Refereeing Papers: Some top tips

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Before you begin...

• Read widely. So you know the sorts of papers that might appear in the journal
• Be polite - imagine the review will be read by a close colleague
• Be honest - if there are areas you feel can’t cover (e.g. stats, experimental details) say so, but equally remember, they’ve asked you for a reason
• Respond promptly (both to invitation & review)
• Be positive – highlight the good points, suggest how to make the bad points better.
What editors are looking for?

- Does the title clearly and succinctly reflect its contents?
- Is the content worthwhile? Will the journal’s readers find it interesting?
- Are the questions asked really advancing the field in a meaningful way?
- Are the conclusions supported by the data presented?
- Are there alternative explanations for the findings presented?
- Has the existing literature been cited adequately (and correctly)? Be alert for taxonomic/geographic biases, but no need to check in detail.
- Is it well organised? A good paper should tell a story in a logical fashion. Can the manuscript be shortened?
Organisation

• Divide your review into three sections:
  – An overview: what’s it about, what’s the key message, why is it important / novel / interesting?
  – Major points which require substantive extra work or text. Number these.
  – Minor points – grammar, typos etc
• Refer each point to specific line numbers in the text
• Don’t suggest accepting/rejecting in comments to authors (put in comments to editor).
Doing the review

• Look at the conclusion first - is it interesting?
• Focus on the science
Doing the review

• Look at the conclusion first - is it interesting?
• Focus on the science
• If MS requires substantial revision, don’t give a long list of typos, they may become irrelevant
• Give non-native speakers a break, as long as the presentation is understandable
• Read the whole MS
• Pay careful attention to tables and figures – do they agree with the text?
Seek clarity

• If you don’t understand something, ask for it to be made clearer, chances are others won’t either, beware...

“We used the ‘Grannysuckseggs’ package in R with backwards stepping, multiple sequential iterative likelihood sampling with a ratchet function and partial spatial correlation in the ‘Whathefcukdoesthatmean’ KFC sub-routine”

• ... and it’s possible the authors don’t either as this reviewer perceptively spotted (and pointed out nicely)

“I think this could be a really good and interesting paper with excellent analyses and an important and novel message. However, I also think it needs quite a bit more thought in the way it is set up and presented. It is not clear to me from the Introduction what the question being asked is, and the logic presented to justify the approach is a bit muddled, which suggests the main question is not that clear to the authors either.”
Methods and Results

- Are the methods *appropriate*, not necessarily the most complicated or fashionable?
- Are effects reported appropriately (effect sizes, standard errors, sample sizes), compare
  
  "... the number of babies born was higher in towns with nesting storks (t = 3.20, p < 0.05)."

  "... the number of babies born per person in towns with nesting storks (2.3 ± 1.1, n=10) than in towns without storks (1.0 ± 0.9, n=12, t = 3.20, p = 0.021)."

- Are the figures informative, e.g. do model fits show the underlying data, and correctly labelled?
Is it the appropriate length?

• Be careful about complaining that a manuscript is too long, especially when asking for extra work - indicate the bits that are superfluous

• If suggesting extra work, ask yourself: is it necessary? will it change the key message?

• Restrict requests for extra work to that which supports their argument rather than extending it, avoid the temptation to ...
Your manuscript as submitted

... and after peer review and revision

- minor revisions
- the latest top-mounted laser cannon. Because
- front windshield needs to be removed or tinted red
- horse hitch "cause that's how we always did it"
- introduction and discussion should be significantly expanded
- more replicates needed
- please add necessary circular and triangular windows (*reviewer3 sells odd-shaped windows)
- please try this alternate approach

REDPEN/BLACKPEN  http://redpenblackpen.jasyo.net
Finally...

- Every paper you publish will have had (hopefully helpful) comments from at least 2 referees – so ideally aim to referee roughly as many in return

- Signing reviews probably promotes more constructive reviews, and can certainly facilitate discourse & lead recognition of a review well done. Having said that, most people choose not to sign. Whether you do or not, be consistent - don’t just sign the nice reviews!

- At some point you will review the work of someone you know (possibly well). This is almost unavoidable. If you are at the same institution (or have been in the last year or two) or are actively collaborating with them, decline the invitation, otherwise you’re probably OK. If you feel in any doubt, you should probably decline, but do consult the editor.
Further thoughts...

1. https://methodsblog.wordpress.com/2015/06/03/reviewing_statistics/
3. https://dynamicecology.wordpress.com/2013/01/03/advice-how-to-review-a-manuscript-for-a-journal/

And when you have finished: