Guidelines for course project revisions

You have now received feedback on your draft submissions from me and two of your peers (or peer groups). Improving your work based on such reviews is another fundamental cornerstone of doing science, but is also encountered in almost any other type of work.

As soon as you are granted a budget, you likely have to write a report on what you did with the money. Or the budget may be allocated based on an internal or external funding proposal. If the report or the proposal is important to you, you may want to collect a friendly review from your boss and/or colleagues.

Also, in any type of publishing situation your work will be reviewed by arms-lengths experts as well as by the editor or publisher. While this does not guarantee that all work that gets published is good, and neither guarantees that good work gets published, it is an important quality control filter for scientific progress to be somewhat efficient.

In all the above situations, you may find that peer feedback may be contradictory (opposite recommendations or evaluations from different reviewers), downright hostile especially if anonymous, sometimes petty and often superficial. Almost always, the reviews also contain nuggets of wisdom and valuable hints on which aspects of your work need to be improved (even if the recommendations are bad).

General principles for dealing with reviews and feedback

Here are some important tips on how to deal with such feedback:

- Do not follow every piece of advice. Reviewers are likely to get something wrong, unless they are profoundly more experienced than you. They spend half an hour to a few hours thinking about your work, while you spent days and weeks, perhaps months and years. Nevertheless, they may have good ideas that you should consider.

- Most of the time, peer-review is a voluntary activity with people spending time to help you. Always be polite and appreciative when you reply to their suggestions, even if you ultimately decline making changes. In the end, it's your name on the publication, or your money that's at stake. Use your good judgment. An editor wants to see that good judgment: if you follow poor advice it raises red flags.

- If two independent reviewers make the same suggestion or raise the same concern, that's a very strong indicator that something is wrong with your work, even if you think you are right (that's again the power of an indepedent replication, n=2 or more)! If you are sure that both reviewers are wrong, you have to explain things better, often by directly saying what you DO NOT mean.

- If one of your reviewers is in a position of power (your boss, an editor, a publisher, a granting agency representative, or .... a course instructor ;-) you are usually well advised to take their suggestions rather seriously. Do not hesitate to approach them for clarification or for discussing a point. However it is usually unwise to ignore their requests and recommendations without providing a truly compelling reason.

- Depending on the format of the peer review, you would want to get back in some form to your original reviewers, telling them what you changed and what you didn't. That can range from an informal email to a very comprehensive point-by-point reply or systematic rebuttal to every comment and concern.

Reply to feedback in this class and final submission

For this class project, I would like to keep the reply to reviewers fairly limited and your workload low in this regard. No need to elaborately defend your decisions on which advice and suggestions you followed and which one not. Instead, simply indicate with comment bubbles what you did and didn't do. Only minimal explanations are needed here.

I would like to see your good judgment in what advice you deem valuable and which one perhaps not. I do have your draft websites saved as a reference for how your final submission has been improved over the draft submission, but just to avoid me overlooking something important. Add to the end of my comments anything major that you added or that you improved and that was not part of my suggestions.

For your final submission, send me the following by the deadline posted on e-class: **(1)** a link to your final course-project website, **(2)** a link to the final 5-minute presentation, **(3)** your individual contribution statement if you worked in a group, and **(4-6)** three annotated attachments (Andreas' comments.docx, Review1.docx, Review2.docx) that briefly describe how you have addressed all comments and suggestions, plus any major changes and additions beyond the comments. This may look like the screenshot below, using Word's review and commenting tools:

Your website looks like a good start. Some comments and suggestions that you can work on:

Your narrative is generally good on the home page and introduction. However, you could be a bit more specific and direct. For example you say "Determining EKT migration trends will inform conservation efforts with the intent to minimize human-wildlife conflicts", but that leaves me unsatisfied a reader. What is EKT? An unnecessary abbreviation. How will it actually inform conservation efforts? Can you give an example what you would do if your boundary really is 1100m vs some other value? What would you do if there is a strong trend over time vs a weak trend or no trend? I don't see immiately how your study can be useful. Explain it. Also what human-wildlife conflicts are we talking about. What are the problems?

> **Comment [A1]:** Removed all abbreviations in figures and text

> **Comment [A2]:** That's now all addressed in the third paragraph of the into page

I think I would add a separate Methods page, explaining the different kinds of tracking, a diagram of the numbers of animals and times tracked (e.g. x-axis time, y-axis ID with a closely staked line for each animal). Maybe color by animal characteristic (sex/age)? What about a map that shows the study area, elevaton, and where the animals generally are?

> **Comment [A3]:** done

> **Comment [A4]:** added

Data: Figure 1 is awesome, but what do you do about the outliers? What is objectively an unreasonable number? Can you color this by males vs females? In the abstract you said that may matter. Why not show a map of where each individual is in summer and in winter. Perhaps a density map of records for August and for January. You could show three maps for each period. Any interesting spatial changes? Perhaps look at individuals, taking an average coordinate for August and an average coordinate for January, connecting the two. Just explore and get to know your data by any means that does the job.

> **Comment [A5]:** That didn't work but we had an even better idea: see new Fig 7

> **Comment [A6]:** OK, we did something different. See scatter plots of new figures 3 and 4.

Analysis of a simple spatial migration may be useful. Why not just calculate average coordinate of each individual in January and August of each year. Then calculate the average seasonal spatial and elevational migration distance: Jan-Aug for each individual and each year. You could also look at habitat fidelity: Jan1995-Jan1996-Jan1997-Jan1998 distance divided by years tracked. Same for August. All this is easy to do and easy to analyze as part of RENR 480.

> **Comment [A7]:** Sorry, no time. Couldn't get this done.

> **Comment [A8]:** That we added

Analysis could be two-factor ANOVA: Time (3 levels), Sex (2 levels). As dependent variables, compare elevation migration (winter to summer habitat), distance migration (winter to summer habitat), habitat fidelity for winter habitat, habitat fidelity for summer habitat.

> **Comment [A9]:** Done, see table 3, but it is a non-parametric permuational ANOVA since we could not get an acceptable residual plot

Add residual plots or other checks of assumptions to your data section if applicable for the final submission.

> **Comment [A10]:** Yes, check the data section Fig 4. These looked bad enough to us to go with a non-parametric analysis

Substantially revised sections n addition to the above: 2nd paragraph of intro, the entire methods page. Also completely rewritten: second part of discussion. New section: conclusion on results page.