BIO 5440/CMP 6610 Take Home Final

Answer two of the questions (not counting the Extra Credit), about 1 page each. Aim to take two hours for the whole test, using perhaps half the time for research and outlining and the rest for writing. Due on May 3rd by 3:14 pm, either in my mailbox or under my door in 319 South Biology. I would prefer hard copy, but if you won't be near campus, don't make an extra trip and just send me a nice pdf.

- 1. Building on our discussion of the challenges of ecological research in urban areas, give examples of a few ecological questions that might be **best** investigated in cities. Describe at least one in detail, including the processes to be studied, potential sites of study, and challenges to be overcome.
- 2. Based, ideally, on one of the field trips, choose a site that acts as "downstream in the city," (such as soil, water, or an institution) and describe which urban inputs are concentrated there, what new processes occur there, and how those processes can feed back to the city at large to affect ecosystem functioning and the organisms that live there, including humans. What policy options might mitigate any detrimental effects?
- 3. Has anything in this course influenced your plans for future research or professional work? If yes, describe what has changed and which material catalyzed the change. If not, describe the ecological or planning approaches that you would have preferred to investigate, and how those might have affected your thinking and plans.

Extra Credit: What sort of fish live in City Creek Center, and how many are there?