A. J. Corivelli. Use of seasonally flooded marshes by fish in a Mediterranean wetland: timing and demographic consequences. *Journal of Fish Biology*, 51(1):106–119, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Baglole:1997:ODT

- [1840] C. J. Baglole, H. M. Murray, G. P. Goff, and G. M. Wright. Ontogeny of the digestive tract during larval development of yellowtail flounder: a light microscopic and mucous histochemical study. *Journal of Fish Biology*, 51(1):120–134, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Patrick:1997:CRF

- [1841] M. L. Patrick, C. M. Wood, and W. S. Marshall. Calcium regulation in the freshwater-adapted mummichog. *Journal of Fish Biology*, 51(1):135–145, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Everson:1997:IVC

- [1842] I. Everson, K.-H. Kock, and G. Parkes. Interannual variation in condition of the mackerel icefish. *Journal of Fish Biology*, 51(1):146–154, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Verspoor:1997:GDN

- [1843] E. Verspoor and E. McCarthy. Genetic divergence at the NAD +-dependent malic enzyme locus in Atlantic salmon from Europe and North America. *Journal of Fish Biology*, 51(1):155–163, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McDowall:1997:RCF

- [1844] R. M. McDowall and G. A. Eldon. Reproductive cycling and fecundity estimation in the upland bully. *Journal of Fish Biology*, 51(1):164–179, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Diaz:1997:FEL

- [1845] J. P. Diaz, E. Guyot, S. Vigierand, and R. Connes. First events in lipid absorption during post-embryonic development of the anterior intestine in gilt-head sea bream. *Journal of Fish Biology*, 51(1):180–192, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Yoshizaki:1997:CCP

- [1846] G. Yoshizaki, K. Yamaguchi, T. Oota, C. A. Strüssmann, and F. Takashima. Cloning and characterization of pejerrey mitochondrial DNA and its application for RFLP analysis. *Journal of Fish Biology*, 51(1):193–203, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rognon:1997:MDD

- [1847] X. Rognon and R. Guyomard. Mitochondrial DNA differentiation among East and West African Nile tilapia populations. *Journal of Fish Biology*, 51(1):204–207, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lee:1997:IAJ

- [1848] S. C. Lee, S. C. M. Tsoi, H. L. Cheng, and J. T. Chang. Identification of *Anguilla japonica* and *A. marmorata* elvers by allozyme electrophoresis. *Journal of Fish Biology*, 51(1):208–210, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Donaghy:1997:EST

- [1849] M. J. Donaghy and E. Verspoor. Egg survival and timing of hatch in two Scottish Atlantic salmon stocks. *Journal of Fish Biology*, 51(1):211–214, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Archer:1997:OSR

- [1850] S. N. Archer and J. Hirano. Opsin sequences of the rod visual pigments in two species of Poeciliid fish. *Journal of Fish Biology*, 51(1):215–219, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:BRh

- [1851] Anonymous. Book reviews. *Journal of Fish Biology*, 51(1):220–222, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:Ed

- [1852] Anonymous. Erratum. *Journal of Fish Biology*, 51(1):223, July 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Soncini:1997:ETH

- [1853] R. Soncini and M. L. Glass. The effects of temperature and hyperoxia on arterial PO₂ and acid-base status in *Piaractus mesopotamicus*. *Journal of Fish Biology*, 51(2):225–233, August 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mylonas:1997:RBE

- [1854] C. C. Mylonas, Y. Magnus, Y. Klebanov, A. Gissis, and Y. Zohar. Reproductive biology and endocrine regulation of final oocyte maturation of captive white bass. *Journal of Fish Biology*, 51(2):234–250, August 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fishelson:1997:SFB

- [1855] L. Fishelson and O. Sharon. Spatial and foraging behaviour, diet and morphogenesis of postlarvae and juveniles of *Pempheris vanicolensis* in the Gulf of Aqaba, Red Sea. *Journal of Fish Biology*, 51(2):251–265, August 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Smith:1997:UMA

- [1856] I. P. Smith, A. D. F. Johnstone, and G. W. Smith. Upstream migration of adult Atlantic salmon past a fish counter weir in the Aberdeenshire Dee, Scotland. *Journal of Fish Biology*, 51(2):266–274, August 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Panara:1997:APE

- [1857] F. Panara. Acid phosphatases of *Esox lucius*: tissue distribution and partial characterization. *Journal of Fish Biology*, 51(2):275–283, August 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lippitsch:1997:PIH

- [1858] E. Lippitsch. Phylogenetic investigations on the haplochromine Cichlidae of Lake Kivu (East Africa), based on lepidological characters. *Journal of Fish Biology*, 51(2):284–299, August 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Torralva:1997:ERR

- [1859] M. Del Mar Torralva, M. Angeles Puig, and C. Fernández-delgado. Effect of river regulation on the life-history patterns of *Barbus sclateri* in the Segura river basin (south-east Spain). *Journal of Fish Biology*, 51(2): 300–311, August 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Josrgensen:1997:SPG

- [1860] E. H. Jørgensen, S. J. S. Johansen, and M. Jobling. Seasonal patterns of growth, lipid deposition and lipid depletion in anadromous Arctic charr. *Journal of Fish Biology*, 51(2):312–326, August 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lau:1997:STF

- [1861] E.-L. Lau, B.-Y. Lin, F.-Y. Lee, L.-T. Sun, S. Dufour, and C.-F. Chang. Stimulation of testicular function by exogenous testosterone in male protandrous black porgy, *Acanthopagrus schlegeli*. *Journal of Fish Biology*, 51(2):327–333, August 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Steingrund:1997:FBR

- [1862] P. Steingrund and A. Fernö. Feeding behaviour of reared and wild cod and the effect of learning: two strategies of feeding on the two-spotted goby. *Journal of Fish Biology*, 51(2):334–348, August 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vigliola:1997:VDI

- [1863] L. Vigliola. Validation of daily increment formation in otoliths for three *Diplodus* species in the Mediterranean sea. *Journal of Fish Biology*, 51(2):349–360, August 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ellis:1997:RBS

- [1864] J. R. Ellis and S. E. Shackley. The reproductive biology of *Scyliorhinus canicula* in the Bristol Channel, U.K. *Journal of Fish Biology*, 51(2):361–372, August 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Erekinaro:1997:IMJ

- [1865] J. Erekinaro and R. J. Gibson. Interhabitat migration of juvenile Atlantic salmon in a Newfoundland river system, Canada. *Journal of Fish Biology*,

51(2):373–388, August 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ellis:1997:CRH

- [1866] T. Ellis, B. R. Hoowell, and R. N. Hughes. The cryptic responses of hatchery-reared sole to a natural sand substratum. *Journal of Fish Biology*, 51(2):389–401, August 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Poling:1997:SDC

- [1867] K. R. Poling and L. A. Fuiman. Sensory development and concurrent behavioural changes in Atlantic croaker larvae. *Journal of Fish Biology*, 51(2):402–421, August 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Olsen:1997:EKA

- [1868] K. H. Olsén and T. JäUrvi. Effects of kinship on aggression and RNA content in juvenile Arctic charr. *Journal of Fish Biology*, 51(2):422–435, August 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sims:1997:BSO

- [1869] D. W. Sims, A. M. Fox, and D. A. Merrett. Basking shark occurrence off south-west England in relation to zooplankton abundance. *Journal of Fish Biology*, 51(2):436–440, August 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wennhage:1997:UDT

- [1870] H. Wennhage, R. N. Gibson, and L. Robb. The use of drop traps to estimate the efficiency of two beam trawls commonly used for sampling juvenile flatfishes. *Journal of Fish Biology*, 51(2):441–445, August 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rikardsen:1997:RBA

- [1871] A. H. Rikardsen, M.-A. Svenning, and A. Klemetsen. The relationships between anadromy, sex ratio and parr growth of Arctic charr in a lake in North Norway. *Journal of Fish Biology*, 51(3):447–461, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rico:1997:SCN

- [1872] C. Rico, K. M. Ibrahim, I. Rico, and G. M. Hewitt. Stock composition in North Atlantic populations of whiting using microsatellite markers. *Jour-*

nal of Fish Biology, 51(3):462–475, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Økland:1997:RTE

- [1873] F. Økland, B. Finstad, R. S. McKinley, E. B. Thorstad, and R. K. Booth. Radio-transmitted electromyogram signals as indicators of physical activity in Atlantic salmon. *Journal of Fish Biology*, 51(3):476–488, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Griffiths:1997:PFF

- [1874] S. W. Griffiths. Preferences for familiar fish do not vary with predation risk in the European minnow. *Journal of Fish Biology*, 51(3):489–495, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Paxton:1997:SAL

- [1875] C. G. M. Paxton. Shoaling and activity levels in *Corydoras*. *Journal of Fish Biology*, 51(3):496–502, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Chapman:1997:EMS

- [1876] G. B. Chapman and E. G. Johnson. An electron microscope study of intrusions into alarm substance cells of the channel catfish. *Journal of Fish Biology*, 51(3):503–514, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lyytikäinen:1997:TRU

- [1877] T. Lyytikäinen, J. Koskela, and I. Rissanen. Thermal resistance and upper lethal temperatures of underyearling Lake Inari Arctic charr. *Journal of Fish Biology*, 51(3):515–525, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Marshall:1997:CUM

- [1878] S. Marshall and M. Elliott. A comparison of univariate and multivariate numerical and graphical techniques for determining inter- and intraspecific feeding relationships in estuarine fish. *Journal of Fish Biology*, 51(3):526–545, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jordan:1997:ENS

- [1879] W. C. Jordan, E. Verspoor, and A. F. Youngson. The effect of natural selection on estimates of genetic divergence among populations of the At-

lantic salmon. *Journal of Fish Biology*, 51(3):546–560, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ross:1997:DPI

- [1880] C. Ross, R. W. Tilghman, J. X. Hartmann, and F. Mari. Distribution of parvalbumin isotypes in adult snook and their potential applications as species-specific biomarkers. *Journal of Fish Biology*, 51(3):561–572, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Linhart:1997:SUP

- [1881] O. Linhart and S. Kudo. Surface ultrastructure of paddlefish eggs before and after fertilization. *Journal of Fish Biology*, 51(3):573–582, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Francis:1997:CCJ

- [1882] M. P. Francis. Condition cycles in juvenile *Pagrus auratus*. *Journal of Fish Biology*, 51(3):583–600, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nagata:1997:DDP

- [1883] M. Nagata and J. R. Irvine. Differential dispersal patterns of male and female masu salmon fry. *Journal of Fish Biology*, 51(3):601–606, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Helser:1997:DDG

- [1884] T. E. Helser and F. P. Almeida. Density-dependent growth and sexual maturity of silver hake in the north-west Atlantic. *Journal of Fish Biology*, 51(3):607–623, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Goncalves:1997:SDR

- [1885] E. J. Gonçálves and V. C. Almada. Sex differences in resource utilization by the peacock blenny. *Journal of Fish Biology*, 51(3):624–633, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Noel:1997:DCG

- [1886] O. Noel and P.-Y. Le Bail. Does cyclicity of growth rate in rainbow trout exist? *Journal of Fish Biology*, 51(3):634–642, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nicieza:1997:ELL

- [1887] A. G. Nicieza and N. B. Metcalfe. Effects of light level and growth history on attack distances of visually foraging juvenile salmon in experimental tanks. *Journal of Fish Biology*, 51(3):643–649, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Stillwell:1997:CSV

- [1888] E. J. Stillwell and T. J. Benfey. The critical swimming velocity of diploid and triploid brook trout. *Journal of Fish Biology*, 51(3):650–653, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Barber:1997:NIM

- [1889] I. Barber. A non-invasive morphometric technique for estimating cestode plerocercoid burden in small freshwater fish. *Journal of Fish Biology*, 51(3):654–658, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

EEK:1997:SSV

- [1890] D. Eek and T. Bohlin. Strontium in scales verifies that sympatric sea-run and stream-resident brown trout can be distinguished by coloration. *Journal of Fish Biology*, 51(3):659–661, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:BRi

- [1891] Anonymous. Book review. *Journal of Fish Biology*, 51(3):662–663, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:Ad

- [1892] Anonymous. Announcements. *Journal of Fish Biology*, 51(3):664–665, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:Ee

- [1893] Anonymous. Erratum. *Journal of Fish Biology*, 51(3):666–667, September 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pankhurst:1997:VSP

- [1894] N. W. Pankhurst. In vitro steroid production by isolated ovarian follicles of the striped trumpeter. *Journal of Fish Biology*, 51(4):669–685,

October 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Peitts:1997:CBS

- [1895] C. S. Peitts, D. R. Jordan, I. G. Cowx, and N. V. Jones. Controlled breeding studies to verify the identity of roach and common bream hybrids from a natural population. *Journal of Fish Biology*, 51(4):686–696, October 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Frantzen:1997:GDS

- [1896] M. Frantzen, H. K. Jaohnsen, and I. Mayer. Gonadal development and sex steroids in a female Arctic charr broodstock. *Journal of Fish Biology*, 51(4):697–709, October 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Peake:1997:SPV

- [1897] S. Peake, R. S. McKinley, and D. A. Scruton. Swimming performance of various freshwater Newfoundland salmonids relative to habitat selection and fishway design. *Journal of Fish Biology*, 51(4):710–723, October 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Shimizu:1997:RCR

- [1898] A. Shimizu. Reproductive cycles in a reared strain of the mummichog, a daily spawner. *Journal of Fish Biology*, 51(4):724–737, October 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Reinboth:1997:HUS

- [1899] R. Reinboth and S. Bnrusle-Sicard. Histological and ultrastructural studies on the effects of hCG on sex inversion in the protogynous teleost *Coris julis*. *Journal of Fish Biology*, 51(4):738–749, October 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Adams:1997:GMR

- [1900] C. E. Adams and F. A. Huntingford. Growth, maturation and reproductive investment in Arctic charr. *Journal of Fish Biology*, 51(4):750–759, October 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Navas:1997:ISA

- [1901] J. M. Navas, M. Bruce, M. Thrush, B. M. Farndale, N. Bromage, S. Zanuty, M. Carrillo, J. G. Bell, and J. Ramos. The impact of seasonal

alteration in the lipid composition of broodstock diets on egg quality in the European sea bass. *Journal of Fish Biology*, 51(4):760–773, October 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rai:1997:CLD

- [1902] A. K. Rai and A. K. Mittal. Changes in the levels and distribution of glycogen during regeneration of cutaneous wounds in *Heteropneustes fossilis*: a histochemical investigation. *Journal of Fish Biology*, 51(4):774–782, October 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bourke:1997:IVH

- [1903] P. Bourke, P. Magnan, and M. A. Rodríguez. Individual variations in habitat use and morphology in brook charr. *Journal of Fish Biology*, 51(4):783–794, October 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

VanGinneken:1997:TAW

- [1904] V. J. T. Van Ginneken, R. Van Eersel, P. Balm, M. Nieveen, and G. Van Den Thillart. *Tilapia* are able to withstand long-term exposure to low environmental pH, judged by their energy status, ionic balance and plasma cortisol. *Journal of Fish Biology*, 51(4):795–806, October 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Briggs:1997:FMR

- [1905] C. T. Briggs and J. R. Post. Field metabolic rates of rainbow trout estimated using electromyogram telemetry. *Journal of Fish Biology*, 51(4):807–823, October 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Knudsen:1997:IPF

- [1906] F. R. Knudsen, C. B. Schreck, S. M. Knapp, P. S. Enger, and O. Sand. Infrasound produces flight and avoidance responses in Pacific juvenile salmonids. *Journal of Fish Biology*, 51(4):824–829, October 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Franco-Sierra:1997:IIC

- [1907] A. Franco-Sierra, A. Sitj'a-Bobadilla, and P. Alvarez-Pellitero. *Ichthyophonus* infections in cultured marine fish from Spain. *Journal of Fish Biology*, 51(4):830–839, October 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Barbin:1997:F AE

- [1908] G. P. Barbin and J. D. McCleave. Fecundity of the American eel *Anguilla rostrata* at 45°N in Maine, U.S.A. *Journal of Fish Biology*, 51(4):840–847, October 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Scocco:1997:HDG

- [1909] P. Scocco, G. Menghi, and P. Ceccarelli. Histochemical differentiation of glycoconjugates occurring in the tilapine intestine. *Journal of Fish Biology*, 51(4):848–857, October 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wildekamp:1997:F RE

- [1910] R. H. Wildekamp, W. Van Neer, F. Küçük, and M. Ünlüsayın. First record of the eastern Asiatic gobionid fish *Pseudorasbora parva* from the Asiatic part of Turkey. *Journal of Fish Biology*, 51(4):858–861, October 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:BRj

- [1911] Anonymous. Book reviews. *Journal of Fish Biology*, 51(4):862–867, October 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:BRk

- [1912] Anonymous. Books received. *Journal of Fish Biology*, 51(4):867, October 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Salhi:1997:IIP

- [1913] M. Salhi, M. S. Izquierdo, C. M. Hernandez-Cruz, J. Socorro, and H. Fernandez-Palacios. The improved incorporation of polyunsaturated fatty acids and changes in liver structure in larval gilthead seabream fed on microdiets. *Journal of Fish Biology*, 51(5):869–879, November 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Yeomans:1997:KSC

- [1914] W. E. Yeomans, J. C. Chubb, and R. A. Sweeting. *Khawia sinensis* (Cestoda: Caryophyllidea) — an indicator of legislative failure to protect freshwater habitats in the British Isles? *Journal of Fish Biology*, 51(5):880–885, November 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Iwama:1997:OCR

- [1915] G. K. Iwama, A. Takemura, and K. Takano. Oxygen consumption rates of tilapia in fresh water, sea water, and hypersaline sea water. *Journal of Fish Biology*, 51(5):886–894, November 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fevolden:1997:GDS

- [1916] S. E. Fevolden and G. H. Pogson. Genetic divergence at the synaptophysin (Syn I) locus among Norwegian coastal and north-east Arctic populations of Atlantic cod. *Journal of Fish Biology*, 51(5):895–908, November 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jerry:1997:PGS

- [1917] D. R. Jerry. Population genetic structure of the catadromous Australian bass from throughout its range. *Journal of Fish Biology*, 51(5):909–920, November 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Janssen:1997:CRD

- [1918] J. Janssen. Comparison of response distance to prey via the lateral line in the ruffe and yellow perch. *Journal of Fish Biology*, 51(5):921–930, November 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Munday:1997:CEC

- [1919] P. L. Munday and S. K. Wilson. Comparative efficacy of clove oil and other chemicals in anaesthetization of *Pomacentrus amboinensis*, a coral reef fish. *Journal of Fish Biology*, 51(5):931–938, November 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sutela:1997:FCV

- [1920] T. Sutela and A. Huusko. Food consumption of vendace *Coregonus albula* larvae in Lake Lentua, Finland. *Journal of Fish Biology*, 51(5):939–951, November 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Santiago:1997:ABA

- [1921] J. A. Santiago and J. J. Castro. Acoustic behaviour of *Abudefduf luridus*. *Journal of Fish Biology*, 51(5):952–959, November 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hill:1997:PAA

- [1922] J. Hill and I. A. Johnston. Photomicrographic atlas of Atlantic herring embryonic development. *Journal of Fish Biology*, 51(5):960–977, November 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rajasilta:1997:RCM

- [1923] M. Rajasilta, J. Paranko, and P. T. Laine. Reproductive characteristics of the male herring in the northern Baltic Sea. *Journal of Fish Biology*, 51(5):978–988, November 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

O'Keefe:1997:FRD

- [1924] R. A. O'Keefe and T. J. Benfey. The feeding response of diploid and triploid Atlantic salmon and brook trout. *Journal of Fish Biology*, 51(5):989–997, November 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Barton:1997:PSE

- [1925] B. A. Barton and W. P. Dwyer. Physiological stress effects of continuous- and pulsed-DC electroshock on juvenile bull trout. *Journal of Fish Biology*, 51(5):998–1008, November 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Huntigford:1997:SDP

- [1926] F. A. Huntigford and C. Garica de Leaniz. Social dominance, prior residence and the acquisition of profitable feeding sites in juvenile Atlantic salmon. *Journal of Fish Biology*, 51(5):1009–1014, November 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sandstro:1997:TES

- [1927] O. Sandströ, I. Abrahamsson, J. Andersson, and M. Vetemaa. Temperature effects on spawning and egg development in Eurasian perch. *Journal of Fish Biology*, 51(5):1015–1024, November 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Balling:1997:LDI

- [1928] T. E. Balling and W. Pfeiffer. Location-dependent infection of fish parasites in Lake Constance. *Journal of Fish Biology*, 51(5):1025–1032, November 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Amundsen:1997:ISE

- [1929] P.-A. Amundsen, R. Kristoffersen, R. Knudsen, and A. Klemetsen. Infection of *Salmincola edwardsii* (Copepoda: Lernaeopodidae) in an age-structured population of Arctic charr — a long-term study. *Journal of Fish Biology*, 51(5):1033–1046, November 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Johnston:1997:DMY

- [1930] T. A. Johnston. Downstream movements of young-of-the-year fishes in Catamaran Brook and the Little Southwest Miramichi River, New Brunswick. *Journal of Fish Biology*, 51(5):1047–1062, November 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ragonese:1997:CPL

- [1931] S. Ragonese and G. B. Giusto. *Chaunax pictus* Lowe 1846 — first record of the family Chaunacidae in the Mediterranean Sea. *Journal of Fish Biology*, 51(5):1063–1065, November 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Darchambeau:1997:FOS

- [1932] F. Darchambeau and P. Poncin. Field observations of the spawning behaviour of European grayling. *Journal of Fish Biology*, 51(5):1066–1068, November 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:BR1

- [1933] Anonymous. Book reviews. *Journal of Fish Biology*, 51(5):1069–1070, November 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Zhang:1997:CIP

- [1934] Q. Zhang and T. R. Tiersch. Chromosomal inheritance patterns of intergeneric hybrids of ictalurid catfishes: odd diploid numbers with equal parental contributions. *Journal of Fish Biology*, 51(6):1073–1084, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jepsen:1997:TPR

- [1935] D. B. Jepsen, K. O. Winemiller, and D. C. Taphorn. Temporal patterns of resource partitioning among *Cichla* species in a Venezuelan blackwater river. *Journal of Fish Biology*, 51(6):1085–1108, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Specziar:1997:FSG

- [1936] A. Specziár, L. Tölg, and P. Bíró. Feeding strategy and growth of cyprinids in the littoral zone of Lake Balaton. *Journal of Fish Biology*, 51(6):1109–1124, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Yoshizaki:1997:CSC

- [1937] G. Yoshizaki, I. Hirono, T. Aoki, and F. Takashima. Cloning and sequencing of cDNAs of the β -globin gene family in carp. *Journal of Fish Biology*, 51(6):1125–1136, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Propst:1997:PDG

- [1938] D. L. Propst and J. A. Stefferud. Population dynamics of Gila trout in the Gila River drainage of the south-western United States. *Journal of Fish Biology*, 51(6):1137–1154, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Booth:1997:LHL

- [1939] A. J. Booth. On the life history of the lesser gurnard (Scorpaeniformes: Triglididae) inhabiting the Agulhas Bank, South Africa. *Journal of Fish Biology*, 51(6):1155–1173, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Erkinaro:1997:IOH

- [1940] J. Erkinaro, J. B. Dempson, M. Julkunen, and E. Niemelä. Importance of ontogenetic habitat shifts to juvenile output and life history of Atlantic salmon in a large subarctic river: an approach based on analysis of scale characteristics. *Journal of Fish Biology*, 51(6):1174–1185, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Aguirre:1997:PDP

- [1941] H. Aguirre. Presence of dentition in the premaxilla of juvenile *Mullus barbatus* and *M. surmuletus*. *Journal of Fish Biology*, 51(6):1186–1191, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bailly:1997:CAM

- [1942] N. Bailly. *Caelorinchus abditilux* Merrett, 1980, a junior synonym of *Caelorinchus caudani* (Koehler, 1896) (Teleostei: Macrouridae). *Journal of Fish Biology*, 51(6):1192–1196, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Buzzi:1997:BDA

- [1943] M. Buzzi, R. J. Henderson, and J. R. Sargent. The biosynthesis of docosahexaenoic acid [22:6(n-3)] from linolenic acid in primary hepatocytes isolated from wild northern pike. *Journal of Fish Biology*, 51(6):1197–1208, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Einarsson:1997:SVT

- [1944] S. Einarsson, A. C. Jönsson, and P. Spencer Davies. Seasonal variation in trypsin activity in juvenile Atlantic salmon upper and lower modal groups. *Journal of Fish Biology*, 51(6):1209–1218, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Colman:1997:RBE

- [1945] J. G. Colman. A review of the biology and ecology of the whale shark. *Journal of Fish Biology*, 51(6):1219–1234, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Allibone:1997:DFR

- [1946] R. M. Allibone and C. R. Townsend. Distribution of four recently discovered galaxiid species in the Taieri River, New Zealand: the role of macrohabitat. *Journal of Fish Biology*, 51(6):1235–1246, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Allibone:1997:RBS

- [1947] R. M. Allibone and C. R. Townsend. Reproductive biology, species status and taxonomic relationships of four recently discovered galaxiid fishes in a New Zealand river. *Journal of Fish Biology*, 51(6):1247–1261, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kraak:1997:HQE

- [1948] S. B. M. Kraak, T. C. M. Bakker, and B. Mundwiler. How to quantify embryo survival in nest-building fishes, exemplified with three-spined sticklebacks. *Journal of Fish Biology*, 51(6):1262–1264, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Verspoor:1997:SSS

- [1949] E. Verspoor and C. De Garcia Leániz. Stocking success of Scottish Atlantic salmon in two Spanish rivers. *Journal of Fish Biology*, 51(6):1265–1269, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:BRm

- [1950] Anonymous. Book reviews. *Journal of Fish Biology*, 51(6):1270–1275, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:FSP

- [1951] Anonymous. Further symposium presentations not published in this supplement. *Journal of Fish Biology*, 51(sA):v–vi, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Heath:1997:PID

- [1952] M. Heath and A. Gallego. From the biology of the individual to the dynamics of the population: bridging the gap in fish early life studies. *Journal of Fish Biology*, 51(sA):1–29, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Somarakis:1997:FAO

- [1953] S. Somarakis, I. Kostikas, and N. Tsimenides. Fluctuating asymmetry in the otoliths of larval fish as an indicator of condition: conceptual and methodological aspects. *Journal of Fish Biology*, 51(sA):30–38, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Karjalainen:1997:EFC

- [1954] J. Karjalainen, D. Miserque, and H. Huuskonen. The estimation of food consumption in larval and juvenile fish: experimental evaluation of bioenergetics models. *Journal of Fish Biology*, 51(sA):39–51, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Houde:1997:PTL

- [1955] E. D. Houde. Patterns and trends in larval-stage growth and mortality of teleost fish. *Journal of Fish Biology*, 51(sA):52–83, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pepin:1997:PPS

- [1956] P. Pepin and R. W. Penney. Patterns of prey size and taxonomic composition in larval fish: are there general size-dependent models? *Journal of Fish Biology*, 51(sA):84–100, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wang:1997:IBM

- [1957] S. B. Wang, J. H. Cowan, Jr., K. A. Rose, and E. D. Houde. Individual-based modelling of recruitment variability and biomass production of bay anchovy in mid-Chesapeake Bay. *Journal of Fish Biology*, 51(sA): 101–120, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gallego:1997:EGD

- [1958] A. Gallego and M. Heath. The effect of growth-dependent mortality, external environment and internal dynamics on larval fish otolith growth: an individual-based modelling approach. *Journal of Fish Biology*, 51(sA): 121–134, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bailey:1997:RLR

- [1959] K. M. Bailey, P. J. Stabeno, and D. A. Powers. The role of larval retention and transport features in mortality and potential gene flow of wall-eye pollock. *Journal of Fish Biology*, 51(sA):135–154, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hay:1997:LDA

- [1960] D. E. Hay and P. B. McCarter. Larval distribution, abundance, and stock structure of British Columbia herring. *Journal of Fish Biology*, 51(sA): 155–175, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kingsford:1997:IPM

- [1961] M. Kingsford and M. Finn. The influence of phase of the moon and physical processes on the input of presettlement fishes to coral reefs. *Journal of Fish Biology*, 51(sA):176–205, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dickey-Collas:1997:DWI

- [1962] M. Dickey-Collas, J. Brown, L. Fernand, A. E. Hill, K. J. Horsburgh, and R. W. Garvine. Does the western Irish Sea gyre influence the distribution of pelagic juvenile fish? *Journal of Fish Biology*, 51(sA):206–229, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hillgruber:1997:FLB

- [1963] N. Hillgruber, M. Kloppmann, E. Wahl, and H. von Westernhagen. Feeding of larval blue whiting and Atlantic mackerel: a comparison of forag-

ing strategies. *Journal of Fish Biology*, 51(sA):230–249, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Folkvord:1997:ELH

- [1964] A. Folkvord, K. Rukan, A. Johannessen, and E. Moksness. Early life history of herring larvae in contrasting feeding environments determined by otolith microstructure analysis. *Journal of Fish Biology*, 51(sA):250–263, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kristiansen:1997:ELS

- [1965] T. S. Kristiansen, K. E. Jørstad, H. Otterå, O. I. Paulsen, and T. Svåsand. Estimates of larval survival of cod by releases of genetically marked yolk-sac larvae. *Journal of Fish Biology*, 51(sA):264–283, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bergeron:1997:NAI

- [1966] J.-P. Bergeron. Nucleic acids in ichthyoplankton ecology: a review, with emphasis on recent advances for new perspectives. *Journal of Fish Biology*, 51(sA):284–302, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Helminen:1997:PVR

- [1967] H. Helminen, J. Sarvala, and J. Karjalainen. Patterns in vendace recruitment in Lake Pyhäjärvi, south-west Finland. *Journal of Fish Biology*, 51(sA):303–316, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Desaunay:1997:SLT

- [1968] Y. Desaunay and D. Guerault. Seasonal and long-term changes in biometrics of eel larvae: a possible relationship between recruitment variation and North Atlantic ecosystem productivity. *Journal of Fish Biology*, 51(sA):317–339, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Munk:1997:PSS

- [1969] P. Munk. Prey size spectra and prey availability of larval and small juvenile cod. *Journal of Fish Biology*, 51(sA):340–351, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gronkjaer:1997:NCV

- [1970] P. GrønkJær, C. Clemmesen, and M. St. John. Nutritional condition and vertical distribution of Baltic cod larvae. *Journal of Fish Biology*, 51(sA):352–369, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Blom:1997:IVC

- [1971] G. Blom, A. Folkvord, A. Johannessen, and P. Fossum. Interannual variations in condition indices of larval Norwegian spring-spawning herring. *Journal of Fish Biology*, 51(sA):370–384, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Grioche:1997:OMP

- [1972] A. Grioche, P. Koubbi, and B. Sautour. Ontogenic migration of *Pleuronectes flesus* larvae in the eastern English Channel. *Journal of Fish Biology*, 51(sA):385–396, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:PA

- [1973] Anonymous. Poster abstracts. *Journal of Fish Biology*, 51(sA):397–423, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1997:RS

- [1974] Anonymous. Referees for this supplement. *Journal of Fish Biology*, 51(sA):425, December 1997. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gregg:1998:IHT

- [1975] R. E. Gregg, J. H. Howard, and F. Snhonhiwa. Introgressive hybridization of tilapias in Zimbabwe. *Journal of Fish Biology*, 52(1):1–10, January 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Faustino:1998:DOS

- [1976] M. Faustino and D. M. Power. Development of osteological structures in the sea bream: vertebral column and caudal fin complex. *Journal of Fish Biology*, 52(1):11–22, January 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hoque:1998:EHS

- [1977] M. T. Hoque, F. M. Yusoff, T. Law, and M. A. Syed. Effect of hydrogen sulphide on liver somatic index and Fulton's condition factor in *Mystus nemurus*. *Journal of Fish Biology*, 52(1):23–30, January 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Suquet:1998:APT

- [1978] M. Suquet, C. Dreanno, G. Dorange, Y. Normant, L. Quemener, J. L. Gaignon, and R. Billard. The ageing phenomenon of turbot spermatozoa: effects on morphology, motility and concentration, intracellular ATP content, fertilization, and storage capacities. *Journal of Fish Biology*, 52(1):31–41, January 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Valdimarsson:1998:SSJ

- [1979] S. K. Valdimarsson and N. B. Metcalfe. Shelter selection in juvenile Atlantic salmon, or why do salmon seek shelter in winter? *Journal of Fish Biology*, 52(1):42–49, January 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mazon:1998:FMG

- [1980] A. de F. Mazon, M. N. Fernandes, M. A. Nolasco, and W. Severi. Functional morphology of gills and respiratory area of two active rheophilic fish species, *Plagioscion squamosissimus* and *Prochilodus scrofa*. *Journal of Fish Biology*, 52(1):50–61, January 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dockray:1998:RJR

- [1981] J. J. Dockray, I. J. Morgan, S. D. Reid, and C. M. Wood. Responses of juvenile rainbow trout, under food limitation, to chronic low pH and elevated summer temperatures, alone and in combination. *Journal of Fish Biology*, 52(1):62–82, January 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Val:1998:RBC

- [1982] A. L. Val, G. C. de Menezes, and C. M. Wood. Red blood cell adrenergic responses in Amazonian teleosts. *Journal of Fish Biology*, 52(1):83–93, January 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Yoneda:1998:OSB

- [1983] M. Yoneda, M. Tokimura, H. Fujita, N. Takeshita, K. Takeshita, M. Matsuyama, and S. Matsuura. Ovarian structure and batch fecundity in *Lophiomus setigerus*. *Journal of Fish Biology*, 52(1):94–106, January 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mamuris:1998:MVB

- [1984] Z. Mamuris, P. Apostolidis, P. Panagiotaki, A. J. Theodorou, and C. Triantaphyllidis. Morphological variation between red mullet populations in Greece. *Journal of Fish Biology*, 52(1):107–117, January 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Clifford:1998:GCA

- [1985] S. L. Clifford, P. McGinnity, and A. Ferguson. Genetic changes in an Atlantic salmon population resulting from escaped juvenile farm salmon. *Journal of Fish Biology*, 52(1):118–127, January 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Scott:1998:PCO

- [1986] P. Scott, P. R. Witthames, R. J. Turner, and A. V. M. Canario. Plasma concentrations of ovarian steroids in relation to oocyte final maturation and ovulation in female plaice sampled at sea. *Journal of Fish Biology*, 52(1):128–145, January 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Moles:1998:EBP

- [1987] A. Moles and J. Heifetz. Effects of the brain parasite *Myxobolus arcticus* on sockeye salmon. *Journal of Fish Biology*, 52(1):146–151, January 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Coward:1998:ISA

- [1988] K. Coward, N. R. Bromage, and D. C. Little. Inhibition of spawning and associated suppression of sex steroid levels during confinement in the substrate-spawning *Tilapia zillii*. *Journal of Fish Biology*, 52(1):152–165, January 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wagemans:1998:EDC

- [1989] F. Wagemans, B. Focant, and P. Vandewalle. Early development of the cephalic skeleton in the turbot. *Journal of Fish Biology*, 52(1):166–204, January 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Astrup:1998:DBH

- [1990] J. Astrup and B. Møhl. Discrimination between high and low repetition rates of ultrasonic pulses by the cod. *Journal of Fish Biology*, 52(1):205–208, January 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Archer:1998:ROS

- [1991] S. N. Archer and J. Hirano. Rod opsin sequence in the John Dory: further evidence for the spectral tuning of rhodopsin. *Journal of Fish Biology*, 52(1):209–212, January 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bassompierre:1998:IWU

- [1992] M. Bassompierre, H. R. Kristiansen, and E. McLean. Influence of weight upon in vitro protein digestion in rainbow trout. *Journal of Fish Biology*, 52(1):213–216, January 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1998:SIC

- [1993] Anonymous. Second international congress on the biology of fishes. *Journal of Fish Biology*, 52(1):221–222, January 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ali:1998:DRFa

- [1994] M. Ali, M. Przybylski, and R. J. Wootton. Do random fluctuations in daily ration affect the growth rate of juvenile three-spined sticklebacks? *Journal of Fish Biology*, 52(2):223–229, February 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Larsson:1998:GFC

- [1995] S. Larsson and I. Berglund. Growth and food consumption of 0+ Arctic charr fed pelleted or natural food at six different temperatures. *Journal of Fish Biology*, 52(2):230–242, February 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kurkilahti:1998:IEB

- [1996] M. Kurkilahti, M. Appelberg, E. Bergstrand, and O. Enderlein. An indirect estimate of bimodal gillnet selectivity of smelt. *Journal of Fish Biology*, 52(2):243–254, February 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sanchez-Vazquez:1998:CRD

- [1997] F. J. Sánchez-Vázquez and M. Tabata. Circadian rhythms of demand-feeding and locomotor activity in rainbow trout. *Journal of Fish Biology*, 52(2):255–267, February 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vuorinen:1998:RSS

- [1998] P. J. Vuorinen, K. Nyberg, and H. Lehtonen. Radioactive strontium (^{85}Sr) in marking newly hatched pike and success of stocking. *Journal of Fish Biology*, 52(2):268–280, February 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Yamamoto:1998:CAD

- [1999] T. Yamamoto, H. Ueda, and S. Higashi. Correlation among dominance status, metabolic rate and otolith size in masu salmon. *Journal of Fish Biology*, 52(2):281–290, February 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ng:1998:RSE

- [2000] H. H. Ng and P. K. L. Ng. A revision of the South-east Asian catfish genus *Silurichthys*. *Journal of Fish Biology*, 52(2):291–333, February 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Persson:1998:CMO

- [2001] P. Persson, K. Sundell, B. Th. Björnsson, and H. Lundqvist. Calcium metabolism and osmoregulation during sexual maturation of river running Atlantic salmon. *Journal of Fish Biology*, 52(2):334–349, February 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Machias:1998:RFO

- [2002] A. Machias, N. Tsimenides, L. Kokokiris, and P. Divanach. Ring formation on otoliths and scales of *Pagrus pagrus*: a comparative study. *Journal of Fish Biology*, 52(2):350–361, February 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Armstrong:1998:RBH

- [2003] J. D. Armstrong. Relationships between heart rate and metabolic rate of pike: integration of existing data. *Journal of Fish Biology*, 52(2):362–368, February 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Takasusuki:1998:OAR

- [2004] J. Takasusuki, M. N. Fernandes, and W. Severi. The occurrence of aerial respiration in *Rhinelepis strigosa* during progressive hypoxia. *Journal of Fish Biology*, 52(2):369–379, February 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Allanas:1998:DCG

- [2005] J. Mat Allanas. Description of *Careproctus guillemi* n. sp. (Pisces: Scorpaeniformes) from Weddell Sea. *Journal of Fish Biology*, 52(2):380–385, February 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dalzell:1998:RDC

- [2006] P. Dalzell and A. Smith. Rapid data collection and assessment of the biology of *Acanthurus nigrofuscus* at Woleai Atoll, Micronesia. *Journal of Fish Biology*, 52(2):386–397, February 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Platell:1998:DHM

- [2007] M. E. Platell, C. Potter, and K. R. Clarke. Do the habitats, mouth morphology and diets of the mullids *Upeneichthys stotti* and *U. lineatus* in coastal waters of south-western Australia differ? *Journal of Fish Biology*, 52(2):398–418, February 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hesthagen:1998:RAB

- [2008] T. Hesthagen and B. Jonsson. The relative abundance of brown trout in acidic softwater lakes in relation to water quality in tributary streams. *Journal of Fish Biology*, 52(2):419–429, February 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fujioka:1998:SGS

- [2009] Y. Fujioka. Survival, growth and sex ratios of gynogenetic diploid homomorpho. *Journal of Fish Biology*, 52(2):430–442, February 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mookerji:1998:DSP

- [2010] N. Mookerji, C. Heller, H. J. Meng, H. R. Bürgi, and R. Müller. Diel and seasonal patterns of food intake and prey selection by *Coregonus* sp. in re-oligotrophic Lake Lucerne, Switzerland. *Journal of Fish Biology*, 52(3):443–457, March 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Martin-Smith:1998:RBF

- [2011] K. M. Martin-Smith. Relationships between fishes and habitat in rainforest streams in Sabah, Malaysia. *Journal of Fish Biology*, 52(3):458–482, March 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Masuda:1998:OSB

- [2012] R. Masuda and K. Tsukamoto. The ontogeny of schooling behaviour in the striped jack. *Journal of Fish Biology*, 52(3):483–493, March 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Krause:1998:TAI

- [2013] J. Krause, G. D. Ruxton, and D. Rubenstein. Is there always an influence of shoal size on predator hunting success? *Journal of Fish Biology*, 52(3):494–501, March 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Johnson:1998:SCG

- [2014] K. Johnson, P. Thomas, and R. R. Wilson, Jr. Seasonal cycles of gonadal development and plasma sex steroid levels in *Epinephelus morio*, a protogynous grouper in the eastern Gulf of Mexico. *Journal of Fish Biology*, 52(3):502–518, March 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Watanabe:1998:FGE

- [2015] Y. Watanabe and H. Saito. Feeding and growth of early juvenile Japanese sardines in the Pacific waters off central Japan. *Journal of Fish Biology*, 52(3):519–533, March 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Maes:1998:FCA

- [2016] J. Maes, P. A. van Damme, A. Taillieu, and F. Ollevier. Fish communities along an oxygen-poor salinity gradient (Zeeschelde Estuary, Belgium). *Journal of Fish Biology*, 52(3):534–546, March 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lokman:1998:IMS

- [2017] P. M. Lokman and G. Young. An intersexual migratory (silver) longfinned New Zealand eel and its gonadal response to treatment with salmon pituitary homogenate. *Journal of Fish Biology*, 52(3):547–555, March 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Merigoux:1998:BSD

- [2018] S. Mérigoux and D. Ponton. Body shape, diet and ontogenetic diet shifts in young fish of the Sinnamary River, French Guiana, South America. *Journal of Fish Biology*, 52(3):556–569, March 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Suresh:1998:MFG

- [2019] A. V. Suresh and R. J. Sheehan. Muscle fibre growth dynamics in diploid and triploid rainbow trout. *Journal of Fish Biology*, 52(3):570–587, March 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Suresh:1998:BMC

- [2020] V. Suresh and R. J. Sheehan. Biochemical and morphological correlates of growth in diploid and triploid rainbow trout. *Journal of Fish Biology*, 52(3):588–599, March 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Garner:1998:USM

- [2021] P. Garner, S. Clough, S. W. Griffiths, D. Deans, and A. Ibbotson. Use of shallow marginal habitat by *Phoxinus phoxinus*: a trade-off between temperature and food? *Journal of Fish Biology*, 52(3):600–609, March 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Heupel:1998:ATR

- [2022] M. R. Heupel, C. A. Simpfendorfer, and M. B. Bennett. Analysis of tissue responses to fin tagging in Australian carcharhinids. *Journal of Fish Biology*, 52(3):610–620, March 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bernier:1998:CDA

- [2023] N. J. Bernier and D. J. Randall. Carbon dioxide anaesthesia in rainbow trout: effects of hypercapnic level and stress on induction and recovery from anaesthetic treatment. *Journal of Fish Biology*, 52(3):621–637, March 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jonsson:1998:LTS

- [2024] N. Jonsson, B. Jonsson, and L. P. Hansen. Long-term study of the ecology of wild Atlantic salmon smolts in a small Norwegian river. *Journal of Fish Biology*, 52(3):638–650, March 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1998:BRa

- [2025] Anonymous. Book reviews. *Journal of Fish Biology*, 52(3):651–653, March 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1998:BRb

- [2026] Anonymous. Books received. *Journal of Fish Biology*, 52(3):653, March 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1998:E

- [2027] Anonymous. Erratum. *Journal of Fish Biology*, 52(3):654, March 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gelineu:1998:EFT

- [2028] A. Gelineu, F. Médale, and T. Boujard. Effect of feeding time on post-prandial nitrogen excretion and energy expenditure in rainbow trout. *Journal of Fish Biology*, 52(4):655–664, April 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Beacham:1998:PSA

- [2029] T. D. Beacham and J. B. Dempson. Population structure of Atlantic salmon from the Conne River, Newfoundland as determined from microsatellite DNA. *Journal of Fish Biology*, 52(4):665–676, April 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vitturi:1998:CKN

- [2030] R. Vitturi, A. Libertini, M. Campolmi, F. Calderazzo, and A. Mazzola. Conventional karyotype, nucleolar organizer regions and genome size in five Mediterranean species of Syngnathidae (Pisces, Syngnathiformes). *Journal of Fish Biology*, 52(4):677–687, April 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kristiansen:1998:ESS

- [2031] T. S. Kristiansen and T. Svåsand. Effect of size-selective mortality on growth of coastal cod illustrated by tagging data and an individual-based growth and mortality model. *Journal of Fish Biology*, 52(4):688–705, April 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hänfling:1998:GMV

- [2032] B. Hänfling and R. Brandl. Genetic and morphological variation in a common European cyprinid, *Leuciscus cephalus* within and across Cen-

tral European drainages. *Journal of Fish Biology*, 52(4):706–715, April 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rasotto:1998:MGM

- [2033] M. B. Rasotto and D. Y. Shapiro. Morphology of gonoducts and male genital papilla, in the bluehead wrasse: implications and correlates on the control of gamete release. *Journal of Fish Biology*, 52(4):716–725, April 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lahnsteiner:1998:SMM

- [2034] F. Lahnsteiner and R. A. Patzner. Sperm motility of the marine teleosts *Boops boops*, *Diplodus sargus*, *Mullus barbatus* and *Trachurus mediterraneus*. *Journal of Fish Biology*, 52(4):726–742, April 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Andersen:1998:EMS

- [2035] N. G. Andersen. The effect of meal size on gastric evacuation in whiting. *Journal of Fish Biology*, 52(4):743–755, April 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Moutou:1998:ERL

- [2036] K. A. Moutou, I. D. McCarthy, and D. F. Houlihan. The effect of ration level and social rank on the development of fin damage in juvenile rainbow trout. *Journal of Fish Biology*, 52(4):756–770, April 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kuusipalo:1998:SMM

- [2037] L. Kuusipalo. Scale morphology in malawian cichlids. *Journal of Fish Biology*, 52(4):771–781, April 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Giaever:1998:PGS

- [2038] M. Giæver and J. Stien. Population genetic substructure in blue whiting based on allozyme data. *Journal of Fish Biology*, 52(4):782–795, April 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Elliott:1998:GED

- [2039] N. G. Elliott, P. S. Lowry, P. M. Grewe, B. H. Innes, G. K. Yearsley, and R. D. Ward. Genetic evidence for depth- and spatially separated stocks of the deep-water spikey oreo in Australasian waters. *Journal of Fish Biology*, 52(4):796–816, April 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Martins:1998:DVT

- [2040] M. J. Martins, M. J. Collares-Pereira, G. Cowx, and M. M. Coelho. Diploids v. triploids of *Rutilus alburnoides*: spatial segregation and morphological differences. *Journal of Fish Biology*, 52(4):817–828, April 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jerry:1998:MVC

- [2041] D. R. Jerry and S. C. Cairns. Morphological variation in the catadromous Australian bass, from seven geographically distinct riverine drainages. *Journal of Fish Biology*, 52(4):829–843, April 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fernandes:1998:CCA

- [2042] M. N. Fernandes, S. A. Perna, and S. E. Moron. Chloride cell apical surface changes in gill epithelia of the armoured catfish *Hypostomus plecostomus* during exposure to distilled water. *Journal of Fish Biology*, 52(4):844–849, April 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ostenfeld:1998:TCB

- [2043] T. H. Ostenfeld, E. McLean, and R. H. Devlin. Transgenesis changes body and head shape in Pacific salmon. *Journal of Fish Biology*, 52(4):850–854, April 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Arrhenius:1998:VLD

- [2044] F. Arrhenius. Variable length of daily feeding period in bioenergetics modelling: a test with 0-group Baltic herring. *Journal of Fish Biology*, 52(4):855–860, April 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Chikhi:1998:LGV

- [2045] L. Chikhi, F. Bonhomme, and J.-F. Agnès. Low genetic variability in a widely distributed and abundant clupeid species, *Sardinella aurita*. New empirical results and interpretations. *Journal of Fish Biology*, 52(5):861–878, May 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ciannelli:1998:DAB

- [2046] L. Ciannelli, R. D. Drodeur, and T. W. Buckley. Development and application of a bioenergetics model for juvenile walleye Pollock. *Journal*

of *Fish Biology*, 52(5):879–898, May 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vaarkonyi:1998:CMA

- [2047] E. Váarkonyi, M. Bercsényi, C. Ozouf-Costaz, and R. Billard. Chromosomal and morphological abnormalities caused by oocyte ageing in *Silurus glanis*. *Journal of Fish Biology*, 52(5):899–906, May 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Spidle:1998:SBM

- [2048] A. P. Spidle, T. P. Puinn, and P. Bentzen. Sex-biased marine survival and growth in a population of Coho salmon. *Journal of Fish Biology*, 52(5):907–915, May 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Coughlan:1998:MDV

- [2049] J. P. Coughlan, A. K. Imsland, P. T. Galvin, R. D. Fitzgerald, G. Naevdal, and T. F. Cross. Microsatellite DNA variation in wild populations and farmed strains of turbot from Ireland and Norway: a preliminary study. *Journal of Fish Biology*, 52(5):916–922, May 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lyse:1998:BDS

- [2050] A. A. Lyse, S. O. Stefansson, and A. Fernö. Behaviour and diet of sea trout post-smolts in a Norwegian fjord system. *Journal of Fish Biology*, 52(5):923–936, May 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Coelho:1998:LTA

- [2051] M. M. Coelho, N. G. Bogutskaya, J. A. Aodrigues, and M. J. Collares-Pereira. *Leuciscus torgalensis*, and *L. aradensis*, two new cyprinids for Portuguese fresh waters. *Journal of Fish Biology*, 52(5):937–950, May 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Horppila:1998:EMR

- [2052] J. Horppila. Effects of mass removal and variable recruitment on nutrient excretion by a planktivorous roach stock. *Journal of Fish Biology*, 52(5):951–961, May 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Huuskonen:1998:EAL

- [2053] H. Huuskonen, J. Karjalainen, N. Medgyesy, and W. Wieser. Energy allocation in larval and juvenile *Coregonus lavaretus*: validation of a

bioenergetics model. *Journal of Fish Biology*, 52(5):962–972, May 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rodewald:1998:EGH

- [2054] A. D. Rodewald and S. A. Foster. Effects of gravidity on habitat use and antipredator behaviour in three-spined sticklebacks. *Journal of Fish Biology*, 52(5):973–984, May 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ochi:1998:CBC

- [2055] H. Ochi and Y. Yanagisawa. Commensalism between cichlid fishes through differential tolerance of guarding parents toward intruders. *Journal of Fish Biology*, 52(5):985–996, May 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vilizzi:1998:AGC

- [2056] L. Vilizzi. Age, growth and cohort composition of 0+ carp in the River Murray, Australia. *Journal of Fish Biology*, 52(5):997–1013, May 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Crozier:1998:GIH

- [2057] W. W. Crozier. Genetic implications of hatchery rearing in Atlantic salmon: effects of rearing environment on genetic composition. *Journal of Fish Biology*, 52(5):1014–1025, May 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cutts:1998:AGD

- [2058] C. J. Cutts, N. B. Metcalfe, and A. C. Taylor. Aggression and growth depression in juvenile Atlantic salmon: the consequences of individual variation in standard metabolic rate. *Journal of Fish Biology*, 52(5):1026–1037, May 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Coggan:1998:ADR

- [2059] R. A. Coggan, J. D. M. Gordon, and N. R. Merrett. Abundance, distribution, reproduction and diet of notacanthid fishes from the north-east Atlantic. *Journal of Fish Biology*, 52(5):1038–1057, May 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Liang:1998:RSO

- [2060] X. F. Liang, J. K. Kiu, and B. Y. Huang. The role of sense organs in the feeding behaviour of Chinese perch. *Journal of Fish Biology*, 52(5):1058–

1067, May 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pearez-Espanta:1998:GCP

- [2061] H. Pérez-España, F. Galvaan-Magaña, and L. A. Abitia-Cáardenas. Growth, consumption, and productivity of the California killifish in Ojo de Liebre Lagoon, Mexico. *Journal of Fish Biology*, 52(5):1068–1077, May 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Aenderson:1998:CLT

- [2062] B. A. Aenderson and J. L. Wong. Control of lake trout reproduction: role of lipids. *Journal of Fish Biology*, 52(5):1078–1082, May 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tkilbrei:1998:ELT

- [2063] O. T. Tkilbrei and M. Holm. Effects of long-term exercise on survival, homing and straying of released Atlantic salmon smolts. *Journal of Fish Biology*, 52(5):1083–1086, May 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1998:Aa

- [2064] Anonymous. Announcements. *Journal of Fish Biology*, 52(5):1087–1088, May 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Galvez:1998:ZBG

- [2065] F. Galvez, N. Webb, C. Hogstrand, and C. M. Wood. Zinc binding to the gills of rainbow trout: the effect of long-term exposure to sublethal zinc. *Journal of Fish Biology*, 52(6):1089–1104, June 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Grant:1998:EFL

- [2066] S. M. Grant, J. A. Arown, and D. L. Boyce. Enlarged fatty livers of small juvenile cod: a comparison of laboratory-cultured and wild juveniles. *Journal of Fish Biology*, 52(6):1105–1114, June 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Oliveira:1998:MTM

- [2067] R. F. Oliveira and V. C. Almada. Mating tactics and male-male courtship in the lek-breeding cichlid *Oreochromis mossambicus*. *Journal of Fish Biology*, 52(6):1115–1129, June 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Maltagliati:1998:PIA

- [2068] F. Maltagliati. A preliminary investigation of allozyme genetic variation and population geographical structure in *Aphanius fasciatus* from Italian brackish-water habitats. *Journal of Fish Biology*, 52(6):1130–1140, June 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Yossa:1998:DTA

- [2069] M. I. Yossa and C. A. R. M. Araujo-Lima. Detritivory in two Amazonian fish species. *Journal of Fish Biology*, 52(6):1141–1153, June 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Aissaoui:1998:CCT

- [2070] A. Aissaoui, J. Altimiras, and L. Tort. Cardiac conduction times in *Sparus auratus* at different heart rates. Influence of body weight. *Journal of Fish Biology*, 52(6):1154–1164, June 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Baade:1998:MPA

- [2071] U. Baade and F. Fredrich. Movement and pattern of activity of the roach in the River Spree, Germany. *Journal of Fish Biology*, 52(6):1165–1174, June 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McKinnell:1998:ESM

- [2072] S. McKinnell and H. Lundqvist. The effect of sexual maturation on the spatial distribution of Baltic salmon. *Journal of Fish Biology*, 52(6):1175–1185, June 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lyytikäinen:1998:ETF

- [2073] T. Lyytikäinen and M. Jobling. The effect of temperature fluctuations on oxygen consumption and ammonia excretion of underyearling Lake Inari Arctic charr. *Journal of Fish Biology*, 52(6):1186–1198, June 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

B-Rao:1998:MMR

- [2074] C. B-Rao and K. C. Majumdar. Multivariate map representation of phylogenetic relationships: application to tilapiine fish. *Journal of Fish Biology*, 52(6):1199–1217, June 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gallagher:1998:CPF

- [2075] M. L. Gallagher, L. Paramore, D. Alves, and R. A. Rulifson. Comparison of phospholipid and fatty acid composition of wild and cultured striped bass eggs. *Journal of Fish Biology*, 52(6):1218–1228, June 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fujita:1998:IDP

- [2076] T. Fujita, A. Takemura, and K. Takano. Immunochemical detection of precursor proteins of yolk and vitelline envelope, and their annual changes in the blood of *Diodon holocanthus*. *Journal of Fish Biology*, 52(6):1229–1240, June 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Marteinsdottir:1998:MIS

- [2077] G. Marteinsdottir and A. Steinarsson. Maternal influence on the size and viability of Iceland cod *Gadus morhua* eggs and larvae. *Journal of Fish Biology*, 52(6):1241–1258, June 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Adams:1998:TPA

- [2078] C. E. Adams, D. Fraser, F. A. Huntingford, R. B. Greer, C. M. Askew, and A. F. Walker. Trophic polymorphism amongst Arctic charr from Loch Rannoch, Scotland. *Journal of Fish Biology*, 52(6):1259–1271, June 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Berg:1998:SCB

- [2079] O. K. Berg and G. Bremset. Seasonal changes in the body composition of young riverine Atlantic salmon and brown trout. *Journal of Fish Biology*, 52(6):1272–1288, June 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ludwig:1998:CMD

- [2080] A. Ludwig and F. Kirschbaum. Comparison of mitochondrial DNA sequences between the European and the Adriatic sturgeon. *Journal of Fish Biology*, 52(6):1289–1291, June 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Johnsson:1998:IDA

- [2081] J. I. Johnsson and A. Åkerman. Intersexual differences in aggression in juvenile rainbow trout. *Journal of Fish Biology*, 52(6):1292–1294, June 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Quinn:1998:ESD

- [2082] T. P. Quinn and M. V. McPhee. Effects of senescence and density on the aggression of adult female sockeye salmon. *Journal of Fish Biology*, 52(6):1295–1300, June 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Henriques:1998:JNR

- [2083] M. Henriques and V. C. Almada. Juveniles of non-resident fish found in sheltered rocky subtidal areas. *Journal of Fish Biology*, 52(6):1301–1304, June 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Otero:1998:FRE

- [2084] J. G. Otero, M. D. Galeote, and A. Arias. First record for the European Ichthyofauna of *Dentex (Cheimerius) canariensis* Steindachner, 1881. *Journal of Fish Biology*, 52(6):1305–1308, June 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1998:BRc

- [2085] Anonymous. Book reviews. *Journal of Fish Biology*, 52(6):1309–1312, June 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fabre:1998:AFS

- [2086] N. N. Fabré and U. Saint-Paul. Annulus formation on scales and seasonal growth of the Central Amazonian anostomid *Schizodon fasciatus*. *Journal of Fish Biology*, 53(1):1–11, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Datta:1998:CBT

- [2087] S. Datta (Saha) and B. B. Jana. Control of bloom in a tropical lake: grazing efficiency of some herbivorous fishes. *Journal of Fish Biology*, 53(1):12–24, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Greenwood:1998:MBN

- [2088] M. F. D. Greenwood and N. B. Metcalfe. Minnows become nocturnal at low temperatures. *Journal of Fish Biology*, 53(1):25–32, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Natsumeda:1998:SAN

- [2089] T. Natsumeda. Size-assortative nest choice by the Japanese fluvial sculpin in the presence of male-male competition. *Journal of Fish Biology*, 53(1):33–38, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Scocco:1998:UGO

- [2090] P. Scocco, D. Accili, G. Menghi, and P. Ceccarelli. Unusual glycoconjugates in the oesophagus of a tilapine polyhybrid. *Journal of Fish Biology*, 53(1):39–48, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Grutter:1998:HRD

- [2091] A. S. Grutter. Habitat-related differences in the abundance of parasites from a coral reef fish: an indication of the movement patterns of *Hemigymnus melapterus*. *Journal of Fish Biology*, 53(1):49–57, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Szedlmayer:1998:CGR

- [2092] S. T. Szedlmayer. Comparison of growth rate and formation of otolith increments in age-0 red snapper. *Journal of Fish Biology*, 53(1):58–65, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fermon:1998:EIV

- [2093] Y. Fermon and C. Cibert. Ecomorphological individual variation in a population of *Haplochromis nyererei* from the Tanzanian part of Lake Victoria. *Journal of Fish Biology*, 53(1):66–83, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rubin:1998:SEP

- [2094] J.-F. Rubin. Survival and emergence pattern of sea trout fry in substrata of different compositions. *Journal of Fish Biology*, 53(1):84–92, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rieger:1998:MGB

- [2095] P. W. Rieger and R. C. Summerfelt. Microvideography of gas bladder inflation in larval walleye. *Journal of Fish Biology*, 53(1):93–99, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Reiriz:1998:PSE

- [2096] L. Reiriz, A. G. Nicieza, and F. Braña. Prey selection by experienced and naive juvenile Atlantic salmon. *Journal of Fish Biology*, 53(1):100–114, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fu:1998:GFU

- [2097] C. Fu, Y. Cui, S. S. O. Hung, and Z. Zhu. Growth and feed utilization by F⁴ human growth hormone transgenic carp fed diets with different protein levels. *Journal of Fish Biology*, 53(1):115–129, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Magnhagen:1998:ART

- [2098] C. Magnhagen. Alternative reproductive tactics and courtship in the common goby. *Journal of Fish Biology*, 53(1):130–137, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Harvey:1998:CTB

- [2099] R. Harvey and R. S. Batty. Cutaneous taste buds in cod. *Journal of Fish Biology*, 53(1):138–149, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

OConnell:1998:GSA

- [2100] M. O’Connell, M. C. Dillon, J. M. Wright, P. Bentzen, S. Merkouris, and J. Seeb. Genetic structuring among Alaskan Pacific herring populations identified using microsatellite variation. *Journal of Fish Biology*, 53(1):150–163, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Yoneda:1998:RCS

- [2101] M. Yoneda, M. Tokimura, H. Fujita, N. Takeshita, K. Takeshita, M. Matsuyama, and S. Matsuura. Reproductive cycle and sexual maturity of the anglerfish *Lophiomus setigerus* in the East China Sea with a note on specialized spermatogenesis. *Journal of Fish Biology*, 53(1):164–178, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Chen:1998:SLV

- [2102] I-S. Chen, C.-H. Hsu, C.-F. Hui, K.-T. Shao, P. J. Miller, and L.-S. Fang. Sequence length and variation in the mitochondrial control region of two freshwater gobiid fishes belonging to *Rhinogobius* (Teleostei: Gobioidae). *Journal of Fish Biology*, 53(1):179–191, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rognon:1998:MAV

- [2103] X. Rognon, G. G. Teugels, R. Guyomard, P. Galbusera, M. Andriamanga, F. Volckaert, and J. F. Agnès. Morphometric and allozyme variation in the African catfishes *Clarias gariepinus* and *C. anguillaris*. *Journal of Fish Biology*, 53(1):192–207, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Callejas:1998:ISB

- [2104] C. Callejas and M. D. Ochando. Identification of Spanish barbel species using the RAPD technique. *Journal of Fish Biology*, 53(1):208–215, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nielsen:1998:IPS

- [2105] E. E. Nielsen, M. M. Hansen, and K.-L. D. Mensberg. Improved primer sequences for the mitochondrial ND1, ND3/4 and ND5/6 segments in salmonid fishes: application to RFLP analysis of Atlantic salmon. *Journal of Fish Biology*, 53(1):216–220, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Aprahamian:1998:MAA

- [2106] M. W. Aprahamian, G. O. Jones, and P. J. Gough. Movement of adult Atlantic salmon in the Usk estuary, Wales. *Journal of Fish Biology*, 53(1):221–225, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Robison:1998:OSC

- [2107] R. R. Robison, R. D. Fernald, and N. E. Stacey. The olfactory system of a cichlid fish responds to steroidal compounds. *Journal of Fish Biology*, 53(1):226–229, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1998:BRd

- [2108] Anonymous. Book reviews. *Journal of Fish Biology*, 53(1):230–233, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1998:Ab

- [2109] Anonymous. Announcements. *Journal of Fish Biology*, 53(1):234–235, July 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Imsland:1998:SSS

- [2110] A. K. Imsland, T. Nilsen, and A. Folkvord. Stochastic simulation of size variation in turbot: possible causes analysed with an individual-based model. *Journal of Fish Biology*, 53(2):237–258, August 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Xie:1998:RIS

- [2111] X. Xie, T. Long, Y. Zhang, and Z. Cao. Reproductive investment in the *Silurus meridionalis*. *Journal of Fish Biology*, 53(2):259–271, August 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Carter:1998:PSN

- [2112] C. G. Carter, D. F. Houlihan, and S. F. Owen. Protein synthesis, nitrogen excretion and long-term growth of juvenile *Pleuronectes flesus*. *Journal of Fish Biology*, 53(2):272–284, August 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Coward:1998:HCO

- [2113] K. Coward and N. R. Bromage. Histological classification of oocyte growth and the dynamics of ovarian recrudescence in *Tilapia zillii*. *Journal of Fish Biology*, 53(2):285–302, August 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Castonguay:1998:ETS

- [2114] M. Castonguay and D. G. Cyr. Effects on temperature on spontaneous and thyroxine-stimulated locomotor activity of Atlantic cod. *Journal of Fish Biology*, 53(2):303–313, August 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Huntingford:1998:SSG

- [2115] F. A. Huntingford, V. A. Braithwaite, J. D. Armstrong, D. Aird, K. E. Thorpe, and P. Joiner. Social status and growth rates as determinants of site attachment in juvenile Atlantic salmon. *Journal of Fish Biology*, 53(2):314–321, August 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jonsdottir:1998:ERS

- [2116] H. Jónsdóttir, H. J. Malmquist, S. S. Snorrason, G. Gudbergsson, and S. Gudmundsdóttir. Epidemiology of *Renibacterium salmoninarum* in wild Arctic charr and brown trout in Iceland. *Journal of Fish Biology*, 53(2):322–339, August 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Calzada:1998:FSI

- [2117] A. Calzada, A. Medina, and M. L. González de Canales. Fine structure of the intestine development in cultured sea bream larvae. *Journal of Fish Biology*, 53(2):340–365, August 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Herskin:1998:ESS

- [2118] J. Herskin and J. F. Steffensen. Energy savings in sea bass swimming in a school: measurements of tail beat frequency and oxygen consumption at different swimming speeds. *Journal of Fish Biology*, 53(2):366–376, August 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Krause:1998:HCS

- [2119] J. Krause, G. Staaks, and T. Mehner. Habitat choice in shoals of roach as a function of water temperature and feeding rate. *Journal of Fish Biology*, 53(2):377–386, August 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Recasens:1998:SVP

- [2120] L. Recasens, A. Lombarte, B. Morales-Nin, and G. J. Tores. Spatiotemporal variation in the population structure of the European hake in the NW Mediterranean. *Journal of Fish Biology*, 53(2):387–401, August 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rurangwa:1998:MES

- [2121] E. Rurangwa, I. Roelants, G. Huyskens, M. Ebrahimi, D. E. Kime, and F. Ollevier. The minimum effective spermatozoa : egg ratio for artificial insemination and the effects of mercury on sperm motility and fertilization ability in *Clarias gariepinus*. *Journal of Fish Biology*, 53(2):402–413, August 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Elliott:1998:IBM

- [2122] J. M. Elliott and M. A. Hurley. An individual-based model for predicting the emergence period of sea trout fry in a Lake District stream. *Journal of Fish Biology*, 53(2):414–433, August 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

deGaudemar:1998:EOS

- [2123] B. de Gaudemar and E. Beall. Effects of overripening on spawning behaviour and reproductive success of Atlantic salmon females spawning in

a controlled flow channel. *Journal of Fish Biology*, 53(2):434–446, August 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Goncalves:1998:CBT

- [2124] D. M. Gonçalves, E. J. Gonçalves, V. C. Almada, and S. P. Almeida. Comparative behaviour of two species of lepadogaster (Pisces: Gobiesocidae) living at different depths. *Journal of Fish Biology*, 53(2):447–450, August 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tuurala:1998:CEI

- [2125] H. Tuurala, S. Egginton, and A. Soivio. Cold exposure increases branchial water–blood barrier thickness in the eel. *Journal of Fish Biology*, 53(2):451–455, August 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Svedang:1998:APE

- [2126] H. Svedäng, H. Wickström, M. Reizenstein, K. Holmgren, and P. Florenius. Accuracy and precision in eel age estimation, using otoliths of known and unknown age. *Journal of Fish Biology*, 53(2):456–464, August 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gelsleichter:1998:ECI

- [2127] J. Gelsleichter, A. Piercy, and J. A. Musick. Evaluation of copper, iron and lead substitution techniques in elasmobranch age determination. *Journal of Fish Biology*, 53(3):465–470, September 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Masuda:1998:CID

- [2128] R. Masuda, T. Takeuchi, K. Tsukamoto, Y. Ishizaki, M. Kanematsu, and K. Imaizumi. Critical involvement of dietary docosahexaenoic acid in the ontogeny of schooling behaviour in the yellowtail. *Journal of Fish Biology*, 53(3):471–484, September 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

James:1998:ISS

- [2129] R. S. James and I. A. Johnston. Influence of spawning on swimming performance and muscle contractile properties in the short-horn sculpin. *Journal of Fish Biology*, 53(3):485–501, September 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Taylor:1998:SRC

- [2130] R. G. Taylor, H. J. Grier, and J. A. Whittington. Spawning rhythms of common snook in Florida. *Journal of Fish Biology*, 53(3):502–520, September 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Grier:1998:TMR

- [2131] H. J. Grier and R. G. Taylor. Testicular maturation and regression in the common snook. *Journal of Fish Biology*, 53(3):521–542, September 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Begg:1998:GVS

- [2132] G. A. Begg, C. P. Keenan, and M. J. Sellin. Genetic variation and stock structure of school mackerel and spotted mackerel in northern Australian waters. *Journal of Fish Biology*, 53(3):543–559, September 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lin:1998:MSC

- [2133] S.-H. Lin, G. A. Davidson, C. J. Secombes, and A. E. Ellis. A morphological study of cells isolated from the perfused gill of dab and Atlantic salmon. *Journal of Fish Biology*, 53(3):560–568, September 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Skaala:1998:GCS

- [2134] Ø. Skaala, A. A. Makhrov, T. Karlsen, K. E. Jørstad, Y. P. Altukhov, D. V. Politov, K. V. Kuzishin, and G. G. Novikov. Genetic comparison of salmon from the White Sea and north-western Atlantic Ocean. *Journal of Fish Biology*, 53(3):569–580, September 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Matschak:1998:TOT

- [2135] T. W. Matschak, T. Hhopcroft, P. Smason, A. R. Crook, and N. C. Stickland. Temperature and oxygen tension influence the development of muscle cellularity in embryonic rainbow trout. *Journal of Fish Biology*, 53(3):581–590, September 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Doadrio:1998:GDG

- [2136] I. Doadrio and J. A. Carmona. Genetic divergence in Greek populations of the genus *Leuciscus* and its evolutionary and biogeographical implications. *Journal of Fish Biology*, 53(3):591–613, September 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Penlington:1998:ICM

- [2137] M. C. Penlington, N. Harden, J. Garside, D. Hoole, and C. Arme. Isolation and characterization of mRNA encoding the chicken-II type gonadotropin-releasing hormone (GnRH) precursor in the rainbow trout. *Journal of Fish Biology*, 53(3):614–623, September 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

VanEenennaam:1998:EAB

- [2138] J. P. Van Eenennaam and S. I. Doroshov. Effects of age and body size on gonadal development of Atlantic sturgeon. *Journal of Fish Biology*, 53(3):624–637, September 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pezzanite:1998:SDB

- [2139] B. Pezzanite and P. Moller. A sexually dimorphic basal anal-fin ray expansion in the weakly discharging electric fish *Gnathonemus petersii*. *Journal of Fish Biology*, 53(3):638–644, September 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ng:1998:RAC

- [2140] H. H. Ng and D. J. Siebert. A revision of the akysid catfish genus *Breitensteinia* Steindachner with descriptions of two new species. *Journal of Fish Biology*, 53(3):645–657, September 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kamler:1998:TIC

- [2141] E. Kamler, H. Keckeï, and E. Bauer-Nemeschkal. Temperature-induced changes of survival, development and yolk partitioning in *Chondrostoma nasus*. *Journal of Fish Biology*, 53(3):658–682, September 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jennings:1998:RFB

- [2142] S. Jennings, R. H. Bustamante, K. Collins, and J. Mallinson. Reef fish behaviour during a total solar eclipse at pinta Island, Galápagos. *Journal of Fish Biology*, 53(3):683–686, September 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Peuhkuri:1998:BSF

- [2143] N. Peuhkuri. Body size and food-patch finding in a stickleback shoal. *Journal of Fish Biology*, 53(3):687–689, September 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Oliveira:1998:OPE

- [2144] K. Oliveira and R. A. Campbell. The occurrence and pathological effects of *Stephanostomum tenue* (Digenea: Acanthocolpidae) metacercariae in elvers of the American eel. *Journal of Fish Biology*, 53(3):690–692, September 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1998:Ac

- [2145] Anonymous. Announcements. *Journal of Fish Biology*, 53(3):693–694, September 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vokey:1998:SWF

- [2146] J. E. Vokey and D. Burton. Sensitivity of winter flounder melanophores after removal of the epidermis from in vitro preparations. *Journal of Fish Biology*, 53(4):695–700, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Poteaux:1998:TVG

- [2147] C. Poteaux, D. Beaudou, and P. Berrebi. Temporal variations of genetic introgression in stocked brown trout populations. *Journal of Fish Biology*, 53(4):701–713, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tveiten:1998:SSG

- [2148] H. Tveiten, I. Mayer, H. K. Johnsen, and M. Jobling. Sex steroids, growth and condition of Arctic charr broodstock during an annual cycle. *Journal of Fish Biology*, 53(4):714–727, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pottinger:1998:CBC

- [2149] T. G. Pottinger. Changes in blood cortisol, glucose and lactate in carp retained in anglers'keepnets. *Journal of Fish Biology*, 53(4):728–742, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Olla:1998:TMP

- [2150] B. L. Olla, M. W. Davis, and C. B. Schreck. Temperature magnified postcapture mortality in adult sablefish after simulated trawling. *Journal of Fish Biology*, 53(4):743–751, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lippitsch:1998:PSC

- [2151] E. Lippitsch. Phylogenetic study of cichlid fishes in Lake Tanganyika: a lepidological approach. *Journal of Fish Biology*, 53(4):752–766, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Baglole:1998:DOD

- [2152] C. J. Baglole, G. P. Goff, and G. M. Wright. Distribution and ontogeny of digestive enzymes in larval yellowtail and winter flounder. *Journal of Fish Biology*, 53(4):767–784, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Milton:1998:EOS

- [2153] D. A. Milton and S. R. Chenery. The effect of otolith storage methods on the concentrations of elements detected by laser-ablation ICPMS. *Journal of Fish Biology*, 53(4):785–794, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brannas:1998:IVD

- [2154] E. Brännäs. Individual variation in distribution, activity and growth rate of Arctic charr kept in a three-tank system. *Journal of Fish Biology*, 53(4):795–807, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Beckman:1998:PSS

- [2155] B. R. Beckman and W. W. Dickhoff. Plasticity of smolting in spring Chinook salmon: relation to growth and insulin-like growth factor-i. *Journal of Fish Biology*, 53(4):808–826, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

James:1998:EPC

- [2156] K. E. S. James and R. Poulin. The effects of perceived competition and parasitism on the foraging behaviour of the upland bully (eleotridae). *Journal of Fish Biology*, 53(4):827–834, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gage:1998:SMA

- [2157] M. J. G. Gage, P. Stockley, and G. A. Parker. Sperm morphometry in the Atlantic salmon. *Journal of Fish Biology*, 53(4):835–840, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wisenden:1998:REE

- [2158] B. D. Wisenden and R. J. F. Smith. A re-evaluation of the effect of shoalmate familiarity on the proliferation of alarm substance cells in ostariophysan fishes. *Journal of Fish Biology*, 53(4):841–846, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Huntingford:1998:HJS

- [2159] F. A. Huntingford, V. A. Braithwaite, J. D. Armstrong, D. Aird, and P. Joiner. Homing in juvenile salmon in response to imposed and spontaneous displacement: experiments in an artificial stream. *Journal of Fish Biology*, 53(4):847–852, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Köllner:1998:MAR

- [2160] B. Köllner, E. Mundt, and U. Fischer. A monoclonal antibody recognizing a complex tubular structure in rainbow trout pillar cells. *Journal of Fish Biology*, 53(4):853–865, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pommelet:1998:GGH

- [2161] E. Le Pommelet and P. Silan. Gut of goatfishes, a heterogeneous biotope for intestinal mesoparasites: variations in pyloric caeca number and growth models of colonizable digestive surface area. *Journal of Fish Biology*, 53(4):866–878, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lysne:1998:TCL

- [2162] D. A. Lysne, A. Skorping, and W. Hemmingsen. Transmission of *Cryptocotyle lingua cercariae* in natural environments: a field experiment. *Journal of Fish Biology*, 53(4):879–885, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Naish:1998:TML

- [2163] K.-A. Naish and D. O. F. Skibinski. Tetranucleotide microsatellite loci for Indian major carp. *Journal of Fish Biology*, 53(4):886–889, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Neat:1998:MMT

- [2164] F. C. Neat. Mouth morphology, testes size and body size in male *Tilapia zillii*: implications for fighting and assessment. *Journal of Fish Biology*, 53(4):890–892, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pampoulie:1998:FRK

- [2165] C. Pampoulie, A. Marques, E. Rosecchi, A. J. Crivelli, and J.-L. Bouchereau. First record of *Kudoa* (Myxosporea) in *Pomatoschistus microps* in the Rhône Delta, France. *Journal of Fish Biology*, 53(4):893–896, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gill:1998:SCD

- [2166] A. B. Gill and P. J. B. Hart. Stomach capacity as a directing factor in prey size selection of three-spined stickleback. *Journal of Fish Biology*, 53(4):897–900, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Foss:1998:PGS

- [2167] A. Foss, A. K. Imsland, and G. Nævdal. Population genetic studies of the Atlantic halibut in the North Atlantic Ocean. *Journal of Fish Biology*, 53(4):901–905, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mayer:1998:DPM

- [2168] I. Mayer, H. Elofsson, U. Bergman, and J. Bengtson. Diel plasma melatonin profile in a cyclostome, the river lamprey. *Journal of Fish Biology*, 53(4):906–909, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1998:BRe

- [2169] Anonymous. Book reviews. *Journal of Fish Biology*, 53(4):910–916, October 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vuorinen:1998:PFp

- [2170] J. A. Vuorinen, R. A. Bodaly, J. D. Reist, and M. Luczynski. Phylogeny of five *Prosopium* species with comparisons with other Coregonine fishes based on isozyme electrophoresis. *Journal of Fish Biology*, 53(5):917–927, November 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Maddock:1998:GHO

- [2171] D. M. Maddock and M. P. M. Burton. Gross and histological observations of ovarian development and related condition changes in American plaice. *Journal of Fish Biology*, 53(5):928–944, November 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lile:1998:ATH

- [2172] N. K. Lile. Alimentary tract helminths of four pleuronectid flatfish in relation to host phylogeny and ecology. *Journal of Fish Biology*, 53(5):945–953, November 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Manning:1998:MIC

- [2173] A. J. Manning and L. W. Crim. Maternal and interannual comparison of the ovulatory periodicity, egg production and egg quality of the batch-spawning yellowtail flounder. *Journal of Fish Biology*, 53(5):954–972, November 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Doyon:1998:RHA

- [2174] C. Doyon, S. Boileau, R. Fortin, and P. A. Spear. Rapid HPLC analysis of retinoids and dehydroretinoids stored in fish liver: comparison of two lake sturgeon populations. *Journal of Fish Biology*, 53(5):973–986, November 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Zenebe:1998:FAC

- [2175] T. Zenebe, G. Ahlgren, and M. Boberg. Fatty acid content of some freshwater fish of commercial importance from tropical lakes in the Ethiopian Rift Valley. *Journal of Fish Biology*, 53(5):987–1005, November 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ali:1998:DRFb

- [2176] M. Ali and R. J. Wootton. Do random fluctuations in the intervals between feeding affect growth rate in juvenile three-spined sticklebacks? *Journal of Fish Biology*, 53(5):1006–1014, November 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Karmovskaya:1998:TDS

- [2177] E. S. Karmovskaya and N. R. Merrett. Taxonomy of the deep-sea eel genus, *Histiobranchus* (Synaphobranchidae, Anguilliformes), with notes on the ecology of *H. bathybius* in the eastern North Atlantic. *Journal of Fish Biology*, 53(5):1015–1037, November 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Castilho:1998:PSS

- [2178] R. Castilho and B. J. McAndrew. Population structure of seabass in Portugal: evidence from allozymes. *Journal of Fish Biology*, 53(5):1038–

1049, November 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Worischka:1998:CFB

- [2179] S. Worischka and T. Mehner. Comparison of field-based and indirect estimates of daily food consumption in larval perch and zander. *Journal of Fish Biology*, 53(5):1050–1059, November 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Clough:1998:PMH

- [2180] S. Clough, P. Garner, D. Deans, and M. Ladle. Postspawning movements and habitat selection of dace in the River Frome, Dorset, southern England. *Journal of Fish Biology*, 53(5):1060–1070, November 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Liu:1998:FCG

- [2181] J. Liu, Y. Cui, and J. Liu. Food consumption and growth of two piscivorous fishes, the mandarin fish and the Chinese snakehead. *Journal of Fish Biology*, 53(5):1071–1083, November 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dezfuli:1998:DRC

- [2182] B. S. Dezfuli, S. Capuano, and M. Manera. A description of rodlet cells from the alimentary canal of *Anguilla anguilla* and their relationship with parasitic helminths. *Journal of Fish Biology*, 53(5):1084–1095, November 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kacem:1998:QSM

- [2183] A. Kacem, F. J. Meunier, and J. L. Baglinière. A quantitative study of morphological and histological changes in the skeleton of *Salmo salar* during its anadromous migration. *Journal of Fish Biology*, 53(5):1096–1109, November 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Morgan:1998:SEO

- [2184] J. D. Morgan and G. K. Iwama. Salinity effects on oxygen consumption, gill Na^+ K^+ -ATPase and ion regulation in juvenile Coho salmon. *Journal of Fish Biology*, 53(5):1110–1119, November 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Elliott:1998:PFS

- [2185] J. M. Elliott and M. A. Hurley. Predicting fluctuations in the size of newly emerged sea-trout fry in a Lake District stream. *Journal of Fish*

Biology, 53(5):1120–1133, November 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McGowan:1998:RTF

- [2186] C. McGowan and W. S. Davidson. The RAPD technique fails to detect a male-specific genetic marker in Atlantic salmon. *Journal of Fish Biology*, 53(5):1134–1136, November 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Athanassopoulou:1998:SCR

- [2187] F. Athanassopoulou. Susceptibility of carp, roach and goldfish to a Dermocystidium like organism. *Journal of Fish Biology*, 53(5):1137–1139, November 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Morita:1998:EFS

- [2188] K. Morita and Y. Takashima. Effect of female size on fecundity and egg size in white-spotted charr: comparison between sea-run and resident forms. *Journal of Fish Biology*, 53(5):1140–1142, November 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1998:Ad

- [2189] Anonymous. Announcement. *Journal of Fish Biology*, 53(5):1143, November 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Reitan:1998:DRU

- [2190] K. I. Reitan, C. M. Natvik, and O. Vadstein. Drinking rate, uptake of bacteria and microalgae in turbot larvae. *Journal of Fish Biology*, 53(6):1145–1154, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Morales-Nin:1998:OGA

- [2191] B. Morales-Nin, G. J. Tores, A. Lombarte, and L. Recasens. Otolith growth and age estimation in the European hake. *Journal of Fish Biology*, 53(6):1155–1168, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lecklin:1998:EAC

- [2192] T. Lecklin and M. Nikinmaa. Erythropoiesis in Arctic charr is not stimulated by anaemia. *Journal of Fish Biology*, 53(6):1169–1177, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Feresu-Shonhiwa:1998:EIP

- [2193] F. Feresu-Shonhiwa and J. H. Howard. Electrophoretic identification and phylogenetic relationships of indigenous tilapiine species of Zimbabwe. *Journal of Fish Biology*, 53(6):1178–1206, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jacobsen:1998:DVH

- [2194] L. Jacobsen and S. Berg. Diel variation in habitat use by planktivores in field enclosure experiments: the effect of submerged macrophytes and predation. *Journal of Fish Biology*, 53(6):1207–1219, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rhodes:1998:FAO

- [2195] J. S. Rhodes and T. P. Quinn. Factors affecting the outcome of territorial contests between hatchery and naturally reared Coho salmon parr in the laboratory. *Journal of Fish Biology*, 53(6):1220–1230, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Chouinard:1998:STN

- [2196] A. Chouinard and L. Bernatchez. A study of trophic niche partitioning between larval populations of reproductively isolated whitefish (*Coregonus* sp.) ecotypes. *Journal of Fish Biology*, 53(6):1231–1242, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Letcher:1998:MMA

- [2197] B. H. Letcher and T. D. Terrick. Maturation of male age-0 Atlantic salmon following a massive, localized flood. *Journal of Fish Biology*, 53(6):1243–1252, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sola:1998:BRG

- [2198] C. Sola and P. Tongiorgi. Behavioural responses of glass eels of *Anguilla anguilla* to non-protein amino acids. *Journal of Fish Biology*, 53(6):1253–1262, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Faria:1998:PAB

- [2199] C. Faria, V. Almada, and M. do Carmo Nunes. Patterns of agonistic behaviour, shelter occupation and habitat preference in juvenile *Lipophrys pholis*, *Coryphoblennius galerita* and *Gobius cobitis*. *Journal of Fish Biology*, 53(6):1263–1273, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

White:1998:AGR

- [2200] D. B. White, D. M. Wyanski, and G. R. Sedberry. Age, growth, and reproductive biology of the blackbelly rosefish from the Carolinas, U.S.A. *Journal of Fish Biology*, 53(6):1274–1291, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ciereszko:1998:SPI

- [2201] A. Ciereszko, B. Piros, K. Dabrowski, D. Kucharczyk, M. J. Łuczyński, S. Dobosz, and J. Glogowski. Serine proteinase inhibitors of seminal plasma of teleost fish: distribution of activity, electrophoretic profiles and relation to proteinase inhibitors of blood. *Journal of Fish Biology*, 53(6):1292–1305, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jonsson:1998:BCE

- [2202] N. Jonsson and B. Jonsson. Body composition and energy allocation in life-history stages of brown trout. *Journal of Fish Biology*, 53(6):1306–1316, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hossain:1998:ASF

- [2203] A. M. Hossain and H. M. Dutta. Assessment of structural and functional similarities and differences between caeca of the bluegill. *Journal of Fish Biology*, 53(6):1317–1323, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kristoffersen:1998:LHM

- [2204] J. B. Kristoffersen and A. G. V. Salvanes. Life history of *Maurolicus muelleri* in fjordic and oceanic environments. *Journal of Fish Biology*, 53(6):1324–1341, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Plante:1998:HTA

- [2205] S. Plante, D. Chabot, and J.-D. Dutil. Hypoxia tolerance in Atlantic cod. *Journal of Fish Biology*, 53(6):1342–1356, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Frankle:1998:MIT

- [2206] J. S. Frankle. Monogenic inheritance of trunk banding patterns in *Barbus tetrazona*. *Journal of Fish Biology*, 53(6):1357–1359, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dittman:1998:DGS

- [2207] A. H. Dittman, T. P. Quinn, and E. C. Volk. Is the distribution, growth and survival of juvenile salmonids sex biased? Negative results for Coho salmon in an experimental stream channel. *Journal of Fish Biology*, 53(6):1360–1364, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Barber:1998:POM

- [2208] I. Barber, L. C. Downey, and V. A. Braithwaite. Parasitism, oddity and the mechanism of shoal choice. *Journal of Fish Biology*, 53(6):1365–1368, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1998:BRf

- [2209] Anonymous. Book reviews. *Journal of Fish Biology*, 53(6):1369–1374, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1998:Ae

- [2210] Anonymous. Announcements. *Journal of Fish Biology*, 53(6):1375, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pauly:1998:TFP

- [2211] D. Pauly. Tropical fishes: patterns and propensities. *Journal of Fish Biology*, 53(sA):1–17, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sturmbauer:1998:ESC

- [2212] C. Sturmbauer. Explosive speciation in cichlid fishes of the African Great Lakes: a dynamic model of adaptive radiation. *Journal of Fish Biology*, 53(sA):18–36, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Seehausen:1998:DMC

- [2213] O. Seehausen, F. Witte, J. J. M. Van Alphen, and N. Bouton. Direct mate choice maintains diversity among sympatric cichlids in Lake Victoria. *Journal of Fish Biology*, 53(sA):37–55, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Morris:1998:FEF

- [2214] M. R. Morris. Further examination of female preference for vertical bars in swordtails: preference for 'no bars' in a species without bars. *Journal of Fish Biology*, 53(sA):56–63, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ptacek:1998:PRA

- [2215] M. B. Ptacek and F. Breden. Phylogenetic relationships among the mollies (Poeciliidae: *Poecilia*: Mollienesia group) based on mitochondrial DNA sequences. *Journal of Fish Biology*, 53(sA):64–81, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Warner:1998:REI

- [2216] R. R. Warner. The role of extreme iteroparity and risk avoidance in the evolution of mating systems. *Journal of Fish Biology*, 53(sA):82–93, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sancho:1998:FRH

- [2217] G. Sancho. Factors regulating the height of spawning ascents in trunk fishes (Ostraciidae). *Journal of Fish Biology*, 53(sA):94–103, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Garcia:1998:DMB

- [2218] C. Macías Garcia, E. Saborío, and C. Berea. Does male-biased predation lead to male scarcity in viviparous fish? *Journal of Fish Biology*, 53(sA):104–117, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bouton:1998:FPL

- [2219] N. Bouton, N. Van Os, and F. Witte. Feeding performance of Lake Victoria rock cichlids: testing predictions from morphology. *Journal of Fish Biology*, 53(sA):118–127, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Christensen:1998:FIC

- [2220] V. Christensen. Fishery-induced changes in a marine ecosystem: insight from models of the Gulf of Thailand. *Journal of Fish Biology*, 53(sA):128–142, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Arreguin-Sanchez:1998:TRL

- [2221] F. Arreguín-Sánchez and S. Manickchand-Heileman. The trophic role of lutjanid fish and impacts of their fisheries in two ecosystems in the Gulf of Mexico. *Journal of Fish Biology*, 53(sA):143–153, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

VanRooij:1998:HBP

- [2222] J. M. Van Rooij, J. J. Videler, and J. H. Bruggemann. High biomass and production but low energy transfer efficiency of Caribbean parrotfish: implications for trophic models of coral reefs. *Journal of Fish Biology*, 53(sA):154–178, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Manickchand-Heileman:1998:EFN

- [2223] S. Manickchand-Heileman, F. Arreguín-Sánchez, A. Lara-Domínguez, and L. A. Soto. Energy flow and network analysis of Terminos Lagoon, SW Gulf of Mexico. *Journal of Fish Biology*, 53(sA):179–197, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ornellas:1998:STP

- [2224] A. B. Ornellas and R. Coutinho. Spatial and temporal patterns of distribution and abundance of a tropical fish assemblage in a seasonal *Sargassum* bed, Cabo Frio Island, Brazil. *Journal of Fish Biology*, 53(sA):198–208, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lara:1998:RBR

- [2225] E. Núñez Lara and E. Arias González. The relationship between reef fish community structure and environmental variables in the southern Mexican Caribbean. *Journal of Fish Biology*, 53(sA):209–221, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ferreira:1998:SGR

- [2226] D. E. L. Ferreira, A. C. Peret, and R. Coutinho. Seasonal grazing rates and food processing by tropical herbivorous fishes. *Journal of Fish Biology*, 53(sA):222–235, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Arias-Gonzalez:1998:TMP

- [2227] J. E. Arias-González. Trophic models of protected and unprotected coral reef ecosystems in the South of the Mexican Caribbean. *Journal of Fish*

Biology, 53(sA):236–255, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cote:1998:VPB

- [2228] I. M. Côté, C. Arnal, and J. D. Reynolds. Variation in posing behaviour among fish species visiting cleaning stations. *Journal of Fish Biology*, 53(sA):256–266, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Winemiller:1998:ESF

- [2229] K. O. Winemiller and D. B. Jepsen. Effects of seasonality and fish movement on tropical river food webs. *Journal of Fish Biology*, 53(sA):267–296, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Araujo-Lima:1998:TLF

- [2230] C. A. R. M. Araujo-Lima and E. C. Oliveira. Transport of larval fish in the Amazon. *Journal of Fish Biology*, 53(sA):297–306, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Crampton:1998:EAD

- [2231] W. G. R. Crampton. Effects of anoxia on the distribution, respiratory strategies and electric signal diversity of gymnotiform fishes. *Journal of Fish Biology*, 53(sA):307–330, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Martin-Smith:1998:DFP

- [2232] K. M. Martin-Smith and L. M. Laird. Depauperate freshwater fish communities in Sabah: the role of barriers to movement and habitat quality. *Journal of Fish Biology*, 53(sA):331–344, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lorenzen:1998:EAR

- [2233] K. Lorenzen, C. J. Garaway, B. Chamsingh, and T. J. Warren. Effects of access restrictions and stocking on small water body fisheries in Laos. *Journal of Fish Biology*, 53(sA):345–357, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Halls:1998:IFC

- [2234] A. S. Halls, D. D. Hoggarth, and K. Debnath. Impact of flood control schemes on river fish migrations and species assemblages in Bangladesh. *Journal of Fish Biology*, 53(sA):358–380, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Preikshot:1998:IES

- [2235] D. Preikshot, E. Nsiku, T. Pitcher, and D. Pauly. An interdisciplinary evaluation of the status and health of African lake fisheries using a rapid appraisal technique. *Journal of Fish Biology*, 53(sA):381–393, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vrijenhoek:1998:CGF

- [2236] R. C. Vrijenhoek. Conservation genetics of freshwater fish. *Journal of Fish Biology*, 53(sA):394–412, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hauser:1998:GPS

- [2237] L. Hauser, G. R. Carvalho, and T. J. Pitcher. Genetic population structure in the Lake Tanganyika sardine *Limnothrissa miodon*. *Journal of Fish Biology*, 53(sA):413–429, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1998:PA

- [2238] Anonymous. Poster abstracts. *Journal of Fish Biology*, 53(sA):430–447, December 1998. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sampson:1999:GVM

- [2239] D. B. Sampson and S. M. Al-Jufaily. Geographic variation in the maturity and growth schedules of English sole along the U.S. west coast. *Journal of Fish Biology*, 54(1):1–17, January 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ostrovsky:1999:GPD

- [2240] I. Ostrovsky and P. Walline. Growth and production of the dominant pelagic fish, *Acanthobrama terraesanctae*, in subtropical Lake Kinneret, Israel. *Journal of Fish Biology*, 54(1):18–32, January 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Eklov:1999:IWQ

- [2241] A. G. Eklöv, L. A. Greenberg, C. Brönmark, P. Larsson, and O. Berglund. Influence of water quality, habitat and species richness on brown trout populations. *Journal of Fish Biology*, 54(1):33–43, January 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Zhou:1999:PAM

- [2242] T. Zhou and J. S. Weis. Predator avoidance in mummichog larvae from a polluted habitat. *Journal of Fish Biology*, 54(1):44–57, January 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Amundsen:1999:DFR

- [2243] P.-A. Amundsen, R. Bergersen, H. Huru, and T. G. Heggberget. Diel feeding rhythms and daily food consumption of juvenile Atlantic salmon in the River Alta, northern Norway. *Journal of Fish Biology*, 54(1):58–71, January 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Boyce:1999:NEA

- [2244] S. J. Boyce. Nitrogenous excretion in the Antarctic plunderfish. *Journal of Fish Biology*, 54(1):72–81, January 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Baras:1999:SCAa

- [2245] E. Baras. Sibling cannibalism among juvenile vundu under controlled conditions. I. Cannibalistic behaviour, prey selection and prey size selectivity. *Journal of Fish Biology*, 54(1):82–105, January 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Baras:1999:SCAb

- [2246] E. Baras, F. Tissier, J.-C. Philippart, and C. Mélard. Sibling cannibalism among juvenile vundu under controlled conditions. II. Effect of body weight and environmental variables on the periodicity and intensity of type II cannibalism. *Journal of Fish Biology*, 54(1):106–118, January 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Baras:1999:FIE

- [2247] E. Baras. Functional implications of early sexual growth dimorphism in vundu. *Journal of Fish Biology*, 54(1):119–124, January 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Prat:1999:ECS

- [2248] F. Prat, S. Zanuy, N. Bromage, and M. Carrillo. Effects of constant short and long photoperiod regimes on the spawning performance and sex steroid levels of female and male sea bass. *Journal of Fish Biology*, 54(1):125–137, January 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Aldridge:1999:DEB

- [2249] D. C. Aldridge. Development of European bitterling in the gills of freshwater mussels. *Journal of Fish Biology*, 54(1):138–151, January 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Coggan:1999:ABN

- [2250] R. A. Coggan, J. D. M. Gordon, and N. R. Merrett. Aspects of the biology of *Nezumia aequalis* from the continental slope west of the British Isles. *Journal of Fish Biology*, 54(1):152–170, January 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nie:1999:DIH

- [2251] P. Nie, W. J. Yao, Q. Gao, G. T. Wang, and Y. A. Zhang. Diversity of intestinal helminth communities of carp from six lakes in the flood plain of the Yangtze River, China. *Journal of Fish Biology*, 54(1):171–180, January 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Young:1999:SDA

- [2252] M. K. Young. Summer diel activity and movement of adult brown trout in high-elevation streams in Wyoming, U.S.A. *Journal of Fish Biology*, 54(1):181–189, January 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Arculeo:1999:BGD

- [2253] M. Arculeo, A. Mauro, S. Lo Brutto, S. Mirto, M. Cammarata, A. Mazzola, and N. Parrinello. Biochemical genetic differentiation between *Pomatoschistus marmoratus* and *P. tortonesei*. *Journal of Fish Biology*, 54(1):190–195, January 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rideout:1999:OSP

- [2254] R. M. Rideout, D. M. Maddock, and M. P. M. Burton. Oogenesis and the spawning pattern in Greenland halibut from the North-west Atlantic. *Journal of Fish Biology*, 54(1):196–207, January 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Swinney:1999:LFS

- [2255] G. N. Swinney, M. Holmes, J. S. Blackadder, and S. E. Pye. A long-finned specimen of *Beryx decadactylus* caught in the North-eastern Atlantic of Rockall. *Journal of Fish Biology*, 54(1):208–212, January 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Otteraa:1999:MPR

- [2256] H. Otterå, K. E. Jørstad, T. Svåsand, and T. S. Kristiansen. Migration patterns and recapture rates of North-east Arctic and Norwegian coastal cod reared and released under similar conditions. *Journal of Fish Biology*, 54(1):213–217, January 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Coughlan:1999:PBS

- [2257] T. Coughlan, M. Scharl, U. Hornung, I. Hope, and A. Stewart. PCR-based sex test for *Xiphophorus maculatus*. *Journal of Fish Biology*, 54(1):218–222, January 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hamrin:1999:NMT

- [2258] S. F. Hamrin, E. Arneri, P. Doering-Arjes, H. Mosegaard, A. Patwardhan, A. Sasov, M. Schatz, D. Van Dyck, H. Wickström, and M. Van Heel. A new method for three-dimensional otolith analysis. *Journal of Fish Biology*, 54(1):223–225, January 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1999:BRa

- [2259] Anonymous. Book reviews. *Journal of Fish Biology*, 54(1):226–229, January 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pires:1999:SCF

- [2260] A. M. Pires, I. G. Cowx, and M. M. Coelho. Seasonal changes in fish community structure of intermittent streams in the middle reaches of the Guadiana basin, Portugal. *Journal of Fish Biology*, 54(2):235–249, February 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lin:1999:PPG

- [2261] H.-C. Lin and W. A. Dunson. Phenotypic plasticity in the growth of the self-fertilizing hermaphroditic fish *Rivulus marmoratus*. *Journal of Fish Biology*, 54(2):250–266, February 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tsigenopoulos:1999:NMB

- [2262] C. S. Tsigenopoulos, Y. Karakousis, and P. Berrebi. The North Mediterranean *Barbus* lineage: phylogenetic hypotheses and taxonomic implications based on allozyme data. *Journal of Fish Biology*, 54(2):267–286,

February 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Andersen:1999:EPS

- [2263] N. G. Andersen. The effects of predator size, temperature, and prey characteristics on gastric evacuation in whiting. *Journal of Fish Biology*, 54(2):287–301, February 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Shiao:1999:ECV

- [2264] J. C. Shiao, C. S. Tzeng, C. L. Leu, and F. C. Chen. Enhancing the contrast and visibility of daily growth increments in fish otoliths etched by proteinase K buffer. *Journal of Fish Biology*, 54(2):302–309, February 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Chapman:1999:PSH

- [2265] L. J. Chapman, C. A. Chapman, D. A. Brazeau, B. McLaughlin, and M. Jordan. Papyrus swamps, hypoxia, and faunal diversification: variation among populations of *Barbus neumayeri*. *Journal of Fish Biology*, 54(2):310–327, February 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Miklosi:1999:OAB

- [2266] Á. Miklósi and V. Csányi. The ontogeny of antipredator behaviour in paradise fish larvae III. Size-related avoidance of predator models. *Journal of Fish Biology*, 54(2):328–337, February 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Slotte:1999:DUE

- [2267] A. Slotte. Differential utilization of energy during wintering and spawning migration in Norwegian spring-spawning herring. *Journal of Fish Biology*, 54(2):338–355, February 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fauvel:1999:CSC

- [2268] C. Fauvel, O. Savoye, C. Dreanno, J. Cosson, and M. Suquet. Characteristics of sperm of captive seabass in relation to its fertilization potential. *Journal of Fish Biology*, 54(2):356–369, February 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kwonm:1999:POT

- [2269] J. Y. Kwonm, Y. J. Chang, Y. C. Sohn, and K. Aida. Plasma and ovarian thyroxine levels in relation to sexual maturation and gestation in female

Sebastes inermis. *Journal of Fish Biology*, 54(2):370–379, February 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Henglmüller:1999:DAB

- [2270] S. M. Henglmüller and F. Ladich. Development of agonistic behaviour and vocalization in croaking gouramis. *Journal of Fish Biology*, 54(2):380–395, February 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Grant:1999:VFE

- [2271] S. M. Grant and E. Kott. Variation in field estimates of daily ration in young yellow perch. *Journal of Fish Biology*, 54(2):396–403, February 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Janssen:1999:ULL

- [2272] J. Janssen, V. Sideleva, and H. Biga. Use of the lateral line for feeding in two Lake Baikal sculpins. *Journal of Fish Biology*, 54(2):404–416, February 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dgebuadze:1999:ORL

- [2273] Yu. Yu. Dgebuadze, M. V. Mina, S. S. Alekseyev, and A. S. Golubtsov. Observations on reproduction of the Lake Tana barbs. *Journal of Fish Biology*, 54(2):417–423, February 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Koumoundouros:1999:ODV

- [2274] G. Koumoundouros, P. Divanach, and M. Kentouri. Osteological development of the vertebral column and of the caudal complex in *Dentex dentex*. *Journal of Fish Biology*, 54(2):424–436, February 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jobling:1999:FGW

- [2275] M. Jobling, J. Koskela, and S. Winberg. Feeding and growth of whitefish fed restricted and abundant rations: influences on growth heterogeneity and brain serotonergic activity. *Journal of Fish Biology*, 54(2):437–449, February 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ochi:1999:OFC

- [2276] H. Ochi, Y. Sato, and Y. Yanagisawa. Obligate feeding of cichlid eggs by *Caecomastacembelus zebratus* in Lake Tanganyika. *Journal of Fish*

Biology, 54(2):450–459, February 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Perez:1999:IAS

- [2277] J. Perez, J. L. Martinez, P. Moran, E. Beall, and E. Garcia-Vazquez. Identification of Atlantic salmon \times brown trout hybrids with a nuclear marker useful for evolutionary studies. *Journal of Fish Biology*, 54(2):460–464, February 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Collares-Pereira:1999:RGP

- [2278] M. J. Collares-Pereira, M. J. Alves, and M. M. Coelho. Reassessment of the generic position of the Iberian cyprinid alburnoides complex: its return to the genus *Leuciscus*. *Journal of Fish Biology*, 54(2):465–468, February 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Johnsson:1999:TCA

- [2279] J. I. Johnsson, F. Nöbbelein, and T. Bohlin. Territorial competition among wild brown trout fry: effects of ownership and body size. *Journal of Fish Biology*, 54(2):469–472, February 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1999:BRb

- [2280] Anonymous. Book reviews. *Journal of Fish Biology*, 54(2):473–476, February 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Morgan:1999:ESR

- [2281] M. J. Morgan, C. E. Wilson, and L. W. Crim. The effect of stress on reproduction in Atlantic cod. *Journal of Fish Biology*, 54(3):477–488, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Horppila:1999:VDM

- [2282] J. Horppila and K. Nyberg. The validity of different methods in the back-calculation of the lengths of roach — a comparison between scales and cleithra. *Journal of Fish Biology*, 54(3):489–498, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Oliveira:1999:TVM

- [2283] R. F. Oliveira, V. C. Almada, E. Forsgren, and E. J. Gonçalves. Temporal variation in male traits, nesting aggregations and mating success in the

peacock blenny. *Journal of Fish Biology*, 54(3):499–512, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Arkhipchuk:1999:NVD

- [2284] V. V. Arkhipchuk. Nucleolar variations during the ontogenesis of diploid and tetraploid cyprinid species. *Journal of Fish Biology*, 54(3):513–524, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pottinger:1999:PCO

- [2285] T. G. Pottinger, W. E. Yeomans, and T. R. Carrick. Plasma cortisol and 17β -oestradiol levels in roach exposed to acute and chronic stress. *Journal of Fish Biology*, 54(3):525–532, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Simonovic:1999:PRP

- [2286] P. D. Simonovic. Phylogenetic relationships of Ponto-Caspian gobies and their relationship to the Atlantic–Mediterranean *Gobiinae*. *Journal of Fish Biology*, 54(3):533–555, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jonassen:1999:ITF

- [2287] T. M. Jonassen, A. K. Imsland, and S. O. Stefansson. The interaction of temperature and fish size on growth of juvenile halibut. *Journal of Fish Biology*, 54(3):556–572, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gillooly:1999:RSE

- [2288] J. F. Gillooly and J. R. Baylis. Reproductive success and the energetic cost of parental care in male smallmouth bass. *Journal of Fish Biology*, 54(3):573–584, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Schmidt:1999:ABB

- [2289] H. Schmidt, D. Bernet, T. Wahli, W. Meier, and P. Burkhardt-Holm. Active biomonitoring with brown trout and rainbow trout in diluted sewage plant effluents. *Journal of Fish Biology*, 54(3):585–596, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Morrison:1999:SHD

- [2290] C. M. Morrison and J. R. Wright, Jr. A study of the histology of the digestive tract of the Nile tilapia. *Journal of Fish Biology*, 54(3):597–

606, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Silverstein:1999:EDG

- [2291] J. T. Silverstein, W. R. Wolters, and M. Holland. Evidence of differences in growth and food intake regulation in different genetic strains of channel catfish. *Journal of Fish Biology*, 54(3):607–615, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lowartz:1999:HAI

- [2292] S. M. Lowartz, D. L. Holmberg, H. W. Ferguson, and F. W. H. Beamish. Healing of abdominal incisions in sea lamprey larvae: a comparison of three wound-closure techniques. *Journal of Fish Biology*, 54(3):616–626, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

DeMorais:1999:MHA

- [2293] L. Tito De Morais and J. Raffray. Movements of *Hoplias aimara* during the filling phase of the Petit-Saut dam, French Guyana. *Journal of Fish Biology*, 54(3):627–635, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Berg:1999:IV

- [2294] O. K. Berg and V. Moen. Inter- and intrapopulation variation in temperature sum requirements at hatching in Norwegian Atlantic salmon. *Journal of Fish Biology*, 54(3):636–647, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lin:1999:MRC

- [2295] H. C. Lin, P. P. Hwang, and T. H. Lee. Mitochondrion-rich cells in the embryonic yolk sac of *Oreochromis mossambicus*. *Journal of Fish Biology*, 54(3):648–655, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hanson:1999:ECO

- [2296] P. J. Hanson and V. S. Zdanowicz. Elemental composition of otoliths from Atlantic croaker along an estuarine pollution gradient. *Journal of Fish Biology*, 54(3):656–668, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Persson:1999:CMP

- [2297] P. Persson, B. Th. Björnsson, and Y. Takagi. Characterization of morphology and physiological actions of scale osteoclasts in the rainbow

trout. *Journal of Fish Biology*, 54(3):669–684, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Marcogliese:1999:RVE

- [2298] D. J. Marcogliese and T. Scholz. Recent visitations by eels to Sable Island, Canada, confirmed by parasites. *Journal of Fish Biology*, 54(3):685–687, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Heinimaa:1999:FFA

- [2299] S. Heinimaa and J. Erkinaro. Fast-flowing areas affect the feeding activity of migrating Atlantic salmon smolts in tributaries of a subarctic river. *Journal of Fish Biology*, 54(3):688–690, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lugli:1999:PSP

- [2300] M. Lugli and P. Torricelli. Prespawning sound production in Mediterranean sand-gobies. *Journal of Fish Biology*, 54(3):691–694, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Neat:1999:PCS

- [2301] F. C. Neat and I. Mayer. Plasma concentrations of sex steroids and fighting in male *Tilapia zillii*. *Journal of Fish Biology*, 54(3):695–697, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1999:BRc

- [2302] Anonymous. Book reviews. *Journal of Fish Biology*, 54(3):698–702, March 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Iguchi:1999:ESL

- [2303] K. Iguchi and N. Mizuno. Early starvation limits survival in amphidromous fishes. *Journal of Fish Biology*, 54(4):705–712, April 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gowans:1999:MAAa

- [2304] A. R. D. Gowans, J. D. Armstrong, and I. G. Priede. Movements of adult Atlantic salmon in relation to a hydroelectric dam and fish ladder. *Journal of Fish Biology*, 54(4):713–726, April 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gowans:1999:MAAb

- [2305] A. R. D. Gowans, J. D. Armstrong, and I. G. Priede. Movements of adult Atlantic salmon through a reservoir above a hydroelectric dam: Loch Faskally. *Journal of Fish Biology*, 54(4):727–740, April 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Raitaniemi:1999:GWR

- [2306] J. Raitaniemi, T. Malinen, K. Nyberg, and M. Rask. The growth of whitefish in relation to water quality and fish species composition. *Journal of Fish Biology*, 54(4):741–756, April 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Martin:1999:DEA

- [2307] S. A. M. Martin, W. Wallner, A. F. Youngson, and T. Smith. Differential expression of Atlantic salmon thyrotropin β subunit mRNA and its cDNA sequence. *Journal of Fish Biology*, 54(4):757–766, April 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Leach:1999:EEF

- [2308] S. D. Leach and E. D. Houde. Effects of environmental factors on survival, growth, and production of American shad larvae. *Journal of Fish Biology*, 54(4):767–786, April 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bronte:1999:SSL

- [2309] C. R. Bronte, G. W. Fleischer, S. G. Maistrenko, and N. M. Pronin. Stock structure of Lake Baikal omul as determined by whole-body morphology. *Journal of Fish Biology*, 54(4):787–798, April 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nielsen:1999:CBI

- [2310] C. Nielsen, S. S. Madsen, and B. Th. Björnsson. Changes in branchial and intestinal osmoregulatory mechanisms and growth hormone levels during smolting in hatchery-reared and wild brown trout. *Journal of Fish Biology*, 54(4):799–818, April 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Beddow:1999:IEP

- [2311] T. A. Beddow and R. S. McKinley. Importance of electrode positioning in biotelemetry studies estimating muscle activity in fish. *Journal of Fish Biology*, 54(4):819–831, April 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Focant:1999:MPI

- [2312] B. Focant, F. Mélot, S. Collin, A. Chikou, P. Vandewalle, and F. Huri-
aux. Muscle parvalbumin isoforms of *Clarias gariepinus*, *Heterobranchus*
longifilis and *Chrysichthys auratus*: isolation, characterization and ex-
pression during development. *Journal of Fish Biology*, 54(4):832–851,
April 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (elec-
tronic).

Gisbert:1999:EDA

- [2313] E. Gisbert. Early development and allometric growth patterns in Siberian
sturgeon and their ecological significance. *Journal of Fish Biology*, 54(4):
852–862, April 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-
8649 (electronic).

Troynikov:1999:VSA

- [2314] V. S. Troynikov and T. I. Walker. Vertebral size-at-age heterogeneity in
gummy shark harvested off southern Australia. *Journal of Fish Biology*,
54(4):863–877, April 1999. CODEN JFIBA9. ISSN 0022-1112 (print),
1095-8649 (electronic).

Golubtsov:1999:MVT

- [2315] A. S. Golubtsov, P. B. Berendzen, and C. A. Annett. Morphological
variation and taxonomic status of *Altai osmans*, *Oreoleuciscus*, from the
upper reaches of the Ob River system. *Journal of Fish Biology*, 54(4):
878–899, April 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-
8649 (electronic).

Fevolden:1999:PLL

- [2316] S.-E. Fevolden, K. H. Røed, K. T. Fjalestad, and J. Stien. Poststress
levels of lysozyme and cortisol in adult rainbow trout: heritabilities and
genetic correlations. *Journal of Fish Biology*, 54(4):900–910, April 1999.
CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mugiya:1999:EAC

- [2317] Y. Mugiya, H. Tohse, and S. Katoh. Effects of aluminium and cortisol on
in vitro calcium deposition on otoliths in rainbow trout. *Journal of Fish*
Biology, 54(4):911–914, April 1999. CODEN JFIBA9. ISSN 0022-1112
(print), 1095-8649 (electronic).

Anonymous:1999:BRd

- [2318] Anonymous. Book reviews. *Journal of Fish Biology*, 54(4):915–917, April
1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1999:BR

- [2319] Anonymous. Book received. *Journal of Fish Biology*, 54(4):917, April 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1999:Aa

- [2320] Anonymous. Announcements. *Journal of Fish Biology*, 54(4):918–919, April 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Losey:1999:UVW

- [2321] G. S. Losey, T. W. Cronin, T. H. Goldsmith, D. Hyde, N. J. Marshall, and W. N. McFarland. The UV visual world of fishes: a review. *Journal of Fish Biology*, 54(5):921–943, May 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fowler:1999:ASD

- [2322] A. J. Fowler, A. C. Jensen, K. J. Collins, and I. P. Smith. Age structure and diel activity of pouting on the Poole Bay artificial reef. *Journal of Fish Biology*, 54(5):944–954, May 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dynes:1999:GMV

- [2323] J. Dynes, P. Magnan, L. Bernatchez, and M. A. Rodríguez. Genetic and morphological variation between two forms of lacustrine brook charr. *Journal of Fish Biology*, 54(5):955–972, May 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Castle:1999:REG

- [2324] P. H. J. Castle and D. G. Smith. A reassessment of the eels of the genus *Bathycongrus* in the Indo-west Pacific. *Journal of Fish Biology*, 54(5):973–995, May 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Paul:1999:IRV

- [2325] A. J. Paul and J. M. Paul. Interannual and regional variations in body length, weight and energy content of age-0 Pacific herring from Prince William Sound, Alaska. *Journal of Fish Biology*, 54(5):996–1001, May 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Wang:1999:DGR

- [2326] Yu-Tzu Wang and Wann-Nian Tzeng. Differences in growth rates among cohorts of *Encrasicholina punctifer* and *Engraulis japonicus* larvae in the

coastal waters off Tanshui River Estuary, Taiwan, as indicated by otolith microstructure analysis. *Journal of Fish Biology*, 54(5):1002–1016, May 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Matallanas:1999:NRS

- [2327] J. Matallanas. New and rare snailfish genus *Paraliparis* from the Weddell Sea with the description of two new species. *Journal of Fish Biology*, 54(5):1017–1028, May 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sanger:1999:MAA

- [2328] A. M. Sanger. Morphometric analysis of axial muscle in cyprinid fish provides support that intracellular lipid plays a role in slow fibre oxygen supply. *Journal of Fish Biology*, 54(5):1029–1037, May 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kraak:1999:CDE

- [2329] S. B. M. Kraak, T. C. M. Bakker, and B. Mundwiler. Correlates of the duration of the egg collecting phase in the three-spined stickleback. *Journal of Fish Biology*, 54(5):1038–1049, May 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Robards:1999:MFI

- [2330] M. D. Robards, J. F. Piatt, and G. A. Rose. Maturation, fecundity, and intertidal spawning of Pacific sand lance in the northern Gulf of Alaska. *Journal of Fish Biology*, 54(5):1050–1068, May 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Nelson:1999:WEC

- [2331] J. A. Nelson, D. A. Wubah, M. E. Whitmer, E. A. Johnson, and D. J. Stewart. Wood-eating catfishes of the genus *Panaque*: gut microflora and cellulolytic enzyme activities. *Journal of Fish Biology*, 54(5):1069–1082, May 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jepsen:1999:MPS

- [2332] N. Jepsen, A. Koed, and F. okland. The movements of pikeperch in a shallow reservoir. *Journal of Fish Biology*, 54(5):1083–1093, May 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Faustino:1999:DPP

- [2333] M. Faustino and D. M. Power. Development of the pectoral, pelvic, dorsal and anal fins in cultured sea bream. *Journal of Fish Biology*, 54

(5):1094–1110, May 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Heupel:1999:SDE

- [2334] M. R. Heupel, C. A. Simpfendorfer, and M. B. Bennett. Skeletal deformities in elasmobranchs from Australian waters. *Journal of Fish Biology*, 54(5):1111–1115, May 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Thomas:1999:SLE

- [2335] M. B. Thomas, W. Thomas, T. M. Hornstein, and S. C. Hedman. Seasonal leukocyte and erythrocyte counts in fathead minnows. *Journal of Fish Biology*, 54(5):1116–1118, May 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Agnese:1999:GCP

- [2336] J.-F. Agnèse, B. Adépo-Gourène, J. Owino, L. Pouyaud, and R. Aman. Genetic characterization of a pure relict population of *Oreochromis esculentus*, an endangered tilapia. *Journal of Fish Biology*, 54(5):1119–1123, May 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Videler:1999:BCA

- [2337] H. Videler, G. J. Geertjes, and J. J. Videler. Biochemical characteristics and antibiotic properties of the mucous envelope of the queen parrotfish. *Journal of Fish Biology*, 54(5):1124–1127, May 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Stefanni:1999:PCG

- [2338] S. Stefanni and C. Mazzoldi. The presence of Couch's goby in the Mediterranean Sea. *Journal of Fish Biology*, 54(5):1128–1131, May 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Smith:1999:PEE

- [2339] C. Smith and R. J. Wootton. Parental energy expenditure of the male three-spined stickleback. *Journal of Fish Biology*, 54(5):1132–1136, May 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1999:BRf

- [2340] Anonymous. Book reviews. *Journal of Fish Biology*, 54(5):1137–1140, May 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1999:FCE

- [2341] Anonymous. First Conference on European Shads Bordeaux, France 23–26 May 2000. *Journal of Fish Biology*, 54(5):1141, May 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pawson:1999:IPS

- [2342] M. G. Pawson and D. R. Eaton. The influence of a power station on the survival of juvenile sea bass in an estuarine nursery area. *Journal of Fish Biology*, 54(6):1143–1160, June 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Henderson:1999:PSS

- [2343] P. A. Henderson and R. M. Seaby. Population stability of the sea snail at the southern edge of its range. *Journal of Fish Biology*, 54(6):1161–1176, June 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Thomas:1999:ESE

- [2344] P. M. Thomas, N. W. Pankhurst, and H. A. Bremner. The effect of stress and exercise on post-mortem biochemistry of Atlantic salmon and rainbow trout. *Journal of Fish Biology*, 54(6):1177–1196, June 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Doupe:1999:MGW

- [2345] R. G. Doupé, P. Horwitz, and A. J. Lymbery. Mitochondrial genealogy of Western Australian barramundi: applications of inbreeding coefficients and coalescent analysis for separating temporal population processes. *Journal of Fish Biology*, 54(6):1197–1209, June 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bernardi:1999:MPH

- [2346] G. Bernardi and N. L. Crane. Molecular phylogeny of the humbug damselfishes inferred from mtDNA sequences. *Journal of Fish Biology*, 54(6):1210–1217, June 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Leonard:1999:CHD

- [2347] J. B. K. Leonard and S. D. McCormick. Changes in haematology during upstream migration to American shad. *Journal of Fish Biology*, 54(6):1218–1230, June 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fischer:1999:OMD

- [2348] P. Fischer. Otolith microstructure during the pelagic, settlement and benthic phases in burbot. *Journal of Fish Biology*, 54(6):1231–1243, June 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Utne-Palm:1999:EPM

- [2349] A. C. Utne-Palm. The effect of prey mobility, prey contrast, turbidity and spectral composition on the reaction distance of *Gobiusculus flavescens* to its planktonic prey. *Journal of Fish Biology*, 54(6):1244–1258, June 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jonsdottir:1999:GDA

- [2350] Ó. D. B. Jónsdóttir, A. K. Inslan, A. K. Daniélsdóttir, V. Thorsteins-son, and G. Nævdal. Genetic differentiation among Atlantic cod in south and south-east Icelandic waters: synaptophysin (Syp I) and haemoglobin (HbI) variation. *Journal of Fish Biology*, 54(6):1259–1274, June 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Schultz:1999:bfd

- [2351] I. R. Schultz, M. G. Barron, M. C. Newman, and A. M. Vick. Blood flow distribution and tissue allometry in channel catfish. *Journal of Fish Biology*, 54(6):1275–1286, June 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Norton:1999:LCC

- [2352] E. C. Norton and R. B. MacFarlane. Lipid class composition of the viviparous yellowtail rockfish over a reproductive cycle. *Journal of Fish Biology*, 54(6):1287–1299, June 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

DePirrott:1999:FIA

- [2353] M. De Pirrott, G. M. Marchetti, and G. Chelazzi. Foraging interactions among three benthic fish in a *Posidonia oceanica* reef lagoon along the Tyrrhenian Coast. *Journal of Fish Biology*, 54(6):1300–1309, June 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hugueny:1999:MCD

- [2354] B. Hugueny and M. Pouilly. Morphological correlates of diet in an assemblage of West African freshwater fishes. *Journal of Fish Biology*, 54(6):1310–1325, June 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lyndon:1999:EPP

- [2355] A. R. Lyndon and J. G. Brechin. Evidence for partitioning of physiological functions between holobranchs: protein synthesis rates in flounder gills. *Journal of Fish Biology*, 54(6):1326–1328, June 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Maes:1999:DCV

- [2356] J. Maes, J. Pas, A. Taillieu, P. A. Van Damme, and F. Ollevier. Diel changes in the vertical distribution of juvenile fish in the Zeeschede Estuary. *Journal of Fish Biology*, 54(6):1329–1333, June 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

VanNeer:1999:FIR

- [2357] W. Van Neer, R. H. Wildekamp, F. Küçük, and M. Unlüsayin. First inland records of the euryhaline goby *Knipowitschia caucasica* from lakes in Anatolia, Turkey. *Journal of Fish Biology*, 54(6):1334–1337, June 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Swaby:1999:SDF

- [2358] S. E. Swaby and G. W. Potts. The sailfin dory, a first British record. *Journal of Fish Biology*, 54(6):1338–1340, June 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1999:BRg

- [2359] Anonymous. Book reviews. *Journal of Fish Biology*, 54(6):1341–1344, June 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1999:BRh

- [2360] Anonymous. Book received. *Journal of Fish Biology*, 54(6):1344, June 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mjølnerød:1999:SAG

- [2361] I. B. Mjølnerød, U. H. Refseth, and K. Hindar. Spatial association of genetically similar Atlantic salmon juveniles and sex bias in spatial patterns in a river. *Journal of Fish Biology*, 55(1):1–8, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Sorbera:1999:VOM

- [2362] L. A. Sorbera, J. F. Asturiano, M. Carrillo, J. Cerda, D. E. Kime, and S. Zanuy. In vitro oocyte maturation in the sea bass: effects of hCG,

pituitary extract and steroids. *Journal of Fish Biology*, 55(1):9–25, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rocha:1999:PLC

- [2363] M. J. Rocha and M. A. Reis-Henriques. Plasma levels of C₁₈-, C₁₉- and C₂₁-steroids in captive and feral female sea bass. *Journal of Fish Biology*, 55(1):26–34, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vehanen:1999:ICC

- [2364] T. Vehanen, A. Mäki-Petäys, J. Aspi, and T. Muotka. Intercohort competition causes spatial segregation in brown trout in artificial streams. *Journal of Fish Biology*, 55(1):35–46, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Poulin:1999:SPP

- [2365] R. Poulin, D. J. Marcogliese, and J. D. McLaughlin. Skin-penetrating parasites and the release of alarm substances in juvenile rainbow trout. *Journal of Fish Biology*, 55(1):47–53, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Peltonen:1999:EFW

- [2366] H. Peltonen, J. Ruuhijärvi, T. Malinen, J. Horppila, M. Olin, and J. Keto. The effects of food-web management on fish assemblage dynamics in a north temperate lake. *Journal of Fish Biology*, 55(1):54–67, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Utrilla:1999:LHP

- [2367] C. G. Utrilla and J. Lobón-Cerviá. Life-history patterns in a southern population of Atlantic salmon. *Journal of Fish Biology*, 55(1):68–83, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Doucett:1999:EAS

- [2368] R. R. Doucett, M. Power, G. Power, F. Caron, and J. D. Reist. Evidence for anadromy in a southern relict population of Arctic charr from North America. *Journal of Fish Biology*, 55(1):84–93, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Collins:1999:RFA

- [2369] A. L. Collins and T. A. Anderson. The role of food availability in regulating reproductive development in female golden perch. *Journal of Fish*

Biology, 55(1):94–104, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Aguirre:1999:ECS

- [2370] H. Aguirre and A. Lombarte. Ecomorphological comparisons of sagittae in *Mullus barbatus* and *M. surmuletus*. *Journal of Fish Biology*, 55(1):105–114, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pulkkinen:1999:APT

- [2371] K. Pulkkinen and E. T. Valtonen. Accumulation of plerocercoids of *Tri-*aeonophorus crassus** in the second intermediate host *Coregonus lavaretus* and their effect on growth of the host. *Journal of Fish Biology*, 55(1):115–126, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Byrne:1999:MPC

- [2372] C. J. Byrne, C. Holland, and O. Tully. Metazoan parasite community structure of sea trout on the west coast of Ireland. *Journal of Fish Biology*, 55(1):127–134, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

García-Berthou:1999:FIM

- [2373] E. García-Berthou. Food of introduced mosquitofish: ontogenetic diet shift and prey selection. *Journal of Fish Biology*, 55(1):135–147, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Schreiber:1999:ELD

- [2374] A. M. Schreiber and J. L. Specker. Early larval development and metamorphosis in the summer flounder: changes in per cent whole-body water content and effects of altered thyroid status. *Journal of Fish Biology*, 55(1):148–157, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Yambem:1999:RPA

- [2375] H. Yambem, M. Shindo, and F. Yamazaki. A releaser pheromone that attracts males in the urine of mature female masu salmon. *Journal of Fish Biology*, 55(1):158–171, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Parkinson:1999:PIS

- [2376] D. Parkinson, J.-C. Philippart, and E. Baras. A preliminary investigation of spawning migrations of grayling in a small stream as determined

by radio-tracking. *Journal of Fish Biology*, 55(1):172–182, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hansen:1999:DNV

- [2377] M. M. Hansen, J. B. Taggart, and D. Meldrup. Development of new VNTR markers for pike and assessment of variability at di- and tetranucleotide repeat microsatellite loci. *Journal of Fish Biology*, 55(1):183–188, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bohlen:1999:ISE

- [2378] J. Bohlen. Influence of salinity on early development in the spined loach. *Journal of Fish Biology*, 55(1):189–198, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Thyrel:1999:UTL

- [2379] M. Thyrel, I. Berglund, S. Larsson, and I. Näslund. Upper thermal limits for feeding and growth of 0+ Arctic charr. *Journal of Fish Biology*, 55(1):199–210, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ali:1999:CRV

- [2380] M. Ali and R. J. Wootton. Coping with resource variation: Effect of constant and variable intervals between feeding on reproductive performance at first spawning of female three-spined sticklebacks. *Journal of Fish Biology*, 55(1):211–220, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Castro:1999:RRG

- [2381] J. Castro, B. G. Pardo, L. Sánchez, and P. Martínez. rDNA RFLPs as genetic markers for resource management in brown trout. *Journal of Fish Biology*, 55(1):221–225, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1999:BRi

- [2382] Anonymous. Book reviews. *Journal of Fish Biology*, 55(1):226–229, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1999:Ab

- [2383] Anonymous. Announcements. *Journal of Fish Biology*, 55(1):230–231, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1999:E

- [2384] Anonymous. Erratum. *Journal of Fish Biology*, 55(1):232, July 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Falk:1999:PGA

- [2385] T. M. Falk, E. K. Abban, and W. Villwock. Population genetic analysis of the haemoglobins of the black-chinned tilapia. *Journal of Fish Biology*, 55(2):233–242, August 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Edmonds:1999:SDP

- [2386] J. S. Edmonds, R. A. Steckis, M. J. Moran, N. Caputi, and M. Morita. Stock delineation of pink snapper and tailor from Western Australia by analysis of stable isotope and strontium/calcium ratios in otolith carbonate. *Journal of Fish Biology*, 55(2):243–259, August 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Booth:1999:PNE

- [2387] R. K. Booth, R. S. McKinley, and J. S. Ballantyne. Plasma non-esterified fatty acid profiles in wild Atlantic salmon during their freshwater migration and spawning. *Journal of Fish Biology*, 55(2):260–273, August 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Huber:1999:IDG

- [2388] M. Huber and D. A. Bengtson. Interspecific differences in growth of somatic and reproductive tissues during the breeding season in *Menidia menidia* and *M. beryllina*. *Journal of Fish Biology*, 55(2):274–287, August 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Chen:1999:UMU

- [2389] K. C. Chen, K. T. Shao, and J. S. Yang. Using micropylar ultrastructure for species identification and phylogenetic inference among four species of Sparidae. *Journal of Fish Biology*, 55(2):288–300, August 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Dalzell:1999:TIB

- [2390] D. J. B. Dalzell and N. A. A. Macfarlane. The toxicity of iron to brown trout and effects on the gills: a comparison of two grades of iron sulphate. *Journal of Fish Biology*, 55(2):301–315, August 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Scott:1999:PRG

- [2391] A. P. Scott, P. R. Witthames, E. L. M. Vermeirssen, and J. Carolsfeld. Prolonged-release gonadotrophin-releasing hormone analogue implants enhance oocyte final maturation and ovulation, and increase plasma concentrations of sulphated C₂₁ steroids in North Sea plaice. *Journal of Fish Biology*, 55(2):316–328, August 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Scharer:1999:SMC

- [2392] L. Schärer and D. R. Robertson. Sperm and milt characteristics and male v. female gametic investment in the Caribbean reef fish, *Thalassoma bifasciatum*. *Journal of Fish Biology*, 55(2):329–343, August 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Carcupino:1999:TSS

- [2393] M. Carcupino, A. Baldacci, G. Corso, P. Franzoi, M. Pala, and M. Mazzini. Testis structure and symplastic spermatid formation during spermatogenesis of pipefishes. *Journal of Fish Biology*, 55(2):344–353, August 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Baras:1999:AES

- [2394] E. Baras and J. C. Philippart. Adaptive and evolutionary significance of a reproductive thermal threshold in *Barbus barbuis*. *Journal of Fish Biology*, 55(2):354–375, August 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Siligato:1999:SMB

- [2395] S. Siligato. Spawning migration of Balon's ruffe into a Danubian side branch in Austria. *Journal of Fish Biology*, 55(2):376–381, August 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Killeen:1999:DST

- [2396] J. Killeen, H. A. McLay, and I. A. Johnston. Development in *Salmo trutta* at different temperatures, with a quantitative scoring method for intraspecific comparisons. *Journal of Fish Biology*, 55(2):382–404, August 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anseume:1999:RCC

- [2397] L. Anseume and G. G. Teugels. On the rehabilitation of the clariid catfish genus *Bathyclarias* endemic to the East African Rift Lake Malaŵi.

Journal of Fish Biology, 55(2):405–419, August 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kawamura:1999:STR

- [2398] K. Kawamura, T. Ueda, K. Aoki, and K. Hosoya. Spermatozoa in triploids of the rosy bitterling *Rhodeus ocellatus ocellatus*. *Journal of Fish Biology*, 55(2):420–432, August 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jepsen:1999:ASG

- [2399] D. B. Jepsen, K. O. Winemiller, D. C. Taphorn, and D. Rodriguez Olarte. Age structure and growth of peacock cichlids from rivers and reservoirs of Venezuela. *Journal of Fish Biology*, 55(2):433–450, August 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Caruso:1999:SSN

- [2400] D. Caruso and J. Lazard. Subordination stress in Nile tilapia and its effect on plasma lysozyme activity. *Journal of Fish Biology*, 55(2):451–454, August 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Caputo:1999:CCA

- [2401] V. Caputo, M. L. Caniglia, and N. Machella. The chromosomal complement of *Aphia minuta*, a paedomorphic goby. *Journal of Fish Biology*, 55(2):455–458, August 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hamon:1999:UFN

- [2402] T. R. Hamon, C. J. Foote §., and G. S. Brown. Use of female nest characteristics in the sexual behaviour of male sockeye salmon. *Journal of Fish Biology*, 55(3):459–471, September 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Chabot:1999:RGA

- [2403] D. Chabot and J.-D. Dutil. Reduced growth of Atlantic cod in non-lethal hypoxic conditions. *Journal of Fish Biology*, 55(3):472–491, September 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Golubtsov:1999:MEO

- [2404] A. S. Golubtsov and P. B. Berendzen. Morphological evidence for the occurrence of two electric catfish (*Malapterurus*) species in the White Nile and Omo–Turkana systems (East Africa). *Journal of Fish Biology*, 55

(3):492–505, September 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Erkinaro:1999:RMA

- [2405] J. Erkinaro, F. Økland, K. Moen, E. Niemelä, and M. Rahiala. Return migration of Atlantic salmon in the River Tana: the role of environmental factors. *Journal of Fish Biology*, 55(3):506–516, September 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Stevens:1999:GMG

- [2406] E. D. Stevens, G. N. Wagner, and A. Sutterlin. Gut morphology in growth hormone transgenic Atlantic salmon. *Journal of Fish Biology*, 55(3):517–526, September 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Davenport:1999:SVB

- [2407] J. Davenport. Swimbladder volume and body density in an armoured benthic fish, the streaked gurnard. *Journal of Fish Biology*, 55(3):527–534, September 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Holmgren:1999:BYV

- [2408] K. Holmgren. Between-year variation in community structure and biomass–size distributions of benthic lake fish communities. *Journal of Fish Biology*, 55(3):535–552, September 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kreivi:1999:DFP

- [2409] P. Kreivi, T. Muotka, A. Huusko, A. Mäki-Petäys, A. Huhta, and K. Meissner. Diel feeding periodicity, daily ration and prey selectivity in juvenile brown trout in a subarctic river. *Journal of Fish Biology*, 55(3):553–571, September 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mamuris:1999:TRB

- [2410] Z. Mamuris, C. Stamatis, M. Bani, and C. Triantaphyllidis. Taxonomic relationships between four species of the *Mullidae* family revealed by three genetic methods: allozymes, random amplified polymorphic DNA and mitochondrial DNA. *Journal of Fish Biology*, 55(3):572–587, September 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gibran:1999:AFB

- [2411] F. Z. Gibran and R. M. C. Castro. Activity, feeding behaviour and diet of *Ogocephalus vespertilio* in southern west Atlantic. *Journal of Fish Biology*, 55(3):588–595, September 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gisbert:1999:HDD

- [2412] E. Gisbert, M. C. Sarasquete, P. Williot, and F. Castelló-Orvay. Histochemistry of the development of the digestive system of Siberian sturgeon during early ontogeny. *Journal of Fish Biology*, 55(3):596–616, September 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Brykov:1999:AMI

- [2413] Vl. A. Brykov, N. Polyakova, L. A. Skurikhina, A. D. Kukhlevsky, O. N. Kirillova, D. Churikov, A. I. Pudovkin, and A. J. Gharrett. Analysis of mtDNA indicates weak temporal genetic heterogeneity in pink salmon spawning runs in two rivers on Sakhalin Island. *Journal of Fish Biology*, 55(3):617–635, September 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Carss:1999:STT

- [2414] D. N. Carss, D. A. Elston, K. C. Nelson, and H. Kruuk. Spatial and temporal trends in unexploited yellow eel stocks in two shallow lakes and associated streams. *Journal of Fish Biology*, 55(3):636–654, September 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Begg:1999:CDD

- [2415] G. S. Begg and D. W. Bruno. The common dab as definitive host for the Pennellid copepods *Lernaecera branchialis* and *Haemobaphes cyclopterrina*. *Journal of Fish Biology*, 55(3):655–657, September 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Collares-Pereira:1999:OEL

- [2416] M. J. Collares-Pereira, I. G. Cowx, T. Sales Luís, N. Pedrosa, and M. Santos-Reis. Observations on the ecology of a landlocked population of allis shad in Aguieira Reservoir, Portugal. *Journal of Fish Biology*, 55(3):658–664, September 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Evans:1999:ACN

- [2417] D. W. Evans and M. A. Matthews. *Anguillicola crassus* (Nematoda, Dracunculoidea); first documented record of this swimbladder parasite of eels in Ireland. *Journal of Fish Biology*, 55(3):665–668, September 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1999:BRj

- [2418] Anonymous. Book reviews. *Journal of Fish Biology*, 55(3):669–672, September 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1999:Ac

- [2419] Anonymous. Announcements. *Journal of Fish Biology*, 55(3):673, September 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Valente:1999:GDW

- [2420] L. M. P. Valente, E. Rocha, E. F. S. Gomes, M. W. Silva, M. H. Oliveira, R. A. F. Monteiro, and B. Fauconneau. Growth dynamics of white and red muscle fibres in fast- and slow-growing strains of rainbow trout. *Journal of Fish Biology*, 55(4):675–691, October 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Martinez-Diaz:1999:FMA

- [2421] S. F. Martínez-Díaz and H. Pérez-España. Feasible mechanisms for algal digestion in the king angelfish. *Journal of Fish Biology*, 55(4):692–703, October 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hostens:1999:MFG

- [2422] K. Hostens and J. Mees. The mysid-feeding guild of demersal fishes in the brackish zone of the Westerschelde estuary. *Journal of Fish Biology*, 55(4):704–719, October 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rønnestad:1999:AAT

- [2423] I. Rønnestad, K. Hamre, Ø. Lie, and R. Waagbø. Ascorbic acid and α -tocopherol levels in larvae of Atlantic halibut before and after exogenous feeding. *Journal of Fish Biology*, 55(4):720–731, October 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Kelly:1999:RSB

- [2424] S. P. Kelly and N. Y. S. Woo. The response of sea bream following abrupt hyposmotic exposure. *Journal of Fish Biology*, 55(4):732–750, October 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Doadrio:1999:GVT

- [2425] I. Doadrio, J. A. Carmona, E. Martínez, and A. De Sostoa. Genetic variation and taxonomic analysis of the subgenus *Profundulus*. *Journal of Fish Biology*, 55(4):751–766, October 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jonsson:1999:TBE

- [2426] N. Jonsson and B. Jonsson. Trade-off between egg mass and egg number in brown trout. *Journal of Fish Biology*, 55(4):767–783, October 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Cutts:1999:PRT

- [2427] C. J. Cutts, B. Brembs, N. B. Metcalfe, and A. C. Taylor. Prior residence, territory quality and life-history strategies in juvenile Atlantic salmon (*Salmo salar* L.). *Journal of Fish Biology*, 55(4):784–794, October 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vandewalle:1999:EDC

- [2428] P. Vandewalle, A. Chikou, P. Lalèyé, E. Parmentier, F. Huriaux, and B. Focant. Early development of the chondrocranium in *Chrysichthys auratus*. *Journal of Fish Biology*, 55(4):795–808, October 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Tveiten:1999:TED

- [2429] H. Tveiten and H. K. Johnsen. Temperature experienced during vitellogenesis influences ovarian maturation and the timing of ovulation in common wolffish. *Journal of Fish Biology*, 55(4):809–819, October 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Lahnsteiner:1999:CSE

- [2430] F. Lahnsteiner and R. A. Patzner. Characterization of spermatozoa and eggs of the rabbitfish. *Journal of Fish Biology*, 55(4):820–835, October 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Araujo:1999:STV

- [2431] F. G. Araújo, R. G. Bailey, and W. P. Williams. Spatial and temporal variations in fish populations in the upper Thames estuary. *Journal of*

Fish Biology, 55(4):836–853, October 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

McCarthy:1999:FRD

- [2432] I. D. McCarthy, D. J. Gair, and D. F. Houlihan. Feeding rank and dominance in *Tilapia rendalli* under defensible and indefensible patterns of food distribution. *Journal of Fish Biology*, 55(4):854–867, October 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Deverill:1999:PRA

- [2433] J. I. Deverill, C. E. Adams, and C. W. Bean. Prior residence, aggression and territory acquisition in hatchery-reared and wild brown trout. *Journal of Fish Biology*, 55(4):868–875, October 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Carlson:1999:SDR

- [2434] J. K. Carlson and G. R. Parsons. Seasonal differences in routine oxygen consumption rates of the bonnethead shark. *Journal of Fish Biology*, 55(4):876–879, October 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jepsen:1999:CGR

- [2435] N. Jepsen and K. Aarestrup. A comparison of the growth of radio-tagged and dye-marked pike. *Journal of Fish Biology*, 55(4):880–883, October 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Moore:1999:RPM

- [2436] A. Moore and C. P. Waring. Reproductive priming in mature male Atlantic salmon parr exposed to the sound of redd cutting. *Journal of Fish Biology*, 55(4):884–887, October 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Yamamoto:1999:MGA

- [2437] M. E. Yamamoto, S. Chellappa, M. S. R. F. Cacho, and F. A. Huntingford. Mate guarding in an Amazonian cichlid, *Pterophyllum scalare*. *Journal of Fish Biology*, 55(4):888–891, October 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pampoulie:1999:LHT

- [2438] C. Pampoulie, E. Rosecchi, J. L. Bouchereau, and A. J. Crivelli. Life history traits of *Pomatoschistus minutus* in the Rhône Delta, France. *Journal of Fish Biology*, 55(4):892–896, October 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Douglas:1999:OSW

- [2439] S. E. Douglas, A. Gawlicka, S. Mandla, and J. W. Gallant. Ontogeny of the stomach in winter flounder: characterization and expression of the pepsinogen and proton pump genes and determination of pepsin activity. *Journal of Fish Biology*, 55(5):897–915, November 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Blázquez:1999:SRO

- [2440] M. Blázquez, M. Carrillo, S. Zanuy, and F. Piferrer. Sex ratios in offspring of sex-reversed sea bass and the relationship between growth and phenotypic sex differentiation. *Journal of Fish Biology*, 55(5):916–930, November 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Matallanas:1999:DOS

- [2441] J. Matallanas and A. Brito. Description of *Ophidion saldanhai* sp. nov. from the Cabo Verde Islands. *Journal of Fish Biology*, 55(5):931–936, November 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Healey:1999:SPY

- [2442] E. G. Healey. The skin pattern of young plaice and its rapid modification in response to graded changes in background tint and pattern. *Journal of Fish Biology*, 55(5):937–971, November 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Mackinson:1999:VSD

- [2443] S. Mackinson. Variation in structure and distribution of pre-spawning Pacific herring shoals in two regions of British Columbia. *Journal of Fish Biology*, 55(5):972–989, November 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bell:1999:EAP

- [2444] G. W. Bell, J. A. Buckel, and A. W. Stoner. Effects of alternative prey on cannibalism in age-1 bluefish. *Journal of Fish Biology*, 55(5):990–1000, November 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Beeching:1999:MMP

- [2445] S. C. Beeching and A. B. Hopp. Male mate preference and size-assortative pairing in the convict cichlid. *Journal of Fish Biology*, 55(5):1001–1008,

November 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Höjesjö:1999:BHR

- [2446] J. Höjesjö, J. I. Johnsson, and M. Axelsson. Behavioural and heart rate responses to food limitation and predation risk: an experimental study on rainbow trout. *Journal of Fish Biology*, 55(5):1009–1019, November 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hutchings:1999:ISB

- [2447] J. A. Hutchings, A. Pickle, C. R. McGregor-Shaw, and L. Poirier. Influence of sex, body size, and reproduction on overwinter lipid depletion in brook trout. *Journal of Fish Biology*, 55(5):1020–1028, November 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Aranda:1999:IWT

- [2448] A. Aranda, F. J. Sánchez-Vázquez, and J. A. Madrid. Influence of water temperature on demand-feeding rhythms in sea bass. *Journal of Fish Biology*, 55(5):1029–1039, November 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ali:1999:EVF

- [2449] M. Ali and R. J. Wootton. Effect of variable food levels on reproductive performance of breeding female three-spined sticklebacks. *Journal of Fish Biology*, 55(5):1040–1053, November 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Goolish:1999:LGB

- [2450] E. M. Goolish and K. Okutake. Lack of gas bladder inflation by the larvae of zebrafish in the absence of an air-water interface. *Journal of Fish Biology*, 55(5):1054–1063, November 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Furimsky:1999:IIL

- [2451] M. Furimsky, S. F. Perry, and T. M. Moon. Intracellular ion levels in erythrocytes and hepatocytes isolated from three teleost species. *Journal of Fish Biology*, 55(5):1064–1074, November 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Herskin:1999:ESV

- [2452] J. Herskin. Effects of social and visual contact on the oxygen consumption of juvenile sea bass measured by computerized intermittent respirometry.

try. *Journal of Fish Biology*, 55(5):1075–1085, November 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Aparicio:1999:PMA

- [2453] E. Aparicio and A. De Sostoa. Pattern of movements of adult *Barbus haasi* in a small Mediterranean stream. *Journal of Fish Biology*, 55(5):1086–1095, November 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Pedersen:1999:DCB

- [2454] J. Pedersen. Diet comparison between pelagic and demersal whiting in the North Sea. *Journal of Fish Biology*, 55(5):1096–1113, November 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Economidis:1999:TRS

- [2455] P. S. Economidis, A. Kallianiotis, and H. Psaltopoulou. Two records of sea lamprey from the north Aegean Sea. *Journal of Fish Biology*, 55(5):1114–1118, November 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jarial:1999:UCF

- [2456] M. S. Jarial, L. R. Ganion, and B. A. Verhoestra. Ultrastructure of the collagen fibrils in the coelacanth. *Journal of Fish Biology*, 55(5):1119–1122, November 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bunt:1999:TFI

- [2457] C. M. Bunt. A tool to facilitate implantation of electrodes for electromyographic telemetry experiments. *Journal of Fish Biology*, 55(5):1123–1128, November 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Jonsson:1999:IPL

- [2458] N. Jonsson, T. F. Næsje, B. Jonsson, R. Saksgård, and O. T. Sandlund. The influence of piscivory on life history traits of brown trout. *Journal of Fish Biology*, 55(6):1129–1141, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Ahlgren:1999:ENC

- [2459] G. Ahlgren, M. Carlstein, and I.-B. Gustafsson. Effects of natural and commercial diets on the fatty acid content of European grayling. *Journal of Fish Biology*, 55(6):1142–1155, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Morita:1999:SFH

- [2460] K. Morita and T. Suzuki. Shifts of food habit and jaw position of white-spotted charr after damming. *Journal of Fish Biology*, 55(6):1156–1162, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Chellappa:1999:PRB

- [2461] S. Chellappa, M. E. Yamanoto, M. S. R. F. Cacho, and F. A. Huntingford. Prior residence, body size and the dynamics of territorial disputes between male freshwater angelfish. *Journal of Fish Biology*, 55(6):1163–1170, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Besyst:1999:FEJ

- [2462] B. Besyst, A. Cattrijsse, and J. Mees. Feeding ecology of juvenile flatfishes of the surf zone of a sandy beach. *Journal of Fish Biology*, 55(6):1171–1186, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Molls:1999:NIM

- [2463] F. Molls. New insights into the migration and habitat use by bream and white bream in the floodplain of the River Rhine. *Journal of Fish Biology*, 55(6):1187–1200, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Armstrong:1999:ISU

- [2464] J. D. Armstrong, F. A. Huntingford, and N. A. Herbert. Individual space use strategies of wild juvenile Atlantic salmon. *Journal of Fish Biology*, 55(6):1201–1212, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hoque:1999:LSS

- [2465] M. M. Hoque, A. Takemura, M. Matsuyama, S. Matsuura, and K. Takano. Lunar spawning in *Siganus canaliculatus*. *Journal of Fish Biology*, 55(6):1213–1222, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vinyoles:1999:ECR

- [2466] D. Vinyoles, I. M. Côté, and A. De Sostoa. Egg cannibalism in river blennies: the role of natural prey availability. *Journal of Fish Biology*, 55(6):1223–1232, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hoines:1999:RSA

- [2467] Å. S. Høines and O. A. Bergstad. Resource sharing among cod, haddock, saithe and pollack on a herring spawning ground. *Journal of Fish Biology*, 55(6):1233–1257, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Witten:1999:IV

- [2468] P. E. Witten, L. S. Holliday, G. Delling, and B. K. Hall. Immunohistochemical identification of a vacuolar proton pump (V-ATPase) in bone-resorbing cells of an advanced teleost species, *Oreochromis niloticus*. *Journal of Fish Biology*, 55(6):1258–1272, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Green:1999:ILF

- [2469] B. S. Green and M. I. McCornick. Influence of larval feeding history on the body condition of *Amphiprion melanopus*. *Journal of Fish Biology*, 55(6):1273–1289, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Carlsson:1999:MRF

- [2470] J. Carlsson, K. H. Olsén, J. Nilsson, Ø. Øverli, and O. B. Stabell. Microsatellites reveal fine-scale genetic structure in stream-living brown trout. *Journal of Fish Biology*, 55(6):1290–1303, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Haddy:1999:SIC

- [2471] J. A. Haddy and N. W. Pankhurst. Stress-induced changes in concentrations of plasma sex steroids in black bream. *Journal of Fish Biology*, 55(6):1304–1316, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Gill:1999:DCP

- [2472] A. B. Gill and P. J. B. Hart. Dynamic changes in prey choice by stickleback during simultaneous encounter with large prey. *Journal of Fish Biology*, 55(6):1317–1327, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Verbeeten:1999:CEF

- [2473] B. E. Verbeeten, C. G. Carter, and G. J. Purser. The combined effect of feeding time and ration on growth performance and nitrogen metabolism

of greenback flounder. *Journal of Fish Biology*, 55(6):1328–1343, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Linhart:1999:EOI

- [2474] O. Linhart, J. Walford, B. Sivaloganathan, and T. J. Lam. Effects of osmolality and ions on the motility of stripped and testicular sperm of freshwater-and seawater-acclimated tilapia, *Oreochromis mossambicus*. *Journal of Fish Biology*, 55(6):1344–1358, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Commens:1999:APR

- [2475] A. M. Commens and A. Mathis. Alarm pheromones of rainbow darters: responses to skin extracts of conspecifics and congeners. *Journal of Fish Biology*, 55(6):1359–1362, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1999:BRk

- [2476] Anonymous. Book reviews. *Journal of Fish Biology*, 55(6):1363–1365, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Watabe:1999:MRF

- [2477] S. Watabe. Myogenic regulatory factors and muscle differentiation during ontogeny in fish. *Journal of Fish Biology*, 55(sA):1–18, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rescan:1999:DET

- [2478] P. Y. Rescan, J. M. Delalande, L. Gauvry, and B. Fauconneau. Differential expression of two MyoD genes during early development of the trout: comparison with myogenin. *Journal of Fish Biology*, 55(sA):19–25, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Galloway:1999:MGY

- [2479] T. F. Galloway, E. Kjørsvik, and H. Kryvi. Muscle growth in yolk-sac larvae of the Atlantic halibut as influenced by temperature in the egg and yolk-sac stage. *Journal of Fish Biology*, 55(sA):26–43, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Veggetti:1999:PHD

- [2480] A. Veggetti, A. Rowleron, G. Radaelli, S. Arrighi, and C. Domeneghini. Post-hatching development of the gut and lateral muscle in the

sole. *Journal of Fish Biology*, 55(sA):44–65, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Vieira:1999:TND

- [2481] V. L. A. Vieira and I. A. Johnston. Temperature and neuromuscular development in the tambaqui. *Journal of Fish Biology*, 55(sA):66–83, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Stoiber:1999:MPT

- [2482] W. Stoiber, J. R. Haslett, and A. M. Sanger. Myogenic patterns in teleosts: what does the present evidence really suggest? *Journal of Fish Biology*, 55(sA):84–99, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Steinarsson:1999:ETS

- [2483] A. Steinarsson and B. Bjornsson. The effects of temperature and size on growth and mortality of cod larvae. *Journal of Fish Biology*, 55(sA):100–109, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Hoie:1999:IDP

- [2484] H. Hoie, A. Folkvord, and A. Johannessen. The influence of different parental combinations and incubation temperature on the RNA and DNA content of herring larvae at hatching: a pilot study. *Journal of Fish Biology*, 55(sA):110–118, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Eddy:1999:CRE

- [2485] F. B. Eddy, L. McGovern, N. Acock, and J. C. McGeer. Cardiovascular responses of eggs, embryos and alevins of Atlantic salmon and rainbow trout to nitric oxide donors, sodium nitroprusside and isosorbide dinitrate, and inhibitors of nitric oxide synthase, N-nitro-l-arginine methyl ester and aminoguanidine, following short- and long-term exposure. *Journal of Fish Biology*, 55(sA):119–127, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Boeuf:1999:CSG

- [2486] G. Boeuf, D. Boujard, and J. Person-Le Ruyet. Control of the somatic growth in turbot. *Journal of Fish Biology*, 55(sA):128–147, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Llewellyn:1999:MCD

- [2487] L. Llewellyn, M. A. Nowell, V. P. Ramsurn, T. Wigham, G. E. Sweeney, B. Kristjánsson, and Ó. Halldórrson. Molecular cloning and developmental expression of the halibut thyroid hormone receptor- α . *Journal of Fish Biology*, 55(sA):148–155, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Osse:1999:DMF

- [2488] J. W. M. Osse and J. G. M. van den Boogaart. Dynamic morphology of fish larvae, structural implications of friction forces in swimming, feeding and ventilation. *Journal of Fish Biology*, 55(sA):156–174, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Eiriksson:1999:HSD

- [2489] G. M. Eiriksson, S. Skúlason, and S. S. Snorrason. Heterochrony in skeletal development and body size in progeny of two morphs of Arctic charr from Thingvallavatn, Iceland. *Journal of Fish Biology*, 55(sA):175–185, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Rombough:1999:GFL

- [2490] P. J. Rombough. The gill of fish larvae. Is it primarily a respiratory or an ionoregulatory structure? *Journal of Fish Biology*, 55(sA):186–204, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Parra:1999:EME

- [2491] G. Parra, I. Rønnestad, and M. Yúfera. Energy metabolism in eggs and larvae of the Senegal sole. *Journal of Fish Biology*, 55(sA):205–214, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Fuiman:1999:ORS

- [2492] L. A. Fuiman, M. E. Smith, and V. N. Malley. Ontogeny of routine swimming speed and startle responses in red drum, with a comparison of responses to acoustic and visual stimuli. *Journal of Fish Biology*, 55(sA):215–226, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Bardocz:1999:EIU

- [2493] T. Bardócz, É. Kovács, F. Radics, and Zs. Sándor. Experiments for the improved use of decapsulated *Artemia* cysts in intensive culture of

African catfish larvae. *Journal of Fish Biology*, 55(sA):227–232, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Morley:1999:ESM

- [2494] S. A. Morley, R. S. Batty, A. J. Geffen, and P. Tytler. Egg size manipulation: a technique for investigating maternal effects on the hatching characteristics of herring. *Journal of Fish Biology*, 55(sA):233–238, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:1999:PA

- [2495] Anonymous. Poster abstracts. *Journal of Fish Biology*, 55(sA):239–251, December 1999. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic).

Anonymous:2004:ARN

- [2496] Anonymous. Additional records and notes for Wheeler's (1992) *List of the Common and Scientific Names of Fishes of the British Isles*. *Journal of Fish Biology*, 65:1–40, December 2004. CODEN JFIBA9. ISSN 0022-1112 (print), 1095-8649 (electronic). See [698].