

## *Polar Research's* referees

It is once again time to thank all the scientists—not only those whose names are printed on the following pages—who have kindly served as referees for *Polar Research* during the last couple of years.

There is a widespread sentiment that reviewing manuscripts is an almost thankless task. Yet reviewers agree to it anyway. Why? This was one of the questions addressed in a focus group study commissioned by the publishers Elsevier (Mulligan 2004). The study confirmed that reviewers are motivated by a number of factors. Chief among them is the perception that it is one's academic duty to review others' papers since one's own work is similarly reviewed (and, thereby, often improved). Additional incentives for referees include a wish to remain up-to-date in their fields and the hope that reading new work will stimulate fresh ideas for their own research. The study indicates that the reputation of the journal strongly influences a reviewer's decision to agree to examine a manuscript, and it helps if the referee personally knows the individual requesting the review.

The Elsevier study also revealed that referees believe that reviewing is growing more burdensome. Referees are being swamped with requests to review manuscripts and the turnaround times demanded by editors—themselves pressured by authors who want fast decisions and rapid publication—are becoming shorter. Some fields are more impacted by this than others. Scientists in “high consensus” fields—in which scholars agree about what constitutes good research and fruitful theory—are likelier to compete for priority in announcing their findings and to worry about being scooped by rivals (Hargens 1990). Competition for priority is more pronounced in the physical sciences than in the biological sciences (Hargens 1990 and sources cited therein), yet expectations for speedier turnaround and publication pervade scientific publishing. These expectations have surely been influenced by the possibilities of computer technology, which allows for lightning-fast communication and quicker preparation of documents and graphics. (As with so many other aspects of modern life, the better the technology, the more we humans must scramble to keep pace.) The internet revolution seems

to have aggravated the situation for reviewers in one further respect. Referees in the Elsevier focus group felt that online review, which is in use at many journals (but not yet *Polar Research*), benefits authors and editors but places an extra load on the shoulders of reviewers. They have to print out manuscripts themselves and must confine their comments to restrictive online formats. (See Gladwell [2002] for a look at how and why many people—“knowledge workers”, in particular—continue to rely on paper in spite of the prediction that it would be made largely obsolete by today's information technology.) Editors who participated in the Elsevier study felt that attracting and keeping good referees is getting harder.

Rushed, overburdened and sometimes feeling unappreciated, referees can at least take heart in the fact that editors are deeply concerned with their plight as well as with the larger issues relating to peer review. In September 2005, for example, 470 participants representing 38 nations gathered in Chicago for three days for the Fifth International Congress on Peer Review and Biomedical Publishing. Presentations at the conference covered topics such as conflicts of interest, blind peer review and comparisons of the quality of reviews by editor- as opposed to author-suggested referees. Though a majority of the talks and posters were specific to biomedical publishing, many contained messages of broader relevance. (For the complete program see [www.ama-assn.org/public/peer/program.html](http://www.ama-assn.org/public/peer/program.html).) Peer review is a common topic of discussion in *European Science Editing*, the (peer reviewed) journal of the European Association of Science Editors.

What is the purpose of peer review? As Mulligan (2004) points out, there is no single set of objectives which is universally in use. The consensus in the focus group in the Elsevier study was that “peer review should prevent an author making egregious claims on minimal results... it should ensure that a consistent and appropriate methodology is used, and that recent reputable work...is correctly referenced and acknowledged” (Mulligan 2004: 4). These basic criteria form the backbone of *Polar Research's* reviewer's guidelines and, presumably, those of other scientific journals. On these grounds, referees evaluate manuscripts; those failing to satisfy the most important criteria are rejected by editors. According to Meadows (2005: 114), the rejection rate of the “average” natural science journal does not exceed a third of submissions. Interestingly, in

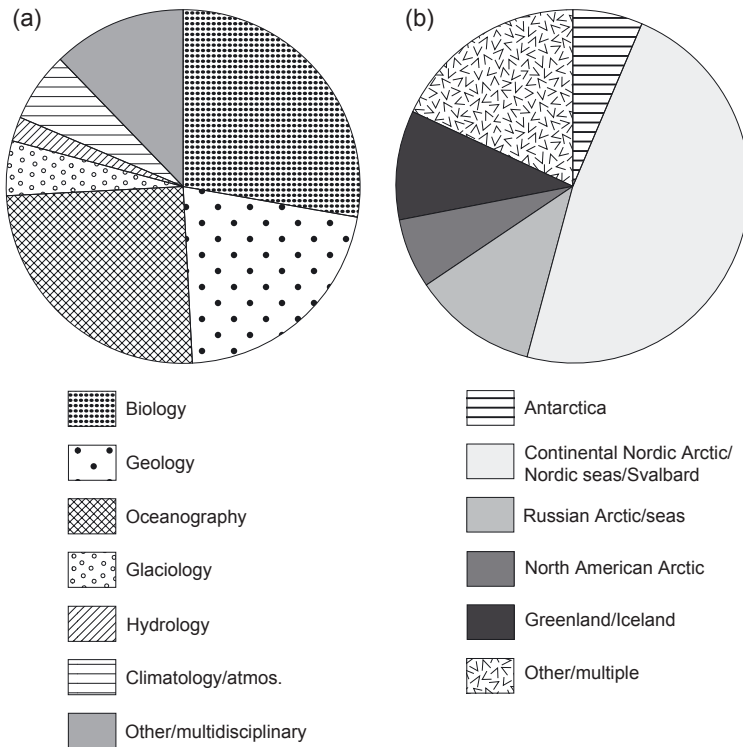


Fig. 1. (a) A rough breakdown of the scientific fields represented in *Polar Research* articles; (b) the geographic areas that the journal's articles concern. The data are drawn from the last five years.

the social sciences—where there is low consensus about what constitutes valuable research—journals reject two-thirds or more of their submissions, and they require more revisions from authors (Meadows 2005; see also Hargens 1990).

In contrast to many journals, *Polar Research* is multidisciplinary; its scope is largely defined by geography and it therefore competes for submissions with journals covering particular scientific fields. Biology, geology and oceanography are all well represented in *Polar Research*: combined, these three disciplines represent about three-quarters of the articles in the journal (Fig. 1a). In terms of geographical coverage, the Nordic Arctic, particularly Svalbard and the Barents Sea, continues to dominate the pages of *Polar Research* (Fig. 1b). Only about 6% of the journal's articles concern the Antarctic. This is an imbalance that the journal's contributors, referees and readers can help to rectify by spreading the word that the scope of *Polar Research* encompasses both poles.

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