Class schedule -- 2020

Date	Class	Assignments Due
Jan 14	Why Publish?	Background presentation (5 minutes)
Jan 16	Discuss Getting Started	Getting Started Exercise
Jan 21	Choosing your Journal	Knowing your Journal Exercise
Jan 23	Figures and Tables	<i>n copies of Tables and Figures:</i> Henry, Rabia, Thomas
Jan 28	Figures and Tables	Changling, Jenna, Jeff, Mike
Jan 30	Outline and Objectives	Two copies of your Outline and Objectives with Abstract (revised)
Feb 4	Results	Draft of Results (two copies)
Feb 6	Writing exercise, in class	Bring a difficult section
Feb 11	Materials and Methods	Draft of Methods (two copies)
Feb 13	Preparation for peer review Editing and proofreading	Submit Results and Materials and Methods Sections with Abstract and Objectives and line numbers (for First Peer Review)
Feb 18	Discussions (examples)	Bring examples from your field, include Conclusions and Summary if any
Feb 20	Drafts of Discussions	2 copies double-spaced
Feb 25	Advice, Responses to Reviews	First Peer Review Due
Feb 27	Introductions (examples)	Bring examples from your field, n copies, number the paragraphs, staple

Mar 3	Drafts of Introductions	2 copies double-spaced
Mar 5	Authorship	Authorship Exercise
Mar 10	Mid-semester feedback	Anonymous feedback
Mar 12	Readings on Peer Review	Submit Rough Draft and Response to First Reviews
	Mar 15-22 (spring break)	
Mar 24	Statistical Considerations	Bring your questions
Mar 26	Readings on Publication Productivity	Second Peer Review Due
Mar 31	Reviewer feedback and help session	Your review, your paper, or a section that needs help
Apr 2	(cancelled)	
Apr 7	Proposals	Bring examples of RFPs, proposals
Apr 9	Ethics	
Apr 14	Abstracts	Bring n copies of an example from your field
Apr 16	Work session	Sections for review
Apr 21	Abstract review	2 copies double-spaced
Apr 23	Steps to Publication	
Apr 28	Last Class (Final Steps)	Final Draft of Manuscript and Response to Second Reviews

Contact Info

Ruth Yanai: 315-345-7412 Thomas: 502-410-9245 Pu Ge: 215-821-5781 Mike: 631-905-1385 Jenna: 802-498-4891 Changling: 314-805-4703 Henry: 716-628-6744 Rabia: 315-440-3430, great!

Jan 14: Why Publish?

Why Publish?

Dan wants to see the end of a neglected paper. And it's fun.

Pu Ge: having a publication record will help me get a post-doc.

Thomas: Writing will help me understand what I have learned.

Henry: I want to show that what we have made in our lab is better than what's out there.

Changling: You can share your research and your new ideas with other people.

Claudia: I want my thesis to be publishable by the time I graduate.

Jenna: I want to capitalize on a previous investment (MS thesis), and I don't want it to be left unfinished.

Dan: Publication is important to academic career advancement. Pride.

Thomas: Advance thinking in my field.

Jenna: Peer review provides a level of scrutiny that makes the work more trustworthy.

Henry: It gives you a chance to evaluate your own process and improve it.

Changling: Publication is a way of communicating among researchers.

Claudia: It's a rite of passage. It's proving that I can be a scientist.

Presentations

https://drive.google.com/drive/folders/0BxXuVrpNGuD9U1pwQVZhdnJRamM

Changling: People die from loss of blood and from infections. Degradable shape memory polymer (SMP) foams can help. The expand at body temperature. Adding phenolic acids can give antibiotic properties. And the surface chemistry promotes clotting. Advisor: Marybeth Monroe.

Henry: Gauze and tourniquets don't work in the torso (non-compressible). XStat is a cellulose

based expandable option but it has to be kept under pressure and it has to be removed after 4 hours. The SMP is a big improvement. Tg is the temperature of the state change from rigid to flexible. Dry Tg should be high, for storage, and wet Tg should be body temperature. Last spring they did studies in pigs, testing function and comparing them to the competition. They decreased bleeding time by 25%.

Thomas: Multiple Element Limitation in Northern Hardwood Ecosystems (MELNHE), in 3 locations in NH. NxP fertilization in 13 stands of different ages (cut from 1890 to 1990). I will be writing about germination; I am also interested in leaf production and soil organic matter. There are also Ca treated plots. Sugar maple produced a lot of seed (mast) in 2011 and 2017. Those cohorts were followed for survival.

Claudia: MELNHE is an overarching project with lots of people studying responses to N, P, Ca. I'm studying fungal fruiting bodies (mushrooms), specifically of ecomycorrhizae. She collected 4085 mushrooms over 5 trips to NH, visiting the 6 mid-aged and mature stands at Bartlett Experimental Forest.

Jenna: several projects relating to leaf litter decomposition and litterfall mass. Decomposition of leaf litter in litterbags. The mesh size matters because it excludes decomposers based on their size. Mass loss is measured to evaluate a decay rate. Initial litter quality is important, and accounting for moisture content is important to mass. MSc at UBC tested 12 different species, coniferous and deciduous, measuring traits that could predict decomposition rates: chemical analysis (N, C fractions, pH), thickness, mass/area (specific leaf area, SLA), toughness (force to punch), cuticle thickness, water uptake and leaching loss. Weight loss over 5 time points was published. Two more sets of bags were collected after 2 and 3 years but not yet published. I used PCA (principle components analysis) and CART (regression tree analysis) to analyze the data.

Jeff: Nutrients in stream runoff and important to algal blooms etc. Data from the Hubbard Brook Experimental Forest, Watershed 3. Streamflow and nutrient concentrations are monitored. Calculations of stream nutrient fluxes are complicated, and there are many sources of uncertainty, like the watershed area, the measurement of discharge, and filling gaps in the data. Estimating concentrations during the time between measurements can be based on a concentration-discharge relationship. Propagating uncertainties can easily be done incorrectly. Dan: In addition to the 13 stands in MELNHE, I'm using 13 additional stands, looking at trees 2-10 cm in diameter at breast height (too small to be tagged) of all species, evaluating the effects of nutrient treatments, stand age, etc, based on inventories from 1994 to 2015. Mike: Behavioral changes in snow hare caused by climate change Rabia: Time series analysis of aerosol optical depth using Fourier series.

Intro to Getting Started

Autumn: If I gave myself only 10 minutes it would have been better earlier.

Shuai: I could divide my study into 2, based on data resolution. Ruth: Then do the GSE twice! It's easy compared to drafting the paper two different ways.

Jan 16: Getting Started Exercise

What's hard about your paper? How can we help you?

Changeling: I have too much data, I studied 10 phenolic acids. I'm having trouble choosing the best ones.

Henry: Mine is fairly straightforward. Figuring out which of the clinical data are relevant to report.

Jenna: I'm not completely finished with the data analysis, which might change my conclusions. The first part of the experiment was already published, so how to write a second paper that can stand on its own.

Rabia: I need a better command of the literature to write the Introduction and Discussion. Mike: I don't have most of my results, I have previous data.

Jeff: Like Rabia, I need to put my conclusions in the context of the literature. Like Jenna, my results may change.

Thomas: I'm still refining my results.

Lessons learned:

Nick: The objectives should be specific and directional in nature. For example, rather than "is there a difference among soil horizons?" ask whether you can see greater evidence of microbial processing at greater depth.

Null hypotheses are dull hypotheses!

Ask the question, "What's difficult about it?" (Helpful hint for job talks.)

Jan 21: Choosing your Journal

Factors to Consider

Relevance to subject matter: what they have published, read aims and scope, who has published similar work, where you cite similar papers.

Impact Factor: journal web site

Special Issues: these can be a mechanism for publishing a group of papers from a conference or a project. Jenna published a paper in a special issue on the hemlock wooly adelgid. Look for these if you're paper might be hard to publish somewhere else. It used to be a problem to be in a special issue, waiting for the last paper to be accepted before it could be published. Now with electronic journals, they can keep a "special feature" open forever.

Type of articles published: Not all journals publish original research articles.

Does it matter how the work was funded?

Publication time: You can see the date submitted, the date accepted, and the date published on each journal article. Compare this to what they claim on their web site!

Is there a relationship between quality or prestige of the journal and turnaround time **Acceptance rate**: Some journals show this on their web site and some don't. You can email the journal to ask. You could submit to a "reach" journal, knowing that you might be rejected. THe drawback is that you have to wait to submit it elsewhere.

Cost to me: Many journals have no page fees but will charge extra for open access.

Access to readers: If it's not open access, people without institutional subscriptions have to pay to read. Interlibrary loan is an option for people with institutional access. You can provide your paper to any individual who asks for it. You can't just post it on your web site, if it's not Open Access. It's also legal to post the version that was accepted by the journal.

Target audience: e.g., managers vs researchers

How many papers are published by the journal--is this related to the acceptance rate? The impact factor is scaled to the number of papers.

Additional requirements: Environmental management requires a section on management implications. This suggests that the target audience is managers.

Coauthors are going to have to be on board with your choice. Ask them early.

Mode of publication and who profits from it.

Your Journal Choices

Thomas: Canadian Journal of Forest Research, for relevance. IF 1.7 for 2 years, 2.6 for 5 years.

Jeff: Water Resources Research: IF 4.6, shorter turnaround time. Second choice Hydrologic Processes 3.189

Rabia: IEEE TGRS IF 5.6. There are two lower levels of journals at IEEE, with the same

formatting requirements. Institutions have subscriptions. Specialized audience.

Jenna: Ecology IF 4.3, for publishing an update to a previous report. Page costs might be an issue.

Henry: J of Trauma and Acute Care. This is where most of these types of papers are published. Changling: J of Colloid and Interface Science. IF 6.3, my PI has published there.

Read the Instructions

Required sections, length limits, costs...

Length limits: 6 pages for free, additional cost per page, 6000 words, 4000, 20-30 pages, 7500 words

Abstract: 150-250, 300, 200, 350, 200

Figures and Tables: 6, additional go into supplementary materials

Format and resolution requirements. E.g. tiff, not png or bmp, 600 dpi. Black on a white background

Required sections: Introduction, Materials, Results and Discussion, Acknowledgements Graphical abstract, highlights. Keywords!

Cost: CJFR \$0, WRR \$0, IEEE TRSE \$200/page beyond 6 pages, Ecology \$75/page, JTrauma \$0

Cost of Open Access:CJFR \$3000 WRR \$2500, more if you exceed the page units (words/500 + figures + tables), IEEE TRSE \$1750, JTrauma \$2150, JBMR \$3750, Advances in Water Resources \$4000

IEEE Transactions on Remote Sensing and the Environment: 4-6 weeks from submission to Hydrologic Processes: 8 months "time to publication"

Canadian J of Forest Research: 49.3 days from submission to first decision

Previous data on acceptance rate: 32% Science of the Total Environment, 659, Ecological Indicators 44%, 3.19, Remote Sensing of the Environment 29% 5.8, 21% for Building and Environment IF 3.4, Journal of Economic Behavior and Organization 10%, Journal of Trauma and Acute Care 40%, Ecology 23%

Impact factor: CJFR 1.8, Ag and Forest Meteorology 4.0, Urban Forestry and Urban Greening 3.5, J Arboriculture and Urban Forestry 0.8, Journal of Economic Behavior and Organization 1.2, Aquatic Sciences 3.6, International Journal of Sustainability in HIgher Education 1.9, Journal of Great Lakes Research 1.

Figures and Tables

Print 4 copies at the size you expect the journal to reproduce them. Please number your figures and tables so we can refer to them. If you have multiple alternatives for a graph, show us the options!

In general, readers can find guidance in a legend more easily than in your figure captions. If too many colors to distinguish in gray scale, consider symbol shapes and line types.

Your journal may publish figures in color. Make sure that they are legible in B&W. Find a guide to color choices that are distinguishable by all viewers, color blind and non color-blind.

Metric units for international journals. Some US audiences understand English units, check your Instructions to Authors.

Digits: Think about whether they are all meaningful. Does Lat 43.13633333 give more precision than your instrument (or the diameter of your stake). Other ways to choose how many digits to show? When you have a standard error, this indicates the confidence in the mean. It's not meaningful to aim for consistency across different units!

Watch out for defaults on figures: axis scale, size of labels, boxes, grid lines Watch out for default error bars in Excel (if they all look the same, they are wrong)

Box plot: characterizing a sample, don't mix/combine samples taken over time

Captions can contain interpretation of results, depending on journal/field. Readers tend to look at figures and tables first so caption info is important to convey results. No speculation. Describe trends (increasing/decreasing) vs function of or correlated.

In what order presenting categorical data. Alphabetical prob not best

Conventions: [concentration] if not, conform to the norm (units). Keep same order of variables in legend and caption. Solid line around legend.

If logic to symbols, use it. Like color to mean spp. Shape to mean function.

Pathways: Images of chemical structure is helpful. Define acronyms if audience may not know them. Don't ask people to memorize your unusual acronyms, just write it out each time.

A column with all the same values is an unnecessary column.

Do not include redundant columns (e.g. count and percentage).

Your numbers should be aligned on the decimal--but the journal will format your tables, so they will apply their journal style even if you don't know it. Another example is vertical rules, often not allowed.

LAST YEARS NOTES

We like the dotted line but it needs to be explained in the figure caption.

Order the legend to match the observations.

What about putting the top, mid and bottom of the tree on the y axis. Soils people do this all the time, even though it means the response variable goes on the x.

Figure axis labels should have units in parentheses at the end.

Avoid acronyms.

Are figures usually labeled with sans serif fonts? Does your journal have a particular style? Order of treatments! Alphabetical is rarely the best order.

Don't use the same fill pattern to mean the same thing across different graphs, if you can afford it.

Table of data sources--need to decide whether this is better than a paragraph of text. Don't include tables redundant with figures (or text).

How do you decide how many digits to report?

For P values: report to 0.01 or the first significant digit, whichever comes first.

Think about how many digits are meaningful. Probably elevation of a lake is not precise to 0.01 m.

You can also look at the variability. 1622 plus or minus 50?

You may decide to include insignificant digits up to the 1 place. 1600 kg/ha

Align numbers on the decimal (or make sure the journal does it for you)

What's in rows vs. columns? Numbers are easier to compare in columns than rows. Beware of defaults. Do you want the gray background, the gridlines, etc.

Maps: You need a north arrow if it's not up. Choose your base map--for example, are political boundaries helpful? Consider an inset map for context. Scale bar.

Specify the meaning of your error bars (SD, SE, CI) Specify the parts of your box plots.

Spell out conventions in other types of figures; you will enlarge the audience who can understand your paper.

Site names: Don't ask your readers to memorize the meaning of your site names (don't ask them to learn any unnecessary vocabulary)

Consider using color, if it won't cost you more. Use colors that can be distinguished in black and white.

Close up space between panels if the axis labels are redundant and can be removed.

When should your axes start at zero? Is the magnitude of the effect relevant to zero?

Font sizes (bigger)

When do you connect the dots? When do you use a curve to connect them?

Jan 31: Outline, Objectives

An outline is a way to look at the organization of your paper without getting distracted by the details.

Thomas: My outline is pretty scant. My outline develops as I write. My results are still in development.

Mike: I enjoyed it. Using bullets vs. writing whole paragraphs. When I write a paragraph I get bogged down on every word. The methods is the most developed.

Jenna: I usually use bullet points and templates when I write. I used your template on the website and it makes it look like I'm going to have a paper! It also helped me identify what I need to do to finish the analysis. The introduction and discussion seem repetitive.

Henry: When I write drafts of papers, I do a few words for my bullet points rather than full sentences, so I don't keep changing the wording all the time. I used your template and changed the headings around. It helped me to think about the limitations. Feedback on sequencing.

Changling: I focused on the discussion and conclusions--We discussed combining results and discussion (Henry needs to do this. Changling will check).

Upload outlines here.

Referencing tools

Nehan and Ryan use Endnote, which works with Web of Science. Not so well with Scopus. Blaz: Endnote is good for keeping the library but it gets messed up when sharing it. Some people do them all manually. They say the software goes wrong. Mark installed Zotero but hasn't tried it yet.

Citation Managers: Getting Started with Zotero and Mendeley February 21 11am-12pm 110 Moon Library Ruth Owens & Casey Koons

Text Editors

Nehan uses LaTeX, this is common in her field.

Feb 4: Methods

Photo points were marked in the NE corner with a yellow pin. TMI

Samples were digested in nitric acid. TLI. concentration, how much, how long, what temperature?

Samples were digested in nitric acid (Bickelhaupt 1970).

Also TLI from the point of view of the reader. Depending on how common it is (know your audience).

- 1. If a researcher were to replicate your study
- 2. If a reader isn't going to hunt down your references.

Chronological is a good organizing principle.

If you have a choice, and the material is not interesting, put it in the Methods.

Mike: pretty solid for what I'm doing, need more on the analysis that I haven't done yet. 1 p. Rabia: I wrote this for a conference, but now I want to add material about the formulas for time series and kriging. 1 p.

Pu Ge: some of the details are missing and I noted that. Is there more that's still missing?

Jenna: Much of the methods are the same as an earlier paper. I tried to change the emphasis and cite the other paper. 6.5 pp.

Is it plagiarism to copy yourself? It could be copyright violation: the journal owns your previous work.

Thomas: I used past papers from these study sites as a model for my site description? Suggestions: read it over, wait until you've lost that author's voice, and write it yourself. Or take notes and then write it again.

Thomas: The data analysis was hard. It's hard to write a comprehensive model statement. 1.5 p

Henry: I am hoping to cut information, because I have a 4000 word limit. 2 pp Changling: I used the same methods as previous publications from my lab. I changed the sentences, changing the order and adding details. Help me with my grammar. 5

Feb 6: Writing Exercise

Rabia: I don't hate it. I spend time making an outline in my mind, first, and then I pour it out and don't think while writing. Then I come back to edit it. If I can't think of the English word, I use another word and keep going.

Thomas: I do hate writing. I am slow and methodical. I usually make a detailed outline, which also helps me think less about the words that I'm using. I feel like I'm a good writer, and I put pressure on myself to write well. My vision of perfection is so unattainable that all my words take me away from that. I deconstruct and reconstruct sentences constantly.

Pu Ge: I like writing. But not under deadlines. I like it because it helps me think. Writing my dissertation, I realize that what I thought doesn't make sense when I write it down.

Mike: I wouldn't say I love or hate writing. I think I'm pretty good at it. I have to have the perfect conditions: the apartment has to be clean and the dishes have to be done... Under a deadline I get to it. Outlines have helped me avoid the trap of getting lost in perfecting my sentences. I think it saves time in the long run. Making it perfect is a waste of time when I'm going to get feedback that makes some of the work unusable.

I'm easily distracted so it helps to pick the right location.

Setting matters. I'll do anything before writing.

Pu Ge started a writing group last year. He read a book called "How to Write More," and it described how to use a group. His group meets weekly for an hour.

Joe: I do dig writing. I get hung up over what I have said and what I want to say. I had a professor who thought I overused "the"—so now I'm hypersensitive to that. It would help for me to get the point across. I lack confidence that my writing will be understood the way I meant. Getting people to review it helps.

Kate: Writing is wonderful, I have a degree in writing. I relate to all of these methods. It helps me to

start with messy concepts and allow evolution of my vision. Sometimes I start writing about how I don't want to be writing, just to get me started. I can delete all the garbage later. An outline can be just a cloud of words or concepts, and you can refer to that when you get stuck.

Jenna: I really like writing. My dream as a kid was to be a writer. I'm a quiet and shy person, so writing is easier for me than speaking, it's how I think things through. Writing helps me understand my subject more than talking about it. I can even write about what to do next. My problem is that I write too much and have to go back and streamline things. It used to be hard to cut things, and it helped to have a graveyard of old ideas.

Kate: The opposite of the graveyard is the "greatest hits" collection.

Henry: I don't like writing. My brain moves too fast and I can't keep up, the sentence is too wordy or has a crap ton of grammatical errors. It makes writing difficult, having to slow down my mental process. It's also a problem with oral presentation.

Thomas has tried voice to text to overcome the labor barrier. It didn't work for me because I was thinking too much. Pu Ge had the same problem. It's beneficial when I have a quick thought. Bear is software that retains the sound recording as well as the text transcription. There are lot of them. Otter is another (recommended by Pu Ge).

Changling: I don't like writing either. Grammar is hard for me. I can be in the middle of writing and get distracted by researching a topic.

Mike: Turning off the wifi saves me from getting lost on the Internet.

Henry: Save the references for after I write the section, or I get lost in a wormhole reading papers for an hour and a half.

There are apps to limit your distractions on the internet.

Rabia: The outline can be a way to capture the overflow from my mind.

Citation managers help make it fun to keep track of references. Zotero, Mendeley.

Brown and Smith

Long sentences can lose a reader. Brown has 5, Smith has 9.

Transition words help.

Paragraphs help.

Avoid unnecessary words. Big words are not the most accessible.

Active voice is easier to understand. It's more direct.

Subject-verb-object is the standard in English.

Organization: each experiment is described followed by the results.

Make the logic of your ideas explicit.

Sounds of words can be distracting.

Brown's Version

In the first experiment of the series using mice it was discovered that total removal of the adrenal glands effects reduction of aggressiveness and that aggressiveness in adrenalectomized mice is restorable to the level of intact mice by treatment with corticosterone. These results point to the indispensability of the adrenals for the full expression of aggression. Nevertheless, since adrenalectomy is followed by an increase in the release of adrenocorticotrophic hormone (ACTH), and since ACTH has been reported (Brain, 1972) to decrease the aggressiveness of intact mice, it is possible that the effects of adrenalectomy on aggressiveness are a function of the concurrent increased levels of ACTH. However, high levels of ACTH, in addition to causing increases in glucocorticoids (which possibly account for the depression of aggression in intact mice by ACTH), also result in decreased androgen levels. In view of the fact that animals with low androgen levels are characterized by decreased aggressiveness the possibility exists that adrenalectomy, rather than affecting aggression directly, has the effect of reducing aggressiveness by producing an ACTH-mediated condition of decreased androgen levels.

Smith's Version

The first experiment in our series with mice showed that the total removal of the adrenal glands reduces aggressiveness. Moreover, when treated with corticosterone, mice that had their adrenals taken out became as aggressive as intact animals again. These findings suggest that the adrenals are necessary for animals to show full aggressiveness.

But removal of the adrenals raises the levels of adrenocorticotrophic hormone (ACTH), and *Brain* (1972) found that ACTH lowers the aggressiveness of intact mice. Thus the reduction of aggressiveness after this operation might be due to the higher levels of ACTH which accompany it.

However, high levels of ACTH have two effects. First, the levels of glucocorticoids rise, which might account for *Brain's* results. Second, the levels of androgen fall. Since animals with lower levels of androgen are less aggressive, it is possible that removal of the adrenals reduces aggressiveness only indirectly: by raising the levels of ACTH it causes androgen levels to drop.¹

Fix this sample:

Proofreading Marks

Loans

Changling: Writing in the biological sciences Rabia: Technical writing Thomas: Writing to learn biology Mike: Writing successful science proposals Jenna: Day

Feb 11: Results

Henry: It's very short. I'm missing results from the clinical side, like blood pressure at different time points, amount of blood loss. I will need to add to figures and tables. Write sentences with gaps for values, so we can review it.

Rabia: I have 2 pages. I made the figures smaller than I want them to be in the journal article, just to save space. I'm still wondering whether this is two papers or one: spatial and temporal analysis. I did a spatial analysis in 2014, which I could bring up to date.

Pu Ge: I'm having trouble with what to say, beyond describing the uncertainties.

Jenna: I have 2 pages of text, plus all my figures. My analysis changed a lot this weekend, after I asked Pu Ge about inflection points, now I'm using piecewise regression. It's all new to me and I hope it makes sense. The methods will have to change to match. There is yet more that I can try; I want to reach out to my coauthors. Reviewing this version is still helpful.

Thomas: Maybe a page. I made a lot of progress on data analysis over the weekend: I learned how to use a covariate and what to do with normality of count data. If this is correct, I have interesting results. Is there more I should add, or is this enough.

Changling: I have 6 pages, 8-900 words. I will add more data later, and I noted where--there are other lab members contributing data.

Digits

Reviewer assignments

Pu Ge and Rabia review each other. Henry and Changling review each other. Jenna reviews Mike reviews Thomas reviews Jenna.

Feb 13: Peer Review

Author Updates

Thomas: I feel pretty good about it. The data analysis is the hardest, describing it. Mike: I have fake results, but I could use comments on how to set it up. I have changed how I organized the Methods, I hope it reads better. I could use a review of how I wrote the data analysis.

Pu Ge: I don't have all the results, either. There are a lot of xxx's. I could use review on how the results are structured.

Jenna: I think I have most of my results, I will be sending it to my co-authors and things may change. It's a little long. I have estimates of the same thing done different ways, which is hard to do clearly. Can an uninitiated reader follow it?

Changling: For now, I am separating results from discussion. I can use feedback to improve my sentences and my grammar. I will be adding more data.

Rabia: I am thinking about separating the time series analysis and focusing on it only. I will perform the analysis again on a larger data and then compile the results.

Expert Reviewers

Please provide the name and email contact for an expert in your field, along with the title of your paper and your target journal.

https://docs.google.com/document/d/1iztkbyF8zRQbT-mFEWdcNPJLeE5F8kk-HZRA-kazWN4/e dit

Review Criteria

Is this a new and original contribution?

Is the quality of the English satisfactory?

Will the paper be understood by a multidisciplinary and multinational audience? Does it have relevance to a broad audience

Do the paragraphs flow smoothly? Is it logically organized? Is the length justified by the content? Can you suggest any reductions in the paper or deletions of parts? Are the objectives and hypotheses clearly stated? Are the methods described clearly enough so that the work could be repeated by someone else. Is the statistical analysis appropriate and adequate? Are the units used properly? Are terms used properly? Are there errors of methods, facts, analysis, or interpretation? Are inferences mistaken for facts? Are the results presented in terms of the subject of study rather than the statistics? Are the tables and figures all necessary? Are they grouped to facilitate comparison?

Does the introductory statement increase the value of this paper? Is the review of the literature limited to defining the problem? Does the Discussion include a comparison to other studies? Are the implications overstated? Are the conclusions justified by the data? Are the references complete and up to date?

We will not ask you to judge whether the paper will be acceptable for publication!

What makes a good review?

Reading and understanding the paper is important. Starting with a summary demonstrates your understanding of the paper. If the author is surprised by what you got out of it, that's important feedback.

Give general feedback before the specifics. Try to start with what's most important.

Give specific recommendations for improvement, such as literature to consider. Not just "your literature review is weak." Give suggestions indexed by line number, table number, or numbers that you add to the manuscript.

You might see something in the results that the authors didn't see. Share it.

Give suggestions for broadening the audience.

Give suggestions for additional applications.

Be humble. "I am not capable of providing a rigorous review of the quantitative methods..." Try to use positive constructions.

Suggestions that are not important to the Editor's decision need not be in your written review. You can return an electronic or paper copy of the ms. to the author with your written review. The author will be required to respond to each of your review comments, so don't put trivial ones in your written review (or say, "Not worthy of a response to the Editor.") It could be worth noting general categories of errors.

Please ask your reviewer whether they want your paper on paper or electronically. I want both! On paper, double spaced with continuous line numbers. Scrap paper acceptable (or preferred).

From Publons: In this new <u>blog post</u>, we provide resources that will help you to write a constructive peer review, including peer review templates, example reports, guidelines, and free courses like the Publons Academy, which gives you practical experience in peer review.

How to write a peer review: practical templates, expert examples, and free training courses

27 FEBRUARY 2020 on Learn peer review, Publons Academy, How to peer review, Peer Review Template, Peer Review Examples

(Added by Jenna 4/3/2020: PeerJ's review criteria: <u>https://peerj.com/about/editorial-criteria/</u>)

February 18: Discussions

Please bring 8 copies of a discussion section from a paper of the type you are writing. Number the paragraphs, we will be looking at the functions they serve.

Alternatively, upload the paper here, if you can number the paragraphs for us. <u>https://drive.google.com/drive/u/0/folders/1zevDALhs8QJtNekZiExLSK4FamI0q3rh</u>

Author updates

What needs to be accomplished in a Discussion?

Summarize key findings--without sounding like Results. Interpretation of the results. Explanation for unexpected results. Support (or not) for the hypotheses or goals posed in the Introduction. Comparison to other studies Limitations of this study. Address anticipated criticisms! Recommendations and implications Suggestions for future research

Justification for the approach--might belong in Intro (or Methods). Where do we describe data availability?

Examples you brought

Thomas

- 1. Interpretation and comparison to other studies
- 2. Interpretation and comparison
- 3. Interpretation, with reference to hypotheses
- 4. Comparison to other studies, why different
- 5. Interpretation, comparison or reference to hypotheses, surprising finding.
- 6. Interpretation, implication, evaluation.

Pu Ge

- 1. Importance of the problem to be solved.
- 2. Objectives and key results. The last phrase looks like interpretation.
- 3. Result
- 4. Results, comparison to other studies, interpretation
- 5. Results, comparison to other studies, interpretation
- 6. Results, comparison to other studies, interpretation
- 7. Key finding
- 8. Interpretation--attempts to explain missing N sink.
- 9. Limitations, uncertainties.
- 10. Summary and future work. Value of this contribution.

Jenna

- 1. Relating results to the research question, with reference to other studies.
- 2. Explanation and comparison to other studies
- 3. Limitations of this approach, justify the interpretation
- 4. Interpretation, comparison to other studies
- 5. Value of this approach to the question answered

- 6. Debunking previous beliefs
- 7. Answers another question posed in the Intro.
- 8. Summary of key results (1 sentence).

Henry

- 1. Key findings and comparison to other studies.
- 2. Justification for this approach (this animal model).
- 3. Seems like Results. Conclusion at the end.
- 4. Result, implication for real-life application. Comparison to other studies.
- 5. Same topics, with a limitation of this approach.
- 6. Limitation of this approach, reference to other studies.
- 7. Interpretation, comparison to other studies.
- 8. Addressing a possible criticism.
- 9. Application and dire warnings.

Changling

- 1. Background and objectives
- 2. Methods, results, future research directions
- 3. Background, result, importance, other studies, limitations
- 4. Comparison to other studies, limitations, future plans
- 5. Key result, limitation, address this Febpotential criticism.
- 6. Summary, value, and future work.

Discussion of Discussions: They differ by discipline!

February 20: Discussions

Author Updates

Thomas: Recently realized that statistics may not have met assumptions, so discussions were written in reference to those. Discussion is brief (1 page), concerned that may be missing information.

Pu Ge: Did not finish discussion, but has an outline of it.

Jenna: Concerned about overlap from previous paper (4 pages)

Henry: Wants to make sure that discussion is concise enough, but also has sufficient explanations. Will have another paragraph of discussion coming soon after getting new results this week (2 pages)

Changling: Discussion is not finished, a new experiment is needed. Discussion is separated from Results, it is difficult to distinguish between them, but it may not matter because the journal calls for a combined Results/Discussion section (2.5 pages)

Feb 25: Reviews, Responses to Reviews

Thoughts on the review process

Changling: This was my first time. I'm not sure I'm right on the statistics.

You can communicate to the AE about aspects of the paper you don't feel qualified to evaluate. Mike: I wished I had more background knowledge in the topic area. I would have benefitted from seeing those examples again.

Some of the examples I shared with you are on the class website.

Mike: Knowing the target journal and elements of the instructions to authors would be helpful. Ruth: Include that with your next draft. It will earn you 10 points on your final draft requirement. Rabia: This was my first time reviewing a paper, but I like reviewing other things. I like pointing out mistakes, it's part of teaching. It was hard to get the overall picture (the paper is not complete). And I learned new things (I had to google some of them).

Jenna: I think this went well. I have reviewed papers before. I haven't used the category of "comments not worthy of a response to the editor"--this is important knowing that the author will be required to respond to all of them.

Thomas: I enjoyed this. It's easier for me to assign work to someone else, I don't have to do the decision-making involved in executing it. It's worthwhile to contribute to improving the scientific literature. And I'm helping a friend.

Pu Ge: To review a paper, you get to see what's at the cutting edge of your field, before it's even published.

Henry: I've reviewed documents for qualifying exams and papers in my field. I look forward to reviewing something that I don't have so much background in.

It helps us with our own writing--both things to avoid and things to emulate.

How to write a response to reviews

The response document is addressed to the Editor. Your goal is to provide a response document so satisfying that the AE can accept it on the spot. You don't want them to have to find the time to find these occurrences in your paper. And you really really don't want them to send it out to review again.

You may be asked to provide tracked changes in the revised manuscript. You can turn on "track changes" in the Review menu. You can generate this after the fact using "compare documents." You may need to include the manuscript number.

Thank you for the helpful reviews...

Some review comments are not clear unless you explain them.

Use positive language. Don't say that the reviewer is stupid. Try to find something you can improve to prevent another reader from having the same problem.

When you disagree, provide appropriate justification.

Don't make changes that do not improve your paper (but you have to say why).

When you made an obvious error, choices are "oops," "Done," "Fixed," "Thank you for catching that." "Noted."

Be clear whether a change was made or not. "No change" (but you have to say why).

When you agree, say, "We agree," comment on the importance, document the changes.

If you made changes not requested by reviewers, you can summarize these at the beginning or the end of the list of responses.

Ways to distinguish your responses from the reviewer comments:

"Response:"

Italicize the review comment

Colored fonts (responses in blue, quoted material in red)

Different fonts (serif and sans serif).

Responses in bold face.

Blaz found on Twitter: #sixwordpeerreview If it will help you to share your troubles, post here!

How to handle revisions

www.dartmouth.edu/~mpayres/teaching/gradprogram/HowToRevise MPA.pdf

Advice to authors, using anonymous examples

February 27: Introductions (examples)

What needs to be accomplished in the Introduction?

The problem to be solved. Why it is a problem. Why it is important. Background: What is known already--from your project or from other researchers Inadequacy of previous attempts to solve this problem. Introduce aspects of your study system, if important. The rationale behind the study--why we can solve the problem Method if novel. Goals or objectives. Testable hypotheses Some papers outline the paper at the end of the Introduction.

Examples you brought

Thomas

- 1. Background. Introduction to masting
- 2. Problem: "cues are not entirely clear"
- 3. Background, previous work on potential explanations.
- 4. Ditto, role of nutrients
- 5. Objectives. Questions to be answered.

Henry

- 1. Problem, this is important because people die.
- 2. Background: current state of affairs
- 3. Objective. Object of study. Comparison to the alternatives, Why it's better. Model system.

We would like this better if the background came before the objectives of this study.

Mike

- 1. Background. 2 appoaches to predator-prey interactions.
- 2. Background. Explaining the first approach and what its limitations are.
- 3. Background. The second approach. Applies well in some cases but not others.
- 4. Objectives.

Well organized, clear. They don't try to sell it to us.

Jenna

- 1. Background on N fertilizers, why this is important.
- 2. Problem statement. Understand the effect of N on C cycling. Very broad.
- 3. More specific problem: N effect on decomposition (positive)
- 4. Alternative: N decreases decomposition
- 5. Objectives. Hypotheses related to early and late stages of decomposition.

Like Jenna, she already published her early results.

Changling

- 1. Problem is important. Background on alternative treatments.
- 2. Background. Review of available products. Address risk of infection.
- 3. Background. XStat.
- 4. Background. Why SMP foams are better.
- 5. Objectives. Description of the product they are going to test

Pu Ge pointed out that each paragraph introduces information and ends by telling us what the limitations are. Problem statement gets developed over all the paragraphs.

Pu Ge

- 1. Background
- 2. Problem statement. Uncertainty is not reported.
- 3. Previous work and what the current report will add. Novelty.
- 4. What we will do, why you should care about whole-tree harvesting.
- 5. More on the whole-tree harvesting background, and what we're going to do about it.
- 6. Objectives. Last sentence as to why this is important.

Rabia

- 1. Importance of aerosols.
- 2. Ditto.
- 3. Problem statement, then more background.
- 4. Background. What is known.
- 5. Objectives. The first sentence about the need for the study could have been the last sentence of the preceding paragraph.

Red Flags

These are statements that help us know what problem the paper will solve. Don't use them for things other than what you will solve!

... is not entirely clear

Ignorance of ... One of the major scientific challenges... Results are inconsistent Insufficient observations...

Last year we did it electronically: Upload the paper here; if you can, number the paragraphs for us. <u>https://drive.google.com/drive/u/0/folders/1zevDALhs8QJtNekZiExLSK4FamI0q3rh</u>

March 3: Introductions (yours)

Thomas checked for flags and is concerned that there may be too many signalling directions that he may not go. 1.5 pages

Pu Ge is hoping that a co-author will write the introduction based on his outline. Please review the structure and layout. Outline and some paragraphs. 1.5

Mike: I like my introduction. I have the hardest time starting them--the problem statement is not in the first sentence. Is there too much background, can I cut to the chase sooner? I started with the camouflage issue rather than the snowshoe hare. 3

Jenna: I have a similar issue, I'm not sure the story goes in the straightest path it could. I have background on multiple topics--leaf traits and the duration of studies. The study was set up for the former, not the latter. 2.5

Henry: It's background heavy. It may be lacking direction, could it be better organized to lead us to the objectives? 2.5

Changling: Some of my references are old--1998 is a long time ago for data on trauma cases (in different wars). 1.7

March 5 Authorship

Jenna

Doing this exercise made me think about how much my third author contributed. The paper would not have been possible if she hadn't collected the samples. She's in another country as a new assistant professor and this paper is not a high priority for her. I hope she will be more involved in interpretation when she sees the next draft.

I used the Hunt system, which brought her up to Cindy's level because of the greater weight on data capture.

	Jenna Zukswert	Cindy Prescott	Han Li
Planning	Major (20%)	Moderate (10%)	No (0%)
Executing	Major (20%)	Minor (5%)	Moderate (10%)
Analyzing	Major (20%)	Minor (5%)	Minor (5%)
Interpreting	Major (20%)	Moderate (10%)	No (0%) (but could be minor in future)
Writing	Major (20%)	Minor (5%)	Minor (5%)
TOTAL	100%	35%	20% (could be 25%)

Thomas

Thomas used a scale of 0-10 instead of 0-20, so according to Gallindo-Leal, his authors need 12.5 to qualify.

	Thomas Mann	Ruth Yanai	Shinjini Goswami	Kathryn Bazany
Planning	0	3	6	1
Executing	0	0	5	5
Analyzing	7	2	1	0
Interpreting	6	3	1	0
Writing	10	0	0	0
Total	23	8	14	6

Thomas Mann	Ruth Yanai	Shinjini	Kathryn
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			Goswami	Bazany
Planning	0	20	20	0
Executing	0	0	20	20
Analyzing	20	10	5	0
Interpreting	20	10	5	0
Writing	20	0	0	0
Total	60	40	50	20

Changling

The PI is the mastermind, she is not on this list, she will be the last and corresponding author. There are other people involved in the patents. They may belong in the Acknowledgments. What about the undergraduate students? There was another one who worked 3 months last summer who was very good; I would like to add him. The PI thinks a longer service would be required for inclusion.

	Changling	Jingyi	Henry	David
Planning	10	10	10	10
Executing	20	20	20	20
Analyzing	20	20	20	10
Interpreting	20	10	10	10
Writing	20	10	10	0
Total	90	70	70	50

Pu Ge

Who gets to be second, me or John??

In a collaboration with multiple products, think about equity over more than just one paper.

	Pu Ge	John Campbell	RuthYanai	Mark Green	Craig See
--	-------	------------------	-----------	------------	-----------

Planning	5	20	20	5	0
Executing	20	5	5	5	0
Analyzing	20	20	20	5	5
Interpreting	20	20	20	5	0
Writing	20	20	20	5	0
Total	85	85	85	25	5

Henry

The execution was at Upstate, which involved a lot of people who would have gotten points only in the Execution row. Mary Beth is the PI, and she will be last. Gary runs the lab at Upstate, so he also goes towards the back of the list. Josh is the head of the lab, Sarah is a technician; they provided ideas, like using a powdered foam, that were key to the study.

	Henry	Josh	Sarah	Gary	Mary Beth
Planning	15	10	10	20	20
Executing	20	20	20	5	0
Analyzing	20	0	0	0	10
Interpreting	20	5	5	0	10
Writing	20	0	0	10	15
Total	95	35	35	35	60

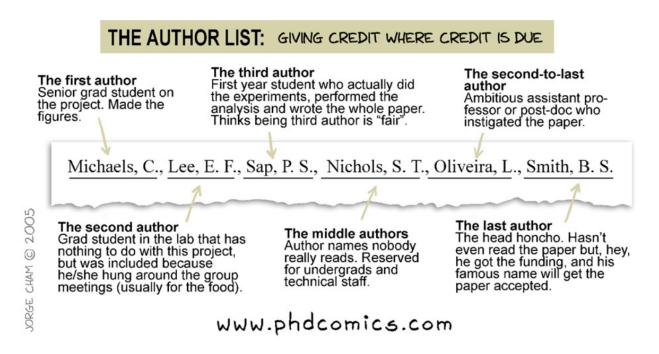
Eva

	Eva	Fiona	Jackie
Planning	Moderate(10%)	Major (20%)	Minor (5%)
Executing	Major (20%)	Minor (5%)	Minor (5%)

Analyzing	Major (20%)	Major (20%)	Major (20%)
Interpreting	Major (20%)	Major (20%)	Major (20%)
Writing	Major (20%)	Major (20%)	Major (20%)
TOTAL	90%	85%	70%

Mike

Mike assumed that his advisor, Cleveland, would be an author. Underwood initiated the prior study that made this possible, so now Mike is aware that he should be considered as a possible author.



1. Use the point system described by Carlos Galindo-Leal in Ecology 101 (Bulletin of the Ecological Society of America, October 1996). Make a column for each of the possible authors of your paper, and assign points for your various contributions. Include yourself!

Planning

Executing

Analyzing

Interpreting

Writing

2. Do the five categories of contributions suggested by Galindo-Leal seem appropriate for your project? If you prefer, try applying a point system with different categories, such as those suggested by Hunt or Dickson and Conner.

Thomas: Yes, they seem appropriate.

Changling: I tried Hunt's point system. To compare with Hunt's system, the contribution of each research activity of the Galindo-Leal's system is 0~20%. I don't like this even distributed. Because I think the planning and execution of research are more important than data analysis. Pu Ge: Yes, I tend to overestimate or underestimate.

Jenna: Yes, they seem appropriate, but I tried the Hunt system anyway:

	Jenna Zukswert	Cindy Prescott	Han Li
Intellectual Input	25	15	5
Practical Input: Data Capture	25	10	15
Practical Input: Beyond Data Capture	10	0	5
Specialist Input from Related Fields	?	?	?
Literary Input	25 (so far)	5-10 expected	5-10 expected

TOTAL	85	30-35	30-35

What is the value of having systems like these?

Henry: It's a reality check. A way of trying to be objective about it. Mike: It's useful to start thinking about it. Not to enforce as a rule.

3. Name your authors, in the order you propose to list them on your publication.

Thomas: Thomas Mann, Shinjini Goswami, Ruth Yanai, Kathryn Bazany Changling:

C. Du^{a,b}, J. Liu^{a,b}, H.T. Beaman^{a,b}, D.A. Fikhman^{a,b}, M.B.M. Monroe^{a,b,*}

^a Department of Biomedical & Chemical Engineering, Syracuse University, USA

^b Syracuse Biomaterials Institute, TX 13244-1200, USA

Corresponding author at: Department of Biomedical & Chemical Engineering, Syracuse University, 223 Link Hall, USA

PuGe: Pu Ge, John Campbell, Ruth Yanai, Mark Green Jenna: Jenna Zukswert, Cindy Prescott, Han Li

4. Does your list agree with any objective point system? If not, what were the other factors that influenced your decision?

Thomas: This was the order that I came up with when submitting my ESA abstract, which was before doing this exercise. The point totals from the Galindo-Leal system happen to match that order.

Changling: special contribution. e.g. my lab colleagues were not involved in my research but I used their research data. Undergraduate assistant? Jenna: Yes, it agrees with both systems I tried

5. Who will you list in your Acknowledgements section?

Thomas: Nat Cleavitt (for helping orient me to the world of demography and terminology for describing the processes that affect population dynamics), Adam Wild (mentor to Kathryn), USFS, LTER, Hubbard Brook

Changling: US Air Force 59th Medical Wing

Pu Ge: David, Whoever did friendly review, Jeff, Craig See, Jarlath, hubbard brook, LTER,

QUEST, USFS

Jenna: Funding source (NSERC), scientists who helped with my methodology (UBC scientists), Pacific Forestry Centre for chemical measurements, Ruth and the writing class for feedback on the manuscript, UBC Farm

Mike: Technicians (Julie Fogden, Katie Eddenburg), NYSDEC, Young Forest Initiative, SUNY ESF Ranger School, Paul Smith's College

Author lists

Vancouver Protocol

<u>CRediT</u>

Discussion

Acknowledgments

Remember to send them a copy of your paper when it's published.

Updates

Henry: I'm still waiting for data to come back from Upstate. I have my full data set, so it's only a paragraph that will change. So I'm in good shape data-wise and writing-wise. I had to get all the data together for a poster. Good for Thursday

Changling has to do new work with a different phenolic acid. Maybe a week later.

Mike: Two months from now he'll have all his data. It helps to go through the motions and get the structure down--he thinks he knows enough about what the results will be.

Pu Ge: After the writing retreat (a week late)

Thomas is having trouble with his statistical analysis. If his results are correct, he can write the next draft on time. Minor delay

Jenna will have a draft by next week. The analysis may not be exactly what she would include--having something that looks like a complete draft will help get the attention of her co-authors. Good for Thursday.

Rabia: first draft will be on time for the second draft due date!

March 10: Feedback for Improvement

Complete <u>this</u> Google form by Monday at 11:30 a.m., so that we can compile the results for discussion in Tuesday's class. Thanks!

Results are here.

Notes from in-class discussion

Background presentations, discuss "Why Publish?" Getting started exercise Choosing your journal Figures and tables Outline and objectives Drafts of methods Writing exercise Drafts of results How to write a peer review Discussion (examples) Discussion (yours) How to write a response to reviews Introductions (examples) Introductions (yours) Authorship

Henry: Oral communication could be used to ensure that the written document is conveying the intent.

Places on campus for help: Moon Library has a writing center (one negative experience) ESOL, in the basement of Marshall Hall SU Graduate Editing Center (good reviews). College of Arts and Sciences (Bird Library?) SU Writing Center, staffed by grad students in the writing program (good for grammar, but page limit and time limit). They also have a service where they will review your entire document. Needs a turnaround time, 4 days to a week. (https://thecollege.syr.edu/writing-center/) Zotero--in office hours with John Drake

Do you have any suggestions for how to proceed if classes are cancelled due to

concerns about the coronavirus?

Updates

Reviewers should aim to return their reviews within a week of getting the papers.

Assign reviewers:

Expert reviewers:

https://docs.google.com/document/d/1iztkbyF8zRQbT-mFEWdcNPJLeE5F8kk-HZRA-kazWN4/e dit

Feedback with Anonymous Examples

Sentences about statistics can be rearranged to be about your study system.

"Time did not affect the change in mass loss with leaf litter type."

Statistics: There was no interaction of time and litter type on mass loss.

Mass loss was consistent across litter types over time.

Don't say "There was a significant effect of litter type."

"Mass loss differed by litter type." "Litter types differed..." Elaborate

Direction is most important, magnitude is important, statistical significance is least important (as long as you don't describe insignificant effects).

Oak leaf litter decayed 23% slower than elm litter (P = 0.03).

Reporting P values is more informative than using an alpha.

"There was a significant relationship between the observed and predicted percent lipid values via this method of estimation."

Describe the dependent variable as a function of the independent variable.

"Predicted and observed percent lipid values were significantly related via this method of estimation."

"Lipid values predicted by this method were significantly related to measured lipids."

"Lipid concentrations were predictable from volumetric reactance in series ($r^2 = 0.88$)."

March 12

Reviewer assignments: Mike reviews Rabia reviews Henry reviews Pu Ge reviews Thomas reviews Mike. Jenna and Changling review each other.

Effect of Acceptance or Rejection on the Authors' Evaluation of Peer Review

Survey research. Forced opinion: 4 choices, none neutral. Authors whose papers were accepted had a more positive experience (duh).

Of the 40 papers in the study, only 1 author said they would not submit it elsewhere. 33 had a plan to revise the paper.

The Evolution of Editorial Peer Review

Journalism and medical journals evolved at about the same time, late 1800s. Initially, they would take anything. When there were more papers and specialized journals, they came up with the idea of sending papers for external review. Editorial boards were developed initially for moral support and for their contributions to the journal.

The Philosophical Basis of Peer Review and the Suppression of Innovation

Starts with a historical perspective. The point of peer review is quality control, but the cost is the suppression of innovation. Innovators are erratic, unsystematic, and difficult to deal with. Peer review in the grant evaluation process: you can't say what you really plan to do or you wouldn't get funded.

A Troubled Tradition

The first scientific journal, 1665: "The Philosophical Transactions, Giving Some Account of the Labors of the Present Undertaakings, Studies, and Labours, of the Ingenious in many considerable parts of the world"--is this the predecessor of the Philosophical Transactions of the Royal Society of London?

Authors were submitting fiction and speculative essays, in the mid 1700s, and they started some kind of review. By the mid 1900s, there was a system of getting input from experts.

A Case for Instant Peer Review?

Authors who speak to the media before getting published. In Darwin's time, discussion happened in print. The anonymous review process eliminates that.

It would make the science more visible to the public.

HESS is a journal that makes the reviews and responses available on line.

Is There Gender Bias in JAMA's Peer Review Process?

They studied 2452 male and 930 female reviewers, 1698 male and 462 female authors. (1994) They concluded that there was no bias.

Nepotism and Sexism in Peer Review

This is about peer review of post-doc applicants in medicine. (1997) They scored them on publication productivity. Women need to be 2.5 times more productive to get the same competence rating. If you know someone on the committee, it has a positive effect of about the same magnitude.

More Transparency in Reviewing is Called For

This was a letter from the editor, 2004, BMJ (British Medical Journal). They looked at articles in Science and Nature and what countries they were from; they were biased against different countries. This editor wanted to bring attention to similar biases in the BMJ. Countries with fewer medical doctors have lower acceptance rates.

Blinding can improve the quality of the reviews--the reviewers aren't afraid to be honest about their criticisms.

12 articles that had been accepted, resubmitted with different names and institutional affiliations (3 were recognized as resubmissions). Of the 9 that were reviewed, most were rejected, when they were attributed to a fake name with no name recognition.

Ecologists who publish more papers have a higher rejection rate! So that's better than being very cautious and submitting only really good ones?

Two biomedical companies were in court over intellectual property stolen by a reviewer.

The DOE failed to get impartial review and then funded a bad project (\$4 billion).

! SPRING BREAK !

March 24: Statistical Considerations

Zoom link: https://maine.zoom.us/i/483113972

Check in: How are you doing, how is your paper doing?

Rabia: Not so good overall, trying to pull myself together, paper is doing good. I will send my first draft today. Being an international student away from home in this situation is tough :(Jenna: I am doing OK, in Syracuse with my roommates. I am fortunate that all of my work right now involves data cleaning/analysis for Ruth and background reading for my new PhD project, so I am not set back in ways beyond my control. I have not worked on my paper at all since submitting the second draft the week before spring break. I finished Changling's review and am ready to send that to her today.

Henry: Set back in all the work i had planned

Rabia: Henry have you sent me yours? I think I am supposed to me reviewing yours. Changling: I am in Syracuse now. I had planned to collect some data during the spring break, but my lab was closed last Monday. My research cannot continue. I still lack some data. Ruth: I'm enjoying my daughter who is here from NYC and will be teaching remotely (2nd grade). We went skiing yesterday at Drumlins! And my Tree Hg revisions are almost done (due Thursday).

NYC is in really bad shape.

Thomas: I have updated the statistical analysis of my paper, and that resulted in some very different results. It's frustrating to feel so unsure of my statistics, but I do honestly feel like I'm learning a lot through the challenge. The quarantine has been weird, but my girlfriend Mikaela decided to quarantine for a while here in Syracuse with me, which has made it a lot more bearable!

Pu Ge had a writing retreat and made some great decisions to move paper along. Stay-in-home has been okay considering everything.

Pu Ge will lead this session, using notes developed by Steve Stehman.

What is statistics? What have we learned from our data? **Topics Covered:** Sample population Target population Total population Flow of design Sampling strategy Presenting results ANOVA

Statistical Software: R, SAS

Other resources:

Professors in FNRM.

Pu Ge recommends: *Naked Statisics* by Charles Wheelan, which uses examples to explain statistics, and addresses common mistakes and how to avoid them. A fun read. Read articles when you have specific questions.

Amazon book

https://www.amazon.com/Naked-Statistics-Stripping-Dread-Data/dp/B00CH7FWWU/ref=sr_1_1 ?dchild=1&keywords=9780393089820&linkCode=qs&qid=1585067855&s=books&sr=1-1

Figure guide <u>https://apastyle.apa.org/style-grammar-guidelines/tables-figures/figures</u>

ANOVA

https://www.r-bloggers.com/anova-%E2%80%93-type-iiiiii-ss-explained/

The manuals associated with R packages are helpful.

Mar 26: Publication Productivity (readings)

Let's test whether you all can get access to read these from home.

Rabia - Yes its downloadable

<u>Changing patterns of publication productivity: accumulative advantage or institutional isomorphism?</u> <u>Dey. Eric L. :</u> <u>Milem, Jeffrey F. ; Berger, Joseph B. Sociology of Education, Oct, 1997, Vol.70(4), p.308(16)</u>

Thomas - <u>Publication Productivity among Scientists: A Critical Review</u> Fox, Mary Frank. Social Studies of Science, May 1983, Vol.13(2), pp.285-305

Publication productivity among scientists: a critical review Mary Frank Fox

- "given the centrality of publication to scientific endeavor, the average rate of this productivity is low"
 - $_{\odot}\,$ "half of the sample had published five or more papers in the last three years, and the other half four or fewer"
 - $_{\odot}$ "7.5% of a sample of chemists receiving doctorates between 1955 and 1961 had published nothing the first decade following receipt of their degree and 11% had published only 1 article... In any given year 60% of the chemists had not published a single article"
- Social scientists less prolific than natural scientists
- Variation between scientists is very high: In one sample, 15% of the group accounted for half of all papers published
 - Psychological characteristics of productive writers
 - "Sacred spark theory" -- an inner compulsion to produce even in the absence of external rewards
 - Stamina in the pursuit of long-range goals
 - "Productive scientists show high ego strength, personal dominance, preference for precision and exactness, strong control of impulse, and a preoccupation with ideas and things rather than people"
 - Biographical background of productive writers
 - Show marked autonomy, independence, and self-sufficiency early in their lives -- less concerned with others' approval
 - Work habits
 - "Intellectual craftsmanship" -- the organization of time, space, and materials
 - Habits and routine
 - Causal relationship uncertain
 - Age
 - Peak in late 30s early 40s, second peak ~50
 - Environmental location (institution)
 - Environment you're in vs. environment you came from?
 - Graduate school background
 - Dept prestige

Publish or Perish: A Limited Author Analysis of ICA and NCA Journals . Bunz, Ulla. Journal of Communication, December 2005. Vol.55(4), pp.703-720

Jenna <u>Cumulative Disadvantages in the Careers of Women Ecologists</u>. <u>Primack, Richard B. ; O'Leary, Virginia.</u> <u>BioScience, 1 March 1993, Vol.43(3), pp.158-165</u>

- Attempt to explain why women scientists tend to have lower productivity
- Theory of Cumulative Disadvantages: No one factor determines this, but women face minor obstacles at every career stage which accumulate over time and result in lower productivity
- Followed up in 1988 with graduate students (men and women) who had attended the OTS tropical biology course in the 1960s and 70s about their career
- Women had lower productivity than men, and this couldn't solely be explained by family situation (e.g., whether or not they had children)
- Factors influencing productivity: differences in mentorship experience, sexual discrimination in workplace, lack of institutional empowerment, nomadic employment (women had more temporary/part-time jobs), personal relationships disrupted by moving to advance career, moving to accommodate spouse, more family responsibilities, less help from spouse, lower salaries, lower job security (e.g., more women were in nontenure roles)
- Solutions: grant programs for women help but aren't enough, attitudes need to shift and this will be slow, husbands and male colleagues are good allies in this, and as more women enter the field, there will be increased opportunities for mentoring and collaboration among women

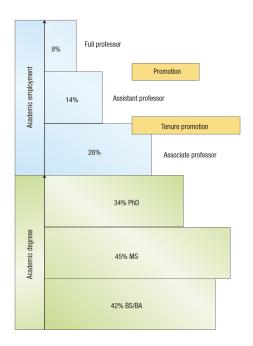
Changling

Holmes, M., O'Connell, S., Frey, C. et al. Gender imbalance in US geoscience academia. Nature Geosci 1, 79–82 (2008). <u>https://doi.org/10.1038/ngeo113</u>

Gender imbalance in US geoscience academia

Women's under-representation-3 dominant themes: 1. The structure of academia, 2. historically low numbers of women, and 3. women's views and choices.

1. The structure of academia:



Proportions of women in each academic rank in US geoscience academia.

2. historically low numbers of women:

Table 1 Percentage of women at varying degree-granting institutions.				
	2004–2005	2001-2002	2000-2001	1996–1997
Bachelor's-granting	18	17*	16	11*
Master's-granting	17*	14	15	12*
PhD-granting	13*	12	12	9*
Total	14	13	13	10*

Table 2 Percentage of women by rank at PhD-granting institutions.				
	2004–2005	2001-2002	2000-2001	1996–1997
Assistant professor	26*	23	21	20*
Associate professor	14	14	15	14
Full professor	8*	8	8	5*
Chair, Head	10*	8	6	4*

3. women's views and choices:

Stereotypes

• "Female" refers to women's views and choices: that is, there are few women in geoscience in academia because women choose not to be there and/or women lack the skills or talent needed to succeed there

a problem with the way the tenure track and academic institutions are structured makes it difficult for women to cope with family issues and be a successful academic.

• Ten male responses, and one associate/full female professor, suggested: "women are choosing a different career path", "females don't like field work", "females in general have a low interest in the subject matter", "females lack self-confidence", and "females in general prefer to teach".

Pu Ge: Torrie, Alex et al. "Publish or Perish – How to Avoid Perishing." International Journal of Surgery 10.8 (2012): <u>S5–S5</u>

Both the success rate and quality of trainees in peer reviewed publication was highly significantly associated with their undertaking projects supervised by a senior author with a strong publication record (p 0.0001) and (p ¼ 0.0002) respectively.

To improve your probability of achieving a peer-reviewed publication you should engage in research with a senior author who has >46 peer-reviewed publications.

Furthermore, collaboration with a fellow registrar was also highly significant (p 0.0001).

Both the success rate and quality of trainees in peer reviewed publication was highly significantly associated with their undertaking projects supervised by a senior author with a strong publication record (p 0.0001) and (p ¼ 0.0002) respectively.

- First, trainees are more likely to achieve both a greater absolute number and the quality of peer-reviewed publication (indicated by the journal impact factor) if they engage in research with a senior author with a strong publication record (indicated by the senior authors' absolute number of PubMed publications).
- Second, trainees are more likely to achieve peer reviewed publication if they collaborate with a fellow

rotational registrar.

Faculty's subtle gender biases favor male students. Corinne A. Moss-Racusin, John F. Dovidio, Victoria L. Brescoll, Mark J. Graham, Jo Handelsman. Proceedings of the National Academy of Sciences Oct 2012, 109 (41) 16474-16479; DOI: 10.1073/pnas.1211286109 (Open Access)

Sonnert. Gerhard. and Gerald Holton. "Career Patterns of Women and Men in Sciences." American Scientist 84.1 (1996): 63–71.

Fox, Mary Frank. "Gender, Family Characteristics, and Publication Productivity Among Scientists." Social Studies of Science 35.1 (2005): 131–150.

Kyvik, Svein. "Motherhood and Scientific Productivity." Social Studies of Science 20.1 (1990): 149–160.

Henry Suitor, J., Dorothy Mecom, and Ilana Feld. "Gender, Household Labor, and Scholarly Productivity Among University Professors." Gender Issues 19.4 (2001): 50–67

Male reseacher do more work within the home when compared to males. Surveyed 673 faculty members

	ALL FACULTY		TENURE-TRACK FACULTY	
WEEKLY HOURS	Men (n=365) ¹	Women (n=235)	Men (n=319)	Women (n=145)
Research ²	19.15**	12.92	20.65**	17.33
	(12.4)	(11.8)	(11.9)	(11.4)
Teaching	19.79**	24.17	18.32+	20.15
	(11.0)	(14.3)	(9.7)	(12.5)
Administration/	12.57**	9.63	13.54	12.53
Service	(13.1)	(12.9)	(13.1)	(14.8)
TOTAL WORK	51.46**	46.87	52.51+	50.25
HOURS ³	(13.9)	(15.5)	(13.36)	(14.4)
Household Labor ⁴	10.77**	13.90	10.96**	13.83
	(3.5)	(7.89)	(6.5)	(7.7)
TOTAL HOURS	62.19	60.85	63.41	64.16
	(15.7)	(16.9)	(15.0)	(16.0)

	ALL FACULTY		TENURE-TRACK FACULTY	
WEEKLY HOURS	Men	Women	Men	Women
	(n=159)	(n=79)	(n=142)	(n=41)
Research	19.02**	9.12	20.50**	14.51
	(11.7)	(9.5)	(10.7)	(9.1)
Teaching	19.17**	24.20	18.61	20.44
	(10.2)	(13.2)	(9.7)	(12.5)
Administration/	11.20*	10.20	11.74	12.48
Service	(8.1)	(10.5)	(9.7)	(12.5)
TOTAL WORK	49.40**	41.77	50.85	48.10
HOURS	(13.4)	(15.7)	(12.3)	(14.9)
Household Labor	10.87**	16.82	11.01**	16.70
	(6.0)	(8.4)	(6.1)	(7.2)
Child Care ²	13.55**	24.99	12.89**	27.47
	(12.2)	(17.7)	(11.9)	(17.6)
TOTAL DOMESTIC	24.42**	41.81	23.86**	44.17
LABOR HOURS	(15.3)	(20.2)	(15.3)	(19.3)
TOTAL HOURS	73.63**	83.92	74.54**	92.65
	(19.22)	(26.7)	(18.7)	(21.5)

Table 4

Etkowitz. Henry et al. "The Paradox of Critical Mass for Women in Science. (change in Workplace Structure Needed to Integrate Women Successfully in Academic Science Departments)." Science 266.5182 (1994): 51–54.

New articles:

Pu Ge - Torrie. P.A.G et al. "Publish or Perish - How to Avoid Perishing." Medical Teacher 35.3 (2013): 260-260. Web

Pu Ge - <u>Torrie, Alex et al. "Publish or Perish – How to Avoid Perishing." International Journal of Surgery 10.8 (2012):</u> <u>S5–S5</u>

Dhillon, Sharanjit Kaur, Roliana Ibrahim, and Ali Selamat. "Factors Associated with Scholarly Publication Productivity Among Academic Staff: Case of a Malaysian Public University." Technology in Society 42 (2015): 160–166.

Faculty publication productivity, collaboration, and grants velocity: using curricula vitae to compare center-affiliated and unaffiliated scientists. Gaughan, Monica ; Ponomariov, Branco. Research Evaluation, 06/01/2008, Vol.17(2), pp.103-110

Not available at Moon and have to pay for online:

Creamer, E. G. "Equity and equality in measuring faculty productivity." Women in Higher Education 7.9 (1998): 7-8.

Holmes, M., O'Connell, S., Frey, C. et al. Gender imbalance in US geoscience academia. Nature Geosci 1, 79–82 (2008). <u>https://doi.org/10.1038/ngeo113</u>

More recent articles that Jenna found:

[http://Historical comparison of gender inequality in scientific careers across countries and disciplines]Historical comparison of gender inequality in scientific careers across countries and disciplines (2020)

- Global study of publishing record of over 1.5 million authors
- "We find that, paradoxically, the increase of participation of women in science over the past 60 years was accompanied by an increase of gender differences in both productivity and impact. Most surprisingly, though, we uncover two gender invariants, finding that men and women publish at a comparable annual rate and have equivalent career-wise impact for the same size body of work. Finally, we demonstrate that differences in publishing career lengths and dropout rates explain a large portion of the reported career-wise differences in productivity and impact, although productivity differences still remain."

<u>Gender Differences in Publication Productivity Among Academic Scientists and Engineers in</u> <u>the U.S. and China: Similarities and Differences (2017)</u>

- Women in the U.S. published less than men in science, but published equally in engineering
- Women and men published at equal rates in the sciences in China, but more women than men published in engineering

Gender bias when assessing recommended ecology articles (2018)

- Editors voted on articles, and the study analyzed the papers in the to 100
- "Female voters tended to rank articles more highly as the number of male coauthors increased, and the relationship between article rank and proportion of male co-authors was even stronger when only men voted. This effect disappeared after testing only articles that the editors declared they had actually read."

Kris: Based on my own past research on this topic:

Intelligence is not relevant, beyond a certain point. Blg 5 personality factors are much more predictive. Conscientiousness provides the biggest impact.

https://onlinelibrary.wiley.com/doi/full/10.1111/j.1467-9310.2011.00665.x

An investigation of the personality traits of scientists versus nonscientists and their relationship with career satisfaction

Age Differences in Personality Traits From 10 to 65: Big Five Domains and Facets in a Large Cross-Sectional Sample

https://www.researchgate.net/publication/49696299_Age_Differences_in_Personality_Traits_Fr om_10_to_65_Big_Five_Domains_and_Facets_in_a_Large_Cross-Sectional_Sample

Nick

https://www.nytimes.com/2019/03/05/science/women-scientists-grants.html https://jamanetwork.com/journals/jama/fullarticle/2726973?guestAccessKey=192c8aa5-23b2-40 0f-87d1-1b5f39c1e6d3

Ruth: scribbles with green pen while walking the dog. You could pick up hard copy from 428 Greenwood Place (1 block from Westcott, across from Avondale) or I can scan and email to you. I am trying CamScanner now (Rabia mentioned this and also another app).

Thomas: I will make suggestions using either google docs or the review functions in microsoft word. Then I'll email that to whomever I review.

Jenna: I scribbled on paper, took photos of pages, merges images into a PDF using a program I found online, and sent it to Changling

Henry: I annotate on my ipad so I can send via email

Pu Ge: I will send my electronic PDF scribble and written review to Thomas.

How's it going (you or your paper)

Thomas: Analysis is still giving me fits, but I think I'm getting closer and closer to where I want to be. The most recent analysis that I did yielded far less exciting results than what I had done before. I didn't get to do a second round of revisions of Mike's paper.

Jenna: I have not worked on my paper since I turned it in, I am doing OK, still not getting much of a response from my co-authors but hope that this next round of reviews will help stimulate more discussion among us. I finished my review for Changling and hope it was helpful!

Henry: I haven't reviewed anything yet but have gotten a chance to fine tune small issue in my paper.

Pu Ge: I did not review Thomas's paper yet, still working on my own. I have one paper previously written through this class in the past in review with Lindi and hoping to submit in April to a special collection. Another paper I'm working on for my dissertation chapter, mostly revision. Also my stream flux paper. Mostly trying to balance time, and working in parallel.

Changling: Better than 1st peer review. This time, I read some paper about the litter decomposition field. They help me to review Jenna's paper.

Ruth: I am learning new things about remote collaboration that will help me later. I am super busy and I kind of expected that things would slow down! Part of being busy this week was finishing revisions to a manuscript about mercury in trees. I thought it was done yesterday but it got "rejected" because we didn't have the Author Change Form or the version without tracked changes uploaded. It's very satisfying to finish a paper (and it gets finished many times, I will warn you!)

March 31: Reviewer feedback session

April 2: Optional check-in

Ruth will leave at 1 to attend another meeting (along with Thomas). Anyone who wants to use the Zoom room as a study hall or to interact with reviewers is welcome.

April 7: Proposals

How is your paper?

Pu Ge: Still doing analysis, made some progress on height discharge. Need to write more with co-authors.

Jenna: Heard back from Cindy (still have not heard back from other coauthor - haven't heard

from her since January...) and got good feedback for restructuring paper, decided to submit to *Oecologia* instead of *Ecology*, made a list of tasks that need to be done to finish paper and template to start response to reviewers, but haven't actually started revising yet. Changling: Adobe illustrator-drawing picture.

Tips and Tools

Henry: writing out weekly task to be completed

Thomas: I appreciate the tip to use ATracker for time management; like Henry, I also use a whiteboard to keep track of commitments and tasks that need to get done

Jenna: ATracker to keep track of time spent working, try to make goals to finish a project/task over the weekend (work on one thing for a longer stretch of time rather than try to work on many small tasks in one day/weekend, to limit amount of time procrastinating/reviewing what was done before), like Henry I have lists of tasks/commitments that need to be done pasted on my wall above my computer so I see it all the time

Pu Ge: Mind mapping technique, there are many apps related to this. General process I use is mapping out a topic you are thinking and then convert them to tasks.

Changling: Calendar App-Timepage, 2020 Planner- try to complete 3 important tasks everyday Ruth: Challenge yourself, enough to be motivating but not discouraging. I want to finish a paper a week! This is challenging enough to make me want to stop reading the news.

How to find opportunities

Who is eligible to submit to NSE?

I subscribe to a daily digest of NSF funding opportunities, you can tailor your announcement. <u>Grants.gov</u> allows you to sign up for alerts in specific areas.

NYS grants gateway

Private Funding Foundation Center

Someone in Moon Library used to help ESF researchers find funding opportunities and sign on to these announcements.

Institutions limit which of their members can submit grants, usually to permanent staff. When you get a post-doc, make sure that you are eligible to submit proposals for grants that would move with you if funded.

Examples:

Soil Nutrient Limitation of Northern Hardwood Forest Productivity. USDA Agriculture and Food Research Initiative. \$500,000. - Jenna

RCN: Quantifying Uncertainty in Ecosystem Studies. National Science Foundation. \$500,000. -

Pu Ge

Collaborative Research: IDBR: Type A: The NANAPHID: A novel aphid-like nanosensor network for real-time measurement of carbohydrates in live plant tissue. National Science Foundation. \$804,000 total; \$59,815 for the ESF component. Other institutions: SUNY Albany (lead), SUNY College of Nanoscale Science and Engineering, Boston University.

Quantifying Mercury in Forest Biomass. Northeastern States Research Cooperative. \$78,235.

Monitoring mercury in loons: How much is enough? New York State Energy Research and Development Authority (NYSERDA). \$65,750. Changling

<u>Uncertainty in Precipitation Inputs in Ecosystem Studies</u>. National Science Foundation, Early-concept Grants for Exploratory Research (EAGER). \$30,000. Henry

Fellowship to Assess Long-Term Monitoring Programs for Sulfur, Nitrogen and Mercury Deposition and Impacts in New York State. New York State Energy Research and Development Authority (NYSERDA). \$79,446. 2011-2012.

Nutrient co-limitation in young and mature northern hardwood forests, National Science Foundation, \$938,591 total, \$401,141 to ESF and the rest in collaborative grants to Marine Biological Laboratory, University of Michigan, Cornell University and Miami University, plus supplements to ESF totaling \$95,624. 2010-2017. - Thomas

What's in a proposal

- Background, Project overview, Statement of work, Project schedule, Milestone payment schedule
- Figures from preliminary findings or other projects help to visualize the message and goals
- Specifically listed objectives, methods and hypotheses for each
- Includes improvements in response to earlier reviews
- Broader Impacts
- Budget
- Budget Justification: this is a place to demonstrate that you've thought things through.
- Timeline for data collection and experiment installation
- (NSF) Research Coordination Plan, Management plan, Coordination Plan
- (NSF) Intellectual Merit + broader impacts, Steering Committee, Current Activity
- Data Management Plan, Payment schedule (in a contract, not a grant)
- C.V.

Conflicts of Interests: everyone who has co-authored a paper (within the last years).
 Major professor, MS and PhD students. They will also exclude as potential reviewers everyone from your institution.

Read the directions! Agencies have very specific requirements. If you don't meet them, your proposal can get returned without review. Page limits

Deadlines

The review process:

ARCC review summary

<u>Collaborative Research: Nitrogen vs. phosphorus limitation in temperate forests:</u> <u>Mechanisms contributing to colimitation</u> review

Apr 9: Ethics

Thomas: not much has changed for me

Jenna: Have worked on the paper since Tuesday, no updates to report

An interesting website relevant to ethical issues http://retractionwatch.com/

Outlier: 139

- Thomas and Jenna
- 1: This is tough if you can't re-do the experiment... Could they ask the other lab group whether they had outliers of this kind? Or maybe repeat the analysis with and without to see how much the outliers change the analysis? --I've done this in my papers (Ruth)
- 2: Yes because they don't know for sure that power fluctuations caused those "outliers"
- 3: The other lab group doing similar work; Did they take notes at the time that data was produced? Do instruments settings confirm that there were power fluctuations at those

times?; Other research, literature: Are there other experiments that were conducted at lower power? Would those values make sense?

- Be honest! If you omit values, say what you did. Ideally, you have a good basis for the decision (like alder for Jenna). In this case study, they don't seem to have any documentation of a reason.

Conflicts of interest: 142 industrial, 144 competition

- Jenna and Thomas
- Conflicts of interest
 - 1: Advantages -- financial support, networking, direct applications of research
 - 1: Disadvantages -- company may take credit and/or financial gain from the findings, company may prevent publications of findings if it makes them look bad
 - 2: Consult the research administration office at her institution, discuss with advisor
 - 3: Consult the research administration office at her institution
- Competition (sharing research materials)
 - 1: Maybe if his advisor discussed the situation with the head of the other lab, he would have better luck
 - 2: Could damage the relationship of the post-doc and the director of the other lab; anything that's been published?

Allocation of credit: 145

-Changling - Pu Ge -Mike

_

In the list of author In the acknowledgements of contribution from others in the list of references of citations Fairness and reward system

Authorship (credit): (146,) 147,

- Pu Ge Ruth
- Jocelyn Bell and the discovery of pulsars. Would a male graduate student (in 1967) have been given more credit? Nobel prize decisions have been criticized for overlooking women and scientists in developing countries.
- Journals are cracking down on changes to author lists, which doesn't seem like it's going to help anything. Here is a correspondence I had this week with a journal editor (the paper was accepted today!!!) It's in reverse chronological order
 On Apr 8, 2020, at 3:31 PM, Ruth D Yanai <rdyanai@syr.edu> wrote:

It's a cultural shift. Charley wrote back to me, when I shared your decision, "It is definitely a thing. I have been involved in three papers that needed authorship changes for various legitimate reasons this year. All were challenging because of pushback from the journal."

The abuse of authorship is not prevented by prohibiting changes. A decade ago, I had a student who told me he had to include his advisor from Korea on all the papers he wrote with me. Then, big surprise, he couldn't get a job at that university (the best in Korea) which I thought was because everyone hated his advisor, or at least felt bullied and resentful. I felt bullied and resentful; maybe I was just projecting.

You could help by accepting our paper! Just kidding. I hope the AE is very impressed by our thorough documentation of responses to the very helpful reviews. We'll sit tight.

Thanks for working during these difficult times. I feel so grateful that my work can continue.

x Ruth

On Apr 8, 2020, at 2:56 PM, Sherestha Saini <Sherestha.Saini@springernature.com> wrote:

Hi Ruth,

Thanks so much. It really depends on the journal and the students should read the instructions. In some cases it's possible that authorship changes might be allowed with approval form the editor in chief but in almost all cases once an article is accepted, no changes are allowed.

If I can help in any other way, please let me know.

Best, Sher

From: Ruth D Yanai <rdyanai@syr.edu>

Sent: Wednesday, April 8, 2020 1:41 PM To: Sherestha Saini <Sherestha.Saini@springernature.com> Subject: Re: WATE-D-19-01997R1

Thanks so much. This will come up every year when we discuss authorship. And I'll warn them that they have to get it right the first time!

I apologize, again, for the extra trouble I caused you.

On Apr 8, 2020, at 1:23 PM, Sherestha Saini <Sherestha.Saini@springernature.com> wrote:

Dear Ruth,

In general, we only allow changes if there are errors in names of the authors or if there is a legal name change. We've had this new policy for some time now since author misconduct is on the rise and we've observed cases of gift authorship where authors decide to add on authors after submission of the paper. Some also add authors who have performed language edits. This is not sufficient to be considered as a co-author. In this case, it might be better to acknowledge their contribution in the acknowledgements section.

The rationale also is that all authors who have made a meaningful contribution to the work should be included during submission.

In this case, we will make an exception and accept the change in authorship.

Best wishes,

Sher

From: Ruth D Yanai <rdyanai@syr.edu>
Sent: Tuesday, April 7, 2020 1:11 PM
To: Sherestha Saini <Sherestha.Saini@springernature.com>
Subject: Re: WATE-D-19-01997R1

Sherstha,

I'm sorry I haven't caught on to this change in policy. In my long career, I have infrequently needed to add or remove authors after the submission of papers, usually due to changes in the scope or content of the paper in the revision process. It's new to be told that this is not possible. Is it related to an increase in abuse? I'm just curious (I teach a course for graduate students preparing manuscripts for publication and this is a relevant topic).

Why is there an author change form, which we went through the trouble of getting all the authors to sign and return, if no changes are allowed?

Could we withdraw the paper and resubmit it and retain the reviews and response to reviews? Then you could say that you didn't break the rule for us.

I'm sorry to make extra work for you. I promise to educate a new generation of students about these rules.

x Ruth

Ruth Yanai

Professor

SUNY College of Environmental Science and Forestry

210 Marshall Hall, 1 Forestry Drive, Syracuse, NY 13210

office: 1-315 470-6955 mobile: 1-315 345-7412 e-mail: rdyanai@syr.edu

http://www.esf.edu//faculty/yanai

On Apr 6, 2020, at 9:52 AM, Sherestha Saini <Sherestha.Saini@springernature.com> wrote: Hello,

I am the publishing editor of the Springer journal Water, Air and Soil Pollution. Unfortunately, we will not be able to make any changes to the authorship at this stage. During submission, the instructions for authors clearly stated the following:

Changes in authorship, order of the authors, or designated corresponding author will not be permitted after an article has been submitted. Therefore authors should ensure that the author list is correct at submission.

We can either proceed with the original list of authors, or you can withdraw your paper. Please let us know ASAP. Thank you.

Best,

Sher

Sherestha Saini, Ph.D. Senior Editor, Environmental Sciences Journals **Springer Nature** One New York Plaza, Suite 4600 New York, NY 10004-1562 Phone - 212 460 1557

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Misconduct: 148, 149, 150

- Mike
- Several forms of misconduct, ranging from accidental, plagiarism, intended as well as sexual misconduct within the organization. All can have effects on those involved as it can result in organizations no longer being trusted by the public, mismanagement of funds, and in cases involving medical research can cause harm to individuals.

- -Changling
- Deception: fabrication, falsification, and plagiarism
- Inside of science
 - Scientific career at risk
- outside of science:
 - Harm individuals
 - Squander public funds
 - Attract the attention of those who would seek to criticize science

Apr 14: Abstracts (examples)

https://drive.google.com/drive/folders/0BxXuVrpNGuD9fm1xUHdVWVhZQkxQYzB1bHVDRU5a ckRpYjAteGl6AbstractsTXY5eIJDeHc2Zk5SZTQ

What do we hope to find in an abstract?

Problem to be addressed Objectives Methods -- may not be necessary if clear from the result Results and findings, or key points Discussion of limitations Conclusion or implications, future recommendations Do not include citations Know your word limit!

Rabia

There are quantitative results presented in this abstract.

- 1. Background
- 2. problem to be addressed
- 3. Objectives of the paper
- 4. Data used and the period of time (Methods)
- 5. Results of the finding
- 6. Results cont.
- 7. Results cont.

- 8. Results cont.
- 9. Results cont.
- 10. Results cont.
- 11. conclusions

Thomas

- 1. Problem statement
- 2. Objective
- 3. Design (Methods)
- 4. Results
- 5. Results + Interpretation
- 6. Results
- 7. Results
- 8. Summary

Jenna

- 1. Background and setting up the problem: belowground traits are poorly understood
- 2. Further clarifying the problem
- 3. Methods + objective (might have been better to start with objectives before methods)
- 4. Result
- 5. Interpretation
- 6. Example as a result
- 7. Conclusion
- 8. Implications
- 9. Criticism of field of study (relates to the problem statement because it's an issue that studies of belowground traits have not been paired with studies of aboveground traits)

Henry:

Sections are pre-defined (Background, Methods, Results, Conclusions)

Background

- 1. Background/Problem
- 2. Background/Problem
- 3. Background
- 4. Objective

Methods

5. Methods

Results (with exact values)

- 6. Results
- 7. Results
- 8. Results
- 9. Results
- 10. Discussion of results (broad summary of results)

Conclusions

- 11. Conclusion
- 12. Conclusion (limitation?)

Changling:

Exact values are used in the abstract..

- 1. Problem
- 2. Background (main device to stop bleeding)
- 3. Objective and material used
- 4. Talking about material cont.
- 5. Objective
- 6. Results
- 7. Results Cont.
- 8. Results explanation
- 9. Results
- 10. Explanation
- 11. Conclusion

Pu Ge

- 1,2. Introduction/Background-why important
- 3-6 Methods
- 7. Methods
- 8. Results
- 9. Discussion
- 10. Conclusion

Apr 16: Abstracts

Paste your abstract here

Thomas:

Nitrogen and phosphorus affect the population density of sugar maple and American beech germinants

Forest species composition depends upon the successful germination and recruitment of germinants. To measure the effect of phosphorus (P) and nitrogen availability on the recruitment of sugar maple (*Acer saccharum*) and American beech (*Fagus grandifolia*) seedlings, we measured the initial density of germinants of both species in the context of a long-term, full-factorial N and P fertilization experiment located in three sites within the White Mountain National Forest of New Hampshire. We analyzed cohorts of each species during the summers following mast years, using 2012 initial density data as a covariate when testing the fertilization effect upon the initial density of germinants by an average of 28% (p=0.03), and P additions decreased the initial population density of sugar maple germinants by an average of 40% (p=0.01). American beech germinants were affected only by N additions, which increased the initial density of this species by an average of 83% (p=0.001). These findings are consistent with prior research indicating that sugar maple is particularly sensitive to soil chemistry, and they contribute further specificity to our understanding of the soil conditions that affect the development of these keystone species.

Jenna:

Relationships Between Leaf Traits and Litter Mass Loss Rates Change from 1 to 3 Years in 12 Woody Plants Species in a Temperate Rainforest

Litter decomposition is important to ecosystem responses to climate change and disturbance. Improving our understanding of decomposition mechanisms and our ability to predict decomposition rates will improve local and global models of carbon and nutrient cycling. The duration of decomposition studies, however, may influence the rates reported and the conclusions drawn. The purpose of this study was to follow up on a 1-year decomposition study investigating the influence of physical and chemical traits in green foliage and leaf litter on mass-loss rates of 12 woody plant species native to British Columbia, Canada to determine 1) whether the length of the study influences relationships between litter characteristics and mass-loss rates and 2) whether initial litter characteristics that correlate with mass-loss rate differ in early-stage (Phase I) and mid-stage (Phase II) litter decomposition. Extending the study duration to 3 years resulted in slower estimated rates of decay on average than determined after 1 year (k values calculated using 3 years of data were on average 12% lower than those calculated using 1). In addition, Phase II mass loss was more strongly, positively associated with initial litter pH and nitrogen after 3 years than after 1 year. Extending litter decomposition studies beyond one year in temperate rainforests provided a clearer depiction of the decomposition process and the factors that influence it over time. In particular, the nutrient content of litter may be more important at later stages of decay, whereas physical characteristics of litter matter more at the start.

Changling: If you accept the changes you like, it will be easier for us to read what you have.

Antimicrobial and Antioxidative Shape Memory Polymer Foam Hemostats

On the battlefield, uncontrolled hemorrhage (i.e. from gunshot wounds) is the primary cause of trauma-related death. About 39% of these wounds have polymicrobial infection. Although the use of hemostat such as gauze and tourniquet on the battlefield can significantly reduce mortality, the antimicrobial properties of these hemostatic devices are less successful and require further development. Polyurethane shape memory polymer (SMP)foams have great potential as a hemostat because they can induce blood clotting in the bleed site. We developed SMP foams with antimicrobial and antioxidative properties, and this paper addresses the incorporation of phenolic acids (PAs), which are known to impart antimicrobial properties, into the SMP network. After analysis of the antimicrobial efficacy of a library of 10 PAs, our lab has identified 3 PAs with promising functionality: ferulic, vanillic, and p-coumaric acid. List the values of the properties you measured. Conclusion:

Rabia:

Fourier Decomposition of Aerosol data over Lahore

Aerosols play an important role directly and indirectly in Earth's climatic balance. Punjab, Pakistan, like many... faces serious health hazards due to the generation of smog by the mixing of water vapor with aerosols. It is therefore very important to study the temporal variation of aerosols. In this study, the AErosol RObotic NETwork (AERONET), a ground-based sun-photometer, in Lahore was used for a time-series analysis of Aerosol Optical Depth (AOD) for 2009-2014. Values of AOD varied yearly (341 days) and seasonally (186 and 126 days). AOD values were also affected by natural and anthropogenic events such as mass crop burning and sand storms. The high values of AOD in summer were due to sand storms, and high values of AOD in winter were due to domestic fuel burning. The relationship of aerosols with other parameters such as urbanization need to be addressed in order for better understanding of aerosol properties..

Index Terms— Aerosols, Lahore, Fourier, Aerosol Optical depth, Time Series

Pu Ge

Ecosystem mass balances are important for estimating and detecting changes in denudation rates and disturbance effects. Stream loads are commonly reported without a complete accounting for uncertainty in the estimates, which makes it difficult to evaluate the significance of findings. At the Hubbard Brook Experimental Forest in the White Mountains of New Hampshire, USA, input-output budgets have been reported for small headwater catchments since 1965, yet uncertainty has never been fully quantified for the majority of solutes. We propagated stream flux uncertainty sources from 2013 to 2019 at Watershed 3. These sources include the stage height-discharge relationship, watershed area, analytical chemistry, and gap filling in both discharge and stream chemistry. Overall uncertainty in stream loads were highest for ... and lowest for ... Uncertainty in runoff was higher in some years than others. Comparing the magnitudes of the sources of uncertainty suggested that greater effort should be allocated to ... which ones?.

Henry Beaman If you accept the changes you like, it will be easier for us to read what you have. **Abstract**

Background: While there are several hemostats in use on the battlefield, uncontrolled hemorrhaging is still the primary cause of preventable death. Currently available hemostats include Quikclot® combat gauze and XStat®, but they induce high pressures on wound walls, require frequent dressing changes, and have limited success in reducing mortality? We propose a new hemostatic material using shape memory polymer (SMP) polyurethane foams, which have ideal properties for hemorrhage control:biocompatibility, rapid clotting, and shape recovery to fill the wound site.

Methods: SMP foam hemostat efficacy was examined in Grade V porcine liver injury trials lasting 30 minutes. The SMP was compared to XStat® and QuikClot based onime to bleeding cessation, total blood loss, and animal survival.

Results: SMP decreased blood loss by 17% compared to Quikclot and XStat, and decreased bleeding time by 28% compared to XStat and 21% compared to Quikclot. Most importantly, SMP increased survival rate by 50% and 37% (XStat and Quikclot, respectively).

Conclusion: Our study showed that a combination treatment—usingSMP foam containing cylindrical and powder foams—exhibited better hemorrhage stabilization than the XStat®, while reducing active bleed time and blood loss.

April 21: Help with Revisions

Status: How's it going?

Jenna: It's going well - I have revised a lot of my manuscript and addressed many reviewer comments, and mainly need to revise the Discussion, finalize my figures, and edit one more time. I'm not sure if I have any sections in particular that I want someone to review right now

Pu Ge: I am working on height discharge code, bootstrap within bootstrap, a bit complex.

Changling: I am writing a new section about PAs selection process. Not done. The data comes from another research of mine. Article on this research is under peer review and will be published soon.

Mike is in the market for alternatives to GIS software on his laptop (how about R code for calculating distances between points?) And an alternative to statistical software? Or a new laptop!

Mike: you should try this to visualize tables of coordinates: <u>https://www.google.com/earth/outreach/learn/visualize-your-data-on-a-custom-map-using-googl</u> <u>e-my-maps/#import-your-data-1</u>

Paste here a section you want help revising

April 23: Steps to Publication

Updates

Thomas: I hope to have a final draft by 4/30 (that may be an ambitious goal, but that's what I'm going for)

Jenna: Ambitious goal: finish the final draft by tomorrow (4/24). Realistic goal: should be able to

turn it in by 4/28

Henry: Done writing, on to editing. I will be able to turn in the paper by 4/28 Rabia: I will submit the second draft by tomorrow, so depending on how quick I get the reviews I can submit the final draft accordingly. Mike hasn't sent a review of the first draft. Send him the second one,

Changling: I focus on my final exams now. 05/01 Pu Ge: Ruth says we will finish by the end May.

Steps to Publication

Powerpoint file is available on the class website. Thanks for taking notes! Was this Dan?

Choose the Article Type of your submission

Title

Authors

Keywords - we talked about this

Cover letter - did you know about this?

Make sure to pay attention to word limit

Suggested reviewers - can be an expert in your field (i.e. someone you reference a lot in your paper). Make sure they are alive! You may want to avoid people who have conflicts of interest. Cover art - some journals will accept an image for the journal's cover.

Graphics - journals will require good quality graphics. There is a rapid inspector that checks the quality of your graphics. This may take some time if you need to change your graphics. Texts -

Some journals would have a separate page for uploading your graphics whereas others will accept the texts and graphics together. Pay attention to this so that reviewers don't see the same graphics twice.

Supplements - some journals will archive your data for free! Is this same as Appendix? Dan thinks he could imagine graphics being in the Appendix but can't imagine how the journal would include raw data? Maybe in tables.

Once everything is uploaded, you can confirm the checklists and submit! You'll get a confirmation message and be able to track its status.

Why would an editor reject a manuscript before distributing it to reviewers?

- 1. Outside of the journal's scope.
- 2. Very poorly written (it's hard to get reviewers so AE spends a lot of time filtering manuscripts.

3. Obvious fatal flaws

AE will filter manuscripts and distribute them to potential reviewers. Potential reviewers are contacted by the journal and given options whether to accept or decline to review. Usually the reviewers will be given three weeks to review. Reviewers will check off what they think of the manuscript (i.e. accept at it is, accept with minor revisions, release because it's not suitable, etc.). Ruth likes to type on a word doc and just copy and paste them onto the webpage.

Authors will get an email about the results of their submission (submittable with no change, some changes, major changes, or rejected). If submittable with some changes, authors are typically given a month to make the changes and resubmit. If the manuscript is rejected, the authors can make the changes (reviews will be provided despite the manuscript being rejected) and submit to a different journal. It's possible the second journal would distribute the manuscript to one of the same reviewers from the first journal! So don't ignore the reviews.

"Revise and resubmit" has become more common. It is a clever way for the journal to have a better turnover time because the clock starts again with the new submission.

Electronic submission of manuscripts

Make a one-page summary and upload it to our google folder: <u>https://drive.google.com/drive/folders/0BxXuVrpNGuD9U1pwQVZhdnJRamM</u> This counts towards your final draft (10 points).

April 28: Final Steps

Link to the PowerPoint: https://www.esf.edu/for/yanai/publishing/steps-publication-new.ppsx

Suggestions for how to replace the powerpoint with interactive activities? Dan: If it's complete with info to a point where the lecture becomes obsolete, then it's a bad use of PowerPoint. But if some things are left out and get filled up as the class discussion goes, then it might be a good use. What the professor starts with would be more like an outline and the details would be filled up as lectures go.

Folder of page proofs

https://drive.google.com/drive/folders/1joJYH0pw29qDVhoaENFFMQi

<u>dkucJJxtY</u>

At the end of class, everyone wish me a Happy Birthday :P

ADVICE:

Rabia: Just start writing and you can edit it later. Henry: Use this class as a way to figure out the editing stuff. Thomas: stay sane Jenna: Stay patient and remember that you will see benefit from what you've published even if it's not immediate; stay proud of yourself Changling: You can learn a lot from reviewing your peers' work Pu Ge: Anyone can start their writing group now.

Links to page proofs

John Campbell's CWD paper: <u>https://www.e-proof.sps.co.in/ja.asp?rfp=rnofnpbell</u> (the proofs aren't available)

Craig See's frequent litter paper:

https://web8.elsevierproofcentral.com/en/landing-page.html?token=SPS3b04ee7aeb6a5b1f4cd0 f6ebc196d154

Correspondence about page proofs

From: **Marie Johnston** <mjohnston@sciencesocieties.org> Date: Mon, Feb 18, 2019 at 1:46 PM Subject: Galley proofs of SSSAJ paper s2018-09-0335 To: YANG YANG <yangy48@gmail.com> Cc: Rebecca Funck <rfunck@sciencesocieties.org>

Dear Dr. Yang,

The proofs of your article s2018-09-0335 are ready. If you have any questions, or if you come across any problems with the files please let me know. If you care to order reprints, the Reprint Order form is online at https://dl.sciencesocieties.org/publications/reprint/. If you do not have an account yet please log in as a guest user.

Current publishing costs:

0-7 pages: No cost
Each additional page: \$100/page (SSSA member pricing); \$200/page (non-member pricing)
<u>Open Access fee:</u>
\$800 for cc-by-nc-nd license; \$1300 for cc-by license. More information about these two types of licenses is available at https://dl.sciencesocieties.org/open-access

Table/Figures/author alterations: no cost

If your institution is doing a press release or other promotion of your research, please share that information with us. Here are other tips to help you start your conversation about your research with the world. https://dl.sciencesocieties.org/files/publications/start-conversation.pdf

Please note if you submit additional changes after the article has been posted, an erratum will be issued.

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If you have any problems please let m

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 - Check all text on the galley proofs. Check the title, the abbreviations list, and the author-paper documentation.
 - Check the table data against that in your original tables.
 - Check any equations against those in your original manuscript. Make sure special characters have not dropped out or changed.
 - Check to be sure that figures are entirely legible, including any small-print text.

- Return the corrected galley proofs within 4 days of receipt (if mailing please use an express delivery service and send c/o Rebecca Funck). Sticky notes on the PDF work well for marking corrections.

- Also, could you please confirm your wish to make your paper Open Access under the CC BY-NC-ND license?

Thank you!

Marie Johnston, PhD Assistant Editor, SSSAJ

5585 Guilford Rd. Madison, WI 53711 email:mjohnston@sciencesocieties.org

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From: Ruth D Yanai [mailto:rdyanai@syr.edu]
Sent: December-01-17 8:25 PM
To: Jennifer McColl
Cc: Griffin Walsh; Yang Yang; Corrie Blodgett; Kikang Bae; Byung Bae Park >
Subject: Re: cjfr-2017-0223: PROOF AND COPY-EDITED MANUSCRIPT AND TABLE(S)
Importance: High

Jennifer,

Sorry I'm slow. Can I give you my corrections by typing about them in email? Some are hard to explain.

1. "nitrogen (N)" occurs twice on the first page. Isn't once the right number?

2. "C4 (age 26 years)" is odd because it's the only time "age" is included (for the 6 stands described). If it should say "age" the first time, C1 was the first. It got deleted there. Maybe it should have been deleted everywhere?

3. "quantitative soils pits" please remove the s from "soils" (our error), in the first sentence under "Root collection."

4. "Larger roots (>2 mm) were all of the roots found in the pits" makes no sense. Most of the roots are finer. The original sentence was "For the larger roots (>2 mm), these were all the roots found in the pits; for the 0-1 and 1-2 mm roots, these were 34 and 85%, respectively, of the mass of roots reported from the pits." This sentence follows a statement that we used only roots collected on the screens. I'm not sure why the original sentence was unacceptable, but the copy editor clearly didn't understand it, so perhaps it can be improved. Maybe it needs to be " "For the larger roots (>2 mm), the roots collected on the screens were all the roots found in the pits." Or, "Roots >2 mm were found entirely on the screens. For the 0-1 and 1-2 mm roots, 34 and 85%, respectively, of the mass of roots reported from the pits of roots reported from the pits." Your call.

5. In the first paragraph of the results, please replace "including P" with "included". There was a stray P, probably from a P value, that didn't belong. Sorry about that.

6. The last paragraph of the Results has ranges of percentages that are sometimes negative and

sometimes positive, and the dash to indicate the range looks just like a minus sign. I consulted my coauthors and they suggested using the word "to" to indicate the range. This probably conflicts with your style guide, but I don't have a better idea. Thus: "For P, this range was 1% to 58% and for Ca, -3% to 68%. For Mg and K, using roots from the Oa to represent the whole profile agreed within -12% to 29% (Mg) or -16% to 29% (K), which is consistent with a lack of significant variation in concentrations with depth (Table 2). We also compared the root nutrient contents of the mineral soil based on sampling only from the 0-10 cm depth. The errors introduced by this sampling scheme were smaller: -7% to 2% for N, -45% to 2% for P, -13% to 30% for Ca, -23% to 2% for Mg, and -13% to 12% for K."

7. In Table 3, should the numbers for the SE be aligned on the decimal? I appreciate that this table was hard to fit on one page!

8. Table 3 Note: The Oie corresponds to the L and F in the Canadian soil taxonomy, and the Oa corresponds to the H. We said this in the text, should it be said again here? The C horizon is the parent material. Maybe since this is not a soils journal, this should be explained?

9. Byung Bae Park's departmental address is "Department of Environment and Forest Resources." I think that's the only change flagged with an author query that wasn't right.

Thanks and sorry again for the delay!

x Ruth

On Nov 27, 2017, at 7:27 AM, Jennifer McColl <jennifer.mccoll@nrcresearchpress.com> wrote:

Dear Dr. Yanai:

Please follow the instructions in this email and if you have any questions feel free to contact me at jennifer.mccoll@nrcresearchpress.com. Corrections to your proofs should be returned within two (2) consecutive days.

Attached to this email you will find:

• A PDF file of your copy-edited manuscript and table(s) (cjfr-2017-0223_copy-edited ms & tables.PDF)

- A PDF file of the proof (cjfr-2017-0223.PDF)
- Instructions on using the Commenting feature of Adobe Reader (or Adobe Acrobat).

STEP 1

Proofread the proof PDF against the copy-edited manuscript and table(s) file. Pay careful attention to:

- Tables and figures (note that placement will be finalized during the incorporation of your corrections)
- Equations, mathematical symbols, and non-English characters and symbols.

STEP 2

Print the proof PDF file in greyscale and carefully check the appearance of all colour figures as printed in black and white. If you wish to have any of these figures printed in colour, please contact the Journal's Editorial Assistant (cjfr@nrcresearchpress.com) for pricing information and colour approval forms.

STEP 3

Respond to all of the queries embedded in the text of your copy-edited manuscript and table(s) file using the latest version of <u>Adobe Reader</u> or Adobe Acrobat. Add comments to the proof (**cjfr-2017-0223.PDF**) file ONLY. Note that unless you specifically address something regarding the changes that we made, we will assume that you agree with all the changes made to your manuscript.

STEP 4

Return the annotated proof PDF file to me as an email attachment.

STEP 5

Review the following:

- Upon final publication of this article the corresponding author will receive an automated email about the "My Articles Dashboard" — this dashboard provides access to download the final article, share 50 free e-prints, track article usage, and more.
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<image001.png>

Jennifer McColl

Scientific Publishing Editor, CJFR Canadian Science Publishing 65 Auriga Drive, Suite 203, Ottawa, ON K2E 7W6 Tel: 613-656-9846 ext.254; Fax: 613-656-9838

<CSP 2015 - Adobe Reader author annotation instructions (English).pdf><cjfr-2017-0223_copy-edited ms & tables.pdf><cjfr-2017-0223.pdf>

One of my responses (I often reject copy edits by the journal) (Uncertainty Survey paper) Dear Corrections,

I have very few corrections, can I just tell you about them here?

Two corrections are to the Author Contributions, which I wrote at the last minute (next time I'll try to remember to propose them in early drafts so all the authors have time to correct them).

1. 140 survey respondents provided the results (not 91, I don't know where I got that from. 90 sites, 140 people).

2. JLC designed the graphical presentation of results with input from CRS and RDY (not RDY and CRS. CRS made the last graph and I didn't make any of them, I just asked for a million changes).

Two corrections are to a sentence in the last paragraph under Model Error, on page 4. Same as AQ6.

3. the number of respondents who report it (line 308)

(not the number of respondents who reports it; I would diagram this "the number (of respondents (who report it))" not "the number (of respondents) who report it)")

4. but there was only one case (line 309)

(not there was only one response) (this removes confusion about the referent for "many" later in the sentence)

1, 2, and 4 are me correcting myself. 3 is a rejection of the edit referenced in AQ6.

AQ1	Kindly check and confirm whether the corresponding authors and their 'Mail Id' are correctly identified and amend if necessary.	checked
AQ2	As per the information provided by the publisher, Fig. 1 will be black and white in print; hence, please confirm whether we can add "colour figure online" to the caption.	Okay. But that will look funny in the online version.
AQ3	Please check whether the phrase 'We distributed an on-line survey' in the sentence 'We distributed an on-line survey to assess the precipitation, streamflow, biomass, and soils' conveys the intended meaning.	why not? A reviewer asked this, too!
AQ4	Please suggest whether the term 'listserve' can be changed to 'listserv' in the sentence 'We also announced the survey via the Ecological Society'.	Yes.
AQ5	Please check the edit made in the sentence 'Fewer of the respondents study vegetation chemistry, and the proportion'.	okay
AQ6	Please check the edit made in the sentence 'Fewer respondents claim to know how to report this source of error'.	see 3 and 4 above
AQ7	Please suggest whether the phrase 'gage-discharge model' can be changed to 'gage/discharge model' in the sentence 'Likewise, our respondents ranked the runoff calculation and the'.	"stage-discharge model" is correct
AQ8	Reference JCGM (2008, 2012) was mentioned in the manuscript; however, this was not included in the reference list. As a rule, all mentioned references should be present in the reference list. Please provide the reference details to be inserted in the reference list.	see below

JCGM [Joint Committee for Guides in Metrology]. 2008. Evaluation of measurement data -Guide to the expression of uncertainty in measurement (GUM). International Organization for

Standardization, Genève, Switzerland.

JCGM [Joint Committee for Guides in Metrology]. 2012. International vocabulary of metrology - Basic and general concepts and associated terms. Geneva: ISO Copyright Office.

Finally, I was surprised by the capitalization of the independent clauses following a colon. I looked it up: Chicago says not to do it unless there are multiple explanatory sentences following the colon. APA says to capitalize it. Is that why you capitalize it? I would prefer not to, if this can be left to the author's discretion. This occurs on lines 447 and 455. I found it startling.

Thanks,

x Ruth

May 4: Final Drafts

Manuscript information

FE&M (Dan)

Which issue (regular or special edition)

Article type (mini review, correspondence, review article, editorial, or full length article)

Full title

Abstract

Keywords (separated by semi-colons)

Authors

*the total size of the submission files may not exceed 700MB

*the Manuscript File size may not exceed 150MB

Invited to submit Data in Brief and/or MethodsX (optional)

Uploading files (Cover Letter*, Manuscript File*, Highlights*, Data in Brief, Video, Figure, Table, Response to Reviewers, Review Reports, Graphical Abstract, Supporting File, etc.)

References (copy manuscript's references into the field; should be numbered and added in numerical order starting from 1; each reference should start on a new line; no extra line breaks within the reference text).

Suggest Reviewers (must provide Title*, First and Last Name*, Email*, Institutions, Country, and Reason; must suggest 4 reviewers)

Funding acknowledgement (all organizations that funded the research and provide grant numbers where appropriate)

Claim Scopus Profile (if you have it)

Review and SUBMIT!

Agriculture and Forest Meteorology (Alex):

Title Authors (Name, academic degrees, affiliation, email) Select category for paper Abstract Key words (limit of 6) Select a manuscript classification Must confirm that all funding grants are mentioned, if submitting a "data in brief", if submission includes a methods article. Comments to send to the journal office Required to suggest 4 reviewers Manuscript can be in any format but must include all figs, legend, and references Highlights are not needed until revision Must submit a cover letter and a manuscript, sharing research data is optional (can link or upload) References must contain abbreviated journal names

Kris Grohn

ACS biochemistry requires:

Step 1: Type of paper (article), Title (Lipofuscin degradation via lipoxygenase activity by white rot Manganese peroxidase, Mechanism and kinetics), Abstract(4000 character limit), Special issues?, "Do you want this to be displayed as a just accepted manuscript" (No), Database identifiers "Does this manuscript describe experimental studies of a protein, if so include the accession ID"

Step 2: Manuscript file upload, graphics upload (cover art), electronic of PDF journal publishing agreement.

Step 3: Authors and institutions "I am submitting this on behalf of myself and coauthors/I am not an author, but I am submitting it on behalf of an author", select author number, add additional authors

Step 4: Reviewers and editors "suggest at least 4 reviewers" Add joke authors. Got Professor Ulrike Eggert as my edittor

Step 5: Details and comments - write a cover letter, reporting funding sources, report conflicts of interest, report unpublished work that is being cited, report the graphics software you used, report if the manuscript has been previously submitted to THIS journal, ANOTHER journal, and a summary of changes made, confirm that the journal hasn't been published elsewhere.

Step 6: review all relevent information and submit.

PLANT AND SOIL, Ryan

Choose the Article Type of your submission (Manuscript).

Attach Files: (provide a single file containing your manuscript now, submit all relevant source files to not cause unnecessary delays in the review and production process) Covering letter and Manuscript.

Keywords separated by semicolons.

Suggest Reviewers: (Please suggest potential reviewers for this submission and provide specific reasons for your suggestion in the comments box for each person. Please note that the editorial office may not use your suggestions, but your help is appreciated and may speed up the selection of appropriate reviewers).

Questionnaire: (1, Is this manuscript currently under consideration for publication in any other journal or do you intend to submit it to another journal before a decision has been made by Plant and Soil? 2, Does your submission contain video material? 3, Do you have related papers under consideration, in press or published elsewhere? If so, please specify the journal. 4, 5, 6,...).

Enter comments: (Please enter any additional comments you would like to send to the publication office. These comments will not appear directly in your submission).

Full Title Abstract Authors Funding information Build PDF for approval. THE END Aquatic Sciences (Nick)

General Structure:

- -Abstract
- -Introduction
- -Materials & Methods
- -Results
- -Discussion
- -R & D May be combined

No Longer than 8 printed pages or 870 words, figures and tables have to be counted in addition Two Expert reviewers are required

References: in-text with name and year in parenthesis (Thompson 1990)

Cover art

None.

Tables

FE&M requires that these be editable, not images. So they can typeset them, I guess.

Aquatic Sciences:

- All tables are to be numbered using Arabic numerals.
 - Tables should always be cited in text in consecutive numerical order.
 - For each table, please supply a table caption (title) explaining the components of the table.
 - Identify any previously published material by giving the original source in the form of a reference at the end of the table caption.
 - Footnotes to tables should be indicated by superscript lower-case letters (or asterisks for significance values and other statistical data) and included beneath the table body.

Blaz, Forests:

- Binding OrcID number to your account
- Web published, color free of charge
- The website combines many different OA journals
- Suggested reviewers (required, 3) from the board of editors as well as excluded reviewers
- OPEN PEER REVIEW my article gives me the option for open peer review: "Open peer review is a process in which the journal will publish the review reports and

your responses along with the paper, if it is accepted." What are the pros and cons of this approach

"Rare trial of open peer review allays common concerns" <u>https://www.nature.com/articles/d41586-019-00500-7</u>

Advice or wishes for your fellow authors

Kris: Look at the experimental designs of other papers. A well designed experiment makes for an easy paper.

Nick: Report direction and magnitude of effects, not just significance.

Alex: Don't say, "there is no difference." Report the magnitude of difference that could be detected with your power.

Nehan: Rephrase the research question multiple times. Return to the GSE.

Mark: Turn in your assignments on time to give your reviewers a chance to give you timely responses. Feedback is helpful.

Ryan: Get the statistical skills that you need.

Blaz: Persist! It's going to be messy but you'll get feedback that will help you improve.

Alex: Don't be a perfectionist.

Dan: Before you print, make sure you have it double-spaced and line-numbered.

Ryan: Speak up if you don't understand!

Dan: Seek help from professors and co-authors.

Ruth: Thank you for an excellent semester. I really appreciated the step up in involvement, making you all authors of these notes!