Publishing your way to success

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Overview

- Why publish?
- How to write a good paper
- The reviewing process
Why publish?

Candidates from last three job searches in Department

<table>
<thead>
<tr>
<th>Year</th>
<th>All</th>
<th>Top 20</th>
<th>Top 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>25</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>2015</td>
<td>22</td>
<td>15</td>
<td>7</td>
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<tr>
<td>2016</td>
<td>13</td>
<td>13</td>
<td>8</td>
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Average publications per year since PhD:
- Top tier (Nature, Science, PNAS, etc.)
What makes a good paper?

Robust science
All decent journals

Novelty

Communication
More important in High Impact Journals
How to write a good paper

Be focused
(too much info kills info)

Advance the field

Set the context
Literature:
(1st paper, best paper, recent review)

Be consistent

Quantify
(Stats)

Display
(figures/tables)

Narrative
(text)
Hour-glass model and the Five Pivotal Paragraphs

1. Eternal Question
   - set your net to catch your reader
2. Narrow to your question(s)
   - What will the reader learn?
3. What important thing did you find?
   - Answer to 2.
4. Implication?
   - Progress to answering eternal question

McGill, *Dynamic Ecology*
Experiments suggest that biodiversity enhances the ability of ecosystems to maintain multiple functions, such as carbon storage, productivity, and the buildup of nutrient pools (multifunctionality). However, the relationship between biodiversity and multifunctionality has never been assessed globally in natural ecosystems. We report here on a global empirical study relating plant species richness and abiotic factors to multifunctionality in drylands, which collectively cover 41% of Earth’s land surface and support over 38% of the human population. Multifunctionality was positively and significantly related to species richness. The best-fitting models accounted for over 55% of the variation in multifunctionality and always included species richness as a predictor variable. Our results suggest that the preservation of plant biodiversity is crucial to buffer negative effects of climate change and desertification in drylands.
Choosing an appropriate journal

- Fits into scope?
  - Similar papers published? Your references?

- Good reputation
  - impact factor, unquantifiables

- Turn-around time?
  - Scooping danger? Job application?

- Appropriate format
  - MS length? Ideas piece? Data paper?
What journal do you think you’ll submit your first paper to?
The peer review process

1. Author submits article to journal
2. Journal Editor screens paper
3. Reviewer
4. You??
5. Reviewer
6. Author makes revisions
7. Editor assessment of reviews
   - Accepted no revisions required
   - Rejected
   - Rejected after screening
8. Accepted no revisions required
The decision

- Accepted
- Minor revisions
- Major revisions
- Rejected, but can resubmit
- Rejected and cannot resubmit
Revising and Responding

- Reviewers are ALWAYS right:
  - Flaw: **Fix it!**
  - Misunderstanding: **Reword/redraw to clarify!**
  - Conflict of interpretation: **Resolve**
- Stay positive it’s (usually) not personal
- 75% of published papers are in the 1st journal submitted to.
- Papers that have been rejected once get more citations when published
Overall tips

- Think about the story
- Cut to the chase
- Be rigorous.
- Be reviewer friendly
  - Think like a reviewer (and review!)
- Don’t give up.

Good luck
Some blogs

- Brian McGill’s tips from Dynamic Ecology
  - https://dynamicecology.wordpress.com/2016/02/24/the-5-pivotal-paragraphs-in-a-paper/

- Pulitzer winning author Cormac McCarthy’s tips on writing a great paper
  - https://www.nature.com/articles/d41586-019-02918-5