Getting published in the peer-reviewed literature

Joanne White
Canadian Forest Service

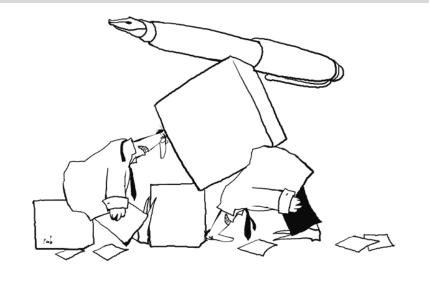
Nicholas Coops
Editor – in – Chief CJRS
UBC

Valencia, Spain November 2016



STRATEGIES FOR PUBLISHING IN PEER REVIEW

- Before you write
- When you write
- When you submit
- When you re-write and re-submit
- Miscelleneous





In a nutshell

- 26,746 peer-reviewed scholarly and scientific journals¹
- ~1.5 million research papers each year²
- Competition is increasing, particularly for "elite" journals

¹As of December 1, 2011. Source:

http://pages.cmns.sfu.ca/heathermorrison/appendix-c-how-many-active-scholarly-peer-reviewed-journals/

²Björk et al. (2008) (Assuming 2.5% increase per year). http://elpub.scix.net/data/works/att/178_elpub2008.content.pdf



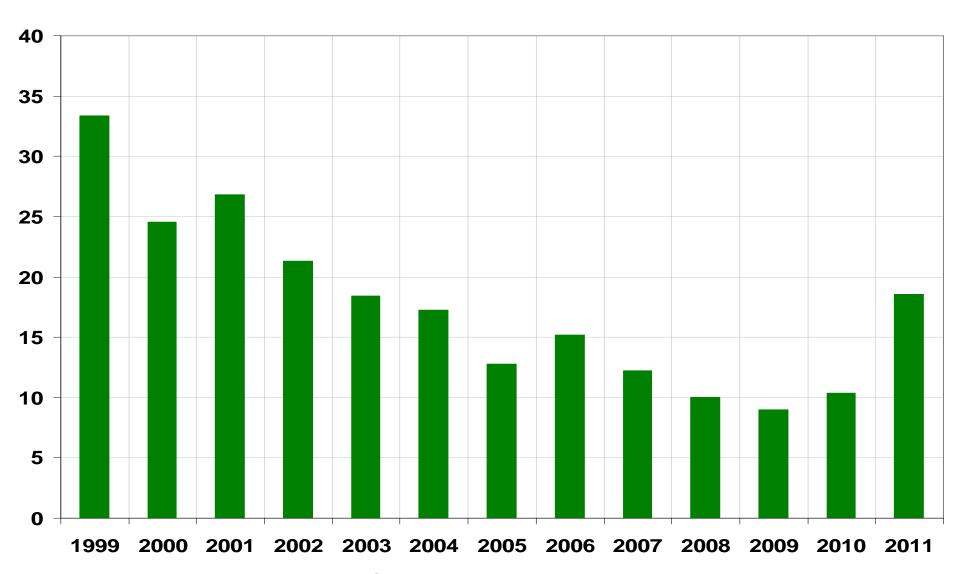
Editors do not want zero-cited articles

"The statistic that 27% of our papers were not cited in 5 years was disconcerting. It certainly indicates that it is important to maintain high standards when accepting papers..."

Marvin Bauer, Editor, Remote Sensing of Environment



% of documents in RSE published in past 3 years that have never been cited



Source: www.scimagojr.com

Editorial Decisions

- 1. Editorial rejection
- 2. Referee rejection
- 3. Revision (minor or major)
- 4. Acceptance



Marvin Bauer, Editor, Remote Sensing of Environment Nicholas Coops, Editor, Canadian Journal of Remote Sensing Giles Foody, Editor, International Journal of Remote Sensing

WHY DO PAPERS GET REJECTED?

- 1. Topic is not well matched to the focus and interests of the journal.
- 2. The research is clearly not significant with common problems being:
 - results for only a single image, location, and date
 - lack of accuracy assessment and validation
 - flawed analysis methods
 - the work and paper are well done, but it is nothing that is not already well known and has been published many times



WHY DO PAPERS GET REJECTED?

3. The paper is poorly prepared (structure, figures, language, inappropriate citations)

Even if it can be fixed, it makes editors and reviewers question how well the research was done.



REJECTION RATES

Remote Sensing of Environment:

- 30% topic is not appropriate for RSE or the paper is clearly not sufficient (i.e., = rejection without full peer review)
- 35% rejected following peer review or authors fail to submit a revised paper
- 35% accepted (with revision)

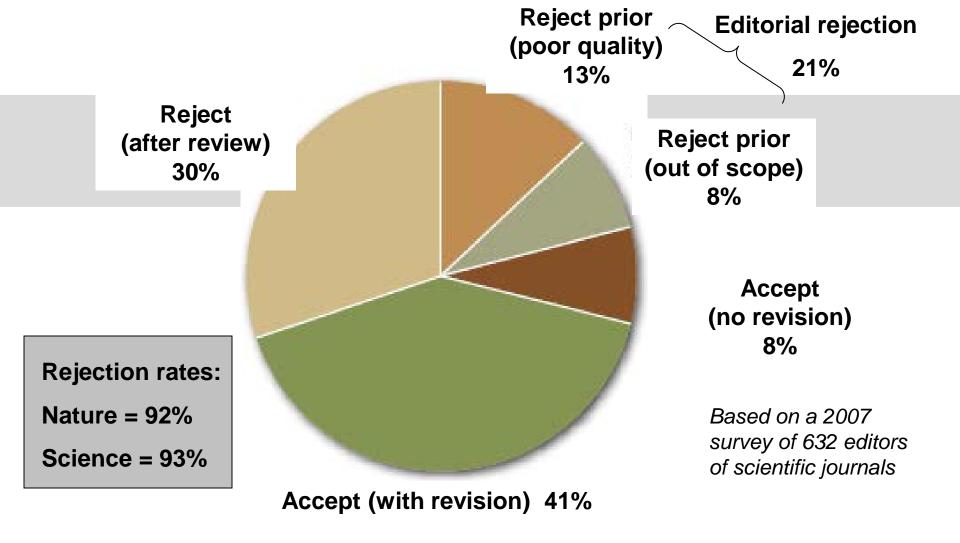
Canadian Journal of Remote Sensing:

50% rejected

International Journal of Remote Sensing:

only a small number get rejected without review





Ware, M. and Monkman, M. (2008). *Peer review in scholarly journals: perspective of the scholarly community – an international study*. Publishing Research Consortium. Available online: www.publishingresearch.org.uk

Schultz, D.M. (2010) Rejection rates for journals publishing in the atmospheric sciences. *American Meterological Socieity.*



BEFORE YOU WRITE

- Select an appropriate target journal
- Know your target
 - read the journal
 - check out guidelines for authors



SELECT AN APPROPRIATE TARGET JOURNAL

- Relevance
 - Aims and scope; types of articles; readership
- Impact
- Turnaround time
- Open access

http://www.scopus.com

http://apps.webofknowledge.com

http://www.scimagojr.com

http://www.journalmetrics.com

http://www.harzing.com/pop.htm



WHEN YOU WRITE: A process, <u>not</u> an afterthought

- Make an outline
- Consult the literature:
 - background/context
 - methods
 - discussion
- Plan your analysis; acquire appropriate data; do the analysis
- Identify appropriate figures and tables
- Keep writing
- Involve and include your co-authors; make sure you take advantage of their experience and expertise



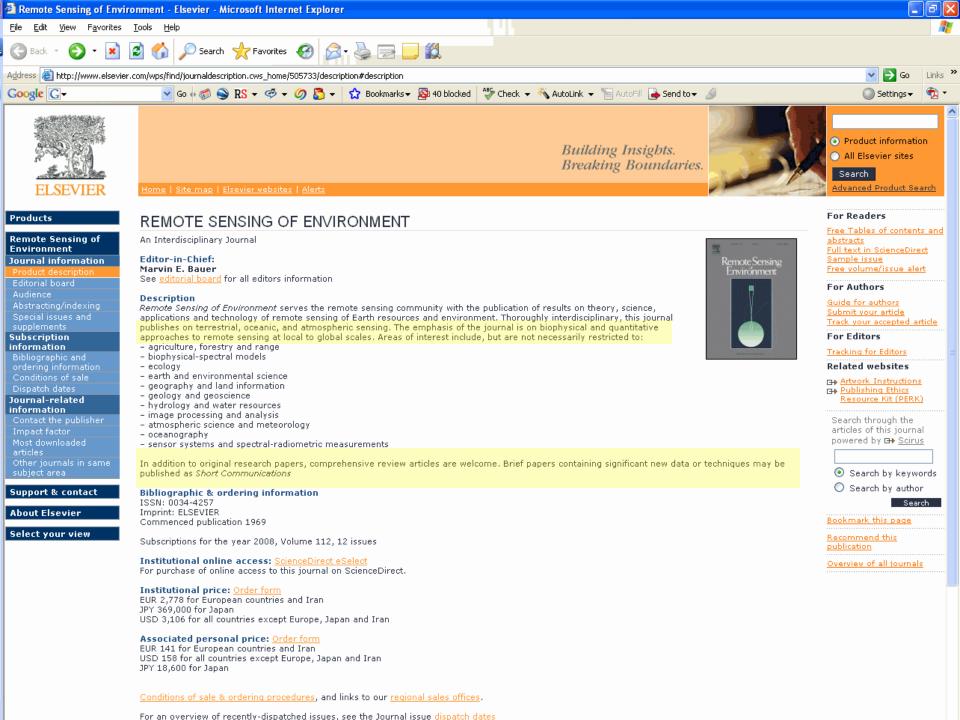


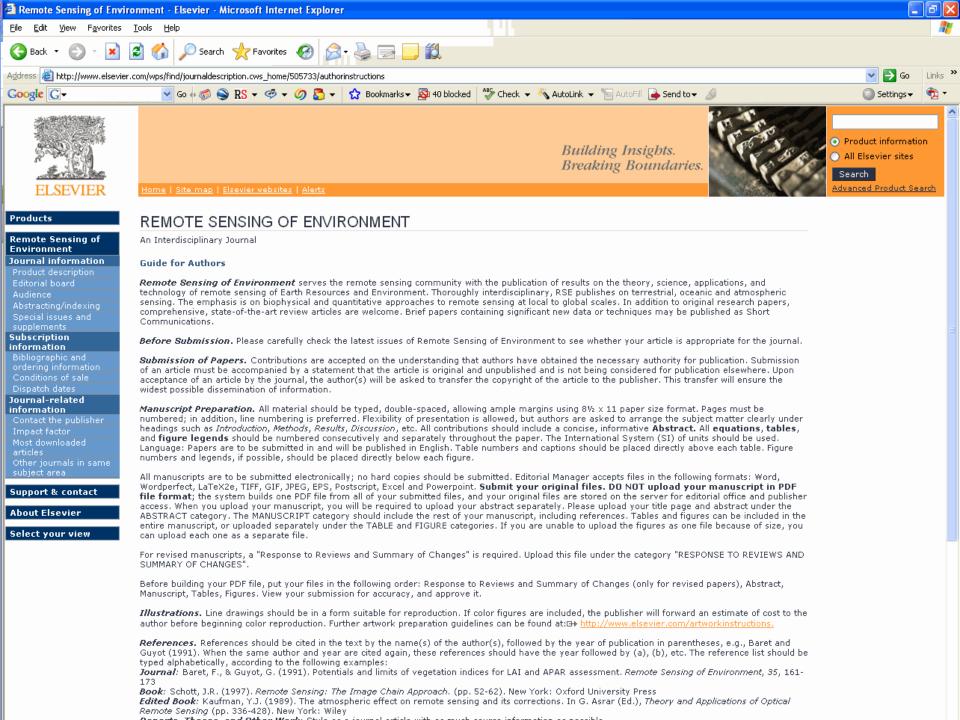
BEFORE YOU WRITE

- Formulate an interesting research question
- Ensure the aim of the paper is clearly defined:
 - specific
 - original
 - relevant to readership

- Select an appropriate target journal
- Know your target (read the journal, check out guidelines for authors, think about journal impact (all journals are not created equal))
- Consult the literature:
 - background/context
 - methods
 - data requirements







Move beyond "remote sensing" journals alone

 A lot of what is submitted to RS journals may be better considered by more application focused journals, such as:

- vegetation science,
- forestry,
- ecology,
- resource management



WHEN YOU WRITE: A process, <u>not</u> an afterthought

- Make an outline
- Consult the literature:
 - background/context
 - methods
 - discussion
- Plan your analysis; acquire appropriate data; do the analysis
- Identify appropriate figures and tables
- Keep writing
- Involve and include your co-authors; make sure you take advantage of their experience and expertise



Section	Function	Preferred Style	Rules of Thumb
Title	Indicates content. Attracts the reader's attention.	Short and simple (but not too short). Purposive (i.e., targets a specific audience/journal).	Avoid redundancy. Include keywords.

Too short: Remote sensing of foliar chemistry

Too long: Predisposition assessment systems (PAS) as supportive tools in forest management-rating of site and stand-related hazards of bark beetle infestation in the High Tatra Mountains as an example for system application and verification

Purposive: The Data Uncertainty Engine (DUE): A software tool for assessing and simulating uncertain environmental variables

Catchy? Ground truth: an underview

Gerund: Analyzing dune dynamics vs. An analysis of dune dynamics

Characterizing forest vertical structure with lidar vs.

Characteristics of forest vertical structure measured with lidar



Sec	tion	Function	Preferred Style	Rules of Thumb
Abst	ract	State the principal objectives and scope of the investigation. Describe the methods employed. Summarize the results. State the principal conclusions.	Past (perfect) tense. Active/passive voice. First person or not? Short concise sentences. No jargon. No citations.	What was done? What was found? What are the main conclusions? Important summary numbers. Should stand alone. KEYWORDS



Less than 5% of research papers are read in detail, but more than 50% of abstracts are read.

Remote sensing of small and linear features: Quantifying the effects of patch size and length, grid position and detectability on land cover mapping

Alex Mark Lechner, Alfred Stein, Simon D. Jones, Jelle Garke Ferwerda

Remote Sensing of Environment 113 (2009) 2194–2204

Context

The accurate mapping of small, often fragmented and linear vegetation patches is of key importance for natural resource management because of their ecological significance...

Objectives

This paper investigates the effect of patch area and patch elongation on the accurate mapping of these vegetation patches.

Methods

Using synthetic images to simulate sub-pixel patch location, we investigated classification accuracy and extraction probability resulting from differences in the geometric properties of the raster grid and the feature alone.

Results

The mapping error was highest when the scale of the feature and the raster grid coincided. The spatial resolution of the grid should be many times finer in order to extract these features accurately.

Conclusion

A more precise estimate of the size of the smallest discernable feature was generated, taking into account the random position of the remote sensing grid with respect to the feature as well as its shape. An understanding of this phenomenon is critical for making good land management decisions based on a thorough understanding of the limitations of remote sensing data.

Active Voice / Passive Voice

- Subject is doing the action:
 - Why did the chicken cross the road?
 - This programme focuses on...

- Object becomes the subject:
 - Why was the road crossed by the chicken?
 - The programme is focused on...
- Awkward, vague:
 - Why was the road crossed?
- When to use?
 - Emphasize an object.
 - De-emphasize an unknown/irrelevant subject (i.e. Methods)



Section	Function	Preferred Style	Rules of Thumb
Introduction	Introduces the topic and defines the terminology. Relates to current knowledge: What has been done? Indicates the gap: What needs to be done? Provides the focus of the paper (purpose) and the research objectives.	Present tense for referring to established knowledge. Past tense for literature review. Active voice. Focussed overview of literature.	Use state-of- the-art references. Follow logical sequence. Emphasize why the topic is important.

Characterizing 23 years (1972-95) of stand replacement disturbance in western Oregon forests with Landsat imagery (Cohen et al., *Ecosystems*, 2002)

Introduce the topic. Emphasize why the topic is important.

Regional forest dynamics influence a variety of ecosystem functions, including terrestrial and aquatic species habitat (Harris and Silva-Lopez 1992; Csuti and others 1997), water quality and flows (Saunders and others 1991), and the carbon cycle (Houghton 1993; Cohen and others 1996).

Relate to current knowledge. What has been done?

Since 1972, it has been possible to monitor forest resources using satellite imagery (Goward and Williams 1997).

Monitoring of both forest disturbance and succession is possible with satelliteimage data (Foody and others 1996; Rignot and others 1997).

Characterizing 23 years (1972-95) of stand replacement disturbance in western Oregon forests with Landsat imagery (Cohen et al., *Ecosystems*, 2002)

Indicate the gap. What needs to be done?

Local to regional monitoring of forest disturbance using satellite imagery has largely focused on the derivation of methods (Sader and Winne 1992; Cohen and others 1998).

Pose research question. Give purpose and objectives.

In this study, we characterize the relationships among disturbance rates and patterns, geoclimatic gradients, and land ownership to determine the impact of land management activities and wildfire across the 4.6 million forested hectares of the three major forest provinces in western Oregon between 1972 and 1995. Our objectives are:

Characterizing 23 years (1972-95) of stand replacement disturbance in western Oregon forests with Landsat imagery (Cohen et al., *Ecosystems*, 2002)

Introduction = 650 words

Topic sentences = 150 words ~ 25%

Section	Function	Preferred Style	Rules of Thumb
Methods	Provides enough detail for competent researchers to be able to repeat the study. Describe data. Describe methods used. Who, what, where, when, why.	Past tense. Passive/active voice. Correct and internationally recognized style and format (for units, variables, materials, etcetera).	Mention everything that is important to the results. Do not create a bull's-eye for the reviewer (i.e., "some data was ignored"). Do not explain accepted techniques. Flow diagram.



Section	Function	Preferred Style	Rules of Thumb
Results	Gives summary results in graphics and numbers. Compares different results. Gives quantified proofs (statistical tests).	Past tense. Active voice. Use tables, graphs, illustrations.	Present summary data related to the objectives (not all the research results). Call attention to the most significant findings. No methods! No analysis of results.



Section	Function	Preferred Style	Rules of Thumb
Discussion	Explains discrepancies and unexpected findings. Agreement (or not) with previously published work. States the important implications of results.	Present tense. Past tense if referring to results. Active voice.	Do not recapitulate results. Make strong statements (i.e., avoid "It may be concluded"). Do not attempt to hide unexpected results-they can be the most important ones. No new results.



Section	Function	Preferred Style	Rules of Thumb
Conclusion	Answers research questions/ objectives. State limitations of the study. State importance of findings. Announce future research.	Past tense (for referring to this study). Present tense for musings of future work.	Summarize concisely. Describe how it represents an advance in the field. Avoid repetition with other sections. Avoid speculation. Do not overemphasize or overstate the impact of your work.



Section	Function	Preferred Style	Rules of Thumb
References	Provide a list of related literature and sources of information. Support the ideas in the paper.	Depends on journal. Check journal requirements for formatting.	Cite primary source rather than review papers. Make citations count.



Miscellaneous Issues (continued)

Contractions The difference wasn't statistically significant.

The difference was not statistically significant.

Ambiguity This method was applied to the time series data.

The Morton method was applied to the time series data.

Data are plural Image data was selected at random.

Image data were selected at random

Numbers **Spell out numbers between zero and nine:**

The model requires eight input layers.

**Except when grouping with larger numbers:

Only 8 of the 49 input variables were selected by the model.

Use numerals for numbers \geq 10.

The model requires 16 input data layers.

**Except when the number begins a sentence:

Sixteen input data layers were required for the analysis.

Miscellaneous Issues (continued)

e.g. vs. i.e. e.g. = exempli gratia, "for example" << GENERAL i.e. = id est, "that is", "in other words" << SPECIFIC Don't italicize, use comma following.

dash vs. colon Dash parenthetical, amplifying, or explanatory.

In some instances—although no one will admit it—the police overreacted to the problem.

Colon introduces a formal list, definition, quotation, or equation. An independent clause precedes the colon. *The reaction of the crowd signified only one thing: apathy.*

which vs. that Which (non-restrictive clause), that (restrictive clause).

My new iPhone, which I took on vacation, was stolen.

My new iPhone that I took on vaction was stolen.

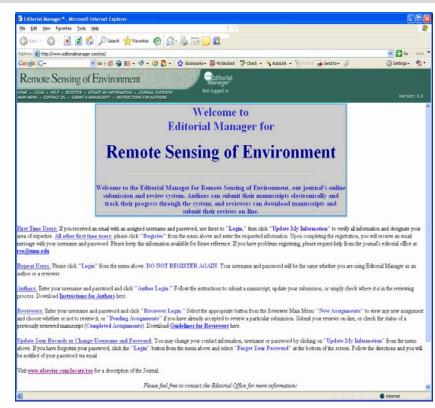
Plagiarism

- Unacknowledged use of other people's ideas or work.
- Misrepresentation of someone else's ideas or work as your own.
- Changing words, but copying sentence structure.
- Use of specific facts without attribution to the source.
- Paraphrasing without citation.
- Improper use of quotations.



WHEN YOU SUBMIT

- Follow the submission guidelines explicitly
- Draft a cover letter to the editor if required and/or appropriate
- Suggest reviewers if given the option

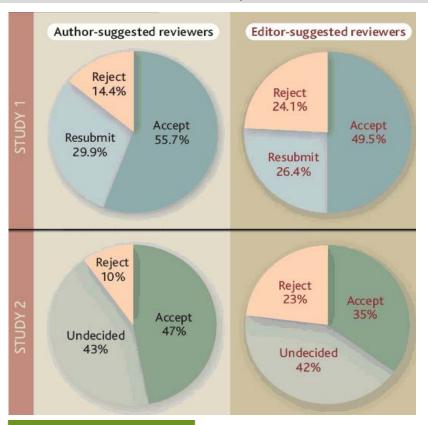


http://www.editorialmanager.com/rse/



"Suggesting or excluding reviewers can help get your paper published"

D. Grimm, 2005, *Science*, Vol. 309, p. 1974



- Suggesting or excluding reviewers significantly increased a manuscript's chances of being accepted
- No difference in quality or timeliness of reviews



The Corruption of Peer Review Is Harming Scientific Credibility

- In July last year, Sage Publications retracted 60 papers from Journal of Vibration and Control
- The authors had exploited peer review so that certain papers were sure to get a positive review for placement in the journal.
- They listed preferred reviewers, who were fictitious and added made up email addresses. When then invited to review the paper they did so.



WHEN YOU RE-WRITE

- Don't underestimate the importance of the rebuttal process.
- Prepare a rebuttal document:
 -make it easy for the editor/reviewer to accept your revision!
- Respond to all points, even if you disagree.
- If you disagree with particular points present your argument.
- Be constructive, positive, and tactful.
- Cross reference to other reviewer comments for the same issue.



Paper RES 106-052:

An accuracy assessment framework for large area land cover classification products derived from medium resolution satellite data.

Reviewer 1:

1. Page 10, line 20: Cite Don Steven's work

An addition has been made to the text (page 10, line 10):

Use different font style to distinguish your responses from reviewer's comments

"Ideally, the sampling frame will match the target population; however in natural resource applications it is common for the sampling frame to contain many non-target elements, and for many of the target elements to be inaccessible (Stevens and Olsen, 2004). Sampling frames are usually list frames or area frames. In an ecological context, both forms of sampling frames may be implemented, depending on the nature of the sample units (Stevens 1993)."

2. Page 10, line 23: The frame most appropriate for large area land cover validation is not necessarily an area frame – could be a list frame. Depends on the nature of the features (are they extensive or discrete)?

The text has been clarified as follows (page 10, line 19):

"The type of sampling frame that is most appropriate for large area land cover validation depends on the nature of each land cover class and whether the class is discrete or extensive."

3. Page 11, line 3: Check that it was the air photo grid that was used as the sampling frame in Zhu et al. 2000.

The reference to the photo grid has been made more explicit in the text (page 11, line 1):

"A sample frame may be defined by a specific spatial dataset, such as the National Air Photo Program coverage (Zhu et al. 2000) or the entire landmass of a country (if evaluating a national product)."

5. Page 11, line 9: Sampling units can be discrete features as well.

Change implemented as suggested by reviewer (page 11, line 6):



"Publish and review, or perish"

W.F. Perrin, 2008, *Science*, Vol 319, p. 32



 Review 4 times as many papers as you publish per year

Otherwise:

- Less knowledgeable reviewers
- Reviews of lesser quality



REVIEWERS ARE MORE PRODUCTIVE

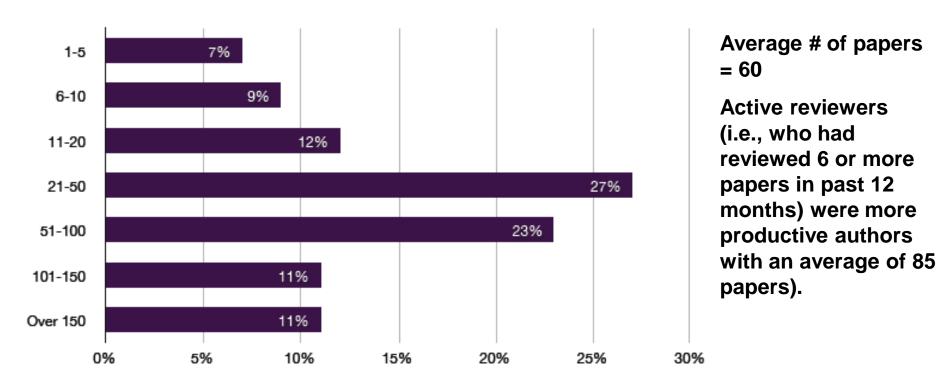


Figure 14: Total number of papers published in career to date (n = 3040)



a place of mind



Contents lists available at SciVerse ScienceDirect

Journal of Informetrics





Publication patterns of award-winning forest scientists and implications for the Australian ERA journal ranking

Jerome K. Vanclay*

Southern Cross University, PO Box 157, Lismore, NSW 2480, Australia

"...prominent scientists increase their impact through coauthorship of a larger number of papers rather than by publishing in journals of higher impact."

Keywords: Excellence for Research in Australia (ERA) Impact assessment Journal ranking decade before and two decades following their first major award. An analysis of their 1703 articles in 431 journals revealed substantial differences between the journal choices of these elite scientists and the ERA classification and ranking of journals. Implications from these findings are that additional cross-classifications should be added for many journals, and there should be an adjustment to the ranking of several journals relevant to the ERA Field of Research classified as 0705 Forestry Sciences.

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Welcome any comments / discussion at this meeting or anytime.

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