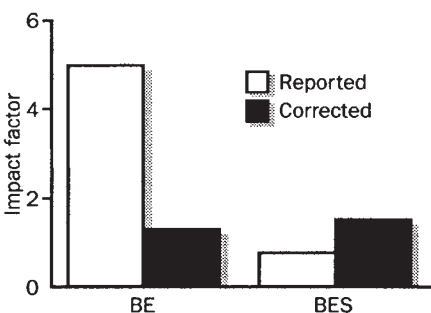


Impact of behavioural ecology

SIR — To be a complete scientist one must publish the results of research. So scientists (as well as granting councils, job search committees and university administrators) use publication records as a measure of a scientist's worth. Publication, however, provides only the raw material for scientific progress — the value of a publication can also be assessed, at least in part, by evaluating citations. Indeed, an entire industry has grown up around such citation analysis^{1,2}.

Journals are also subject to citation analysis as a measure of their influence on science^{2,3} and *Nature* and *Science* are at the top of the multidisciplinary sciences category². But imagine my surprise when the newest journal (*Behavioral Ecology*) in my own field (behavioural ecology) rocketed to the top in the most recent compilation in *Journal Citation Reports*² (*JCR*). *Behavioral Ecology* began life in 1990 as the official organ of the newly formed International Society of Behavioral Ecology and rapidly attracted good papers. Even so, in this, its first inclusion in *JCR*, it was ranked number one (based on impact factor) among the 30 journals in the behavioural sciences category (including psychology and neurobiology) and number two among the 96 zoology journals — a remarkable feat for a newcomer to any field.

Unfortunately, the *JCR* analysis² is incorrect. The accompanying figure tells the story. The meteoric rise of *BE* in *JCR* has come at the expense of *Behavioral Ecology and Sociobiology* (*BES*), long among the top 2 or 3 journals in both the behavioural sciences and zoology categories as compiled by *JCR*. Of the 116 papers



Reported⁴ and corrected impact factors (IF) for *Behavioral Ecology and Sociobiology* (*BES*) and *Behavioral Ecology* (*BE*) for 1993. IF is the average number of citations in a given year for papers published in the previous 2 years. I used ref. 2 to determine corrected IF values for 1993 by tabulating citations (correctly or incorrectly attributed to these journals) for each paper published in 1991 and 1992. This method undoubtedly misses some citations, especially when authors names are misspelled, but such errors should be random with respect to journal.

published in *BES*, 28 and 29 were cited 224 times, but 200 of these citations were erroneously attributed to *BE*. The corrected figures put *BES* back among the top 10 journals of both the behavioural sciences and zoology categories in *JCR*.

Clearly the similarity in the titles of these two journals leads to human error (which will probably be blamed on computers) in the compilation of citations. Other pairs of journals with similar titles in the *JCR* listing may also suffer from errors of this kind.

Behavioural ecology is a vibrant field with a notable impact on medicine⁴, psychology⁵, evolutionary biology⁶ and sociology⁷, so it is not surprising that it can foster two first-rate journals such as *BE* and *BES*. Both journals deserve continued support. But publications about these publications sometimes need more careful scrutiny.

Robert Montgomerie
Department of Biology,
Queen's University,
Kingston, Ontario K7L 3N6,
Canada

1. Garfield, E. *SCI Science Citation Index 1993* (Institute for Scientific Information, Philadelphia, 1994).
2. Garfield, E. *SCI Journal Citation Reports; a bibliometric analysis of journals in the 1993 ISI Database* (Institute for Scientific Information, Philadelphia, 1994).
3. Garfield, E. *Science* **178**, 471–479 (1972).
4. Williams, G. C. & Nesse, R. M. *Quart. Rev. Biol.* **66**, 1–22 (1991).
5. Blurton-Jones, N. G. *Ethol. Sociobiol.* **11**, 353–359 (1990).
6. Andersson, M. *Sexual Selection* (Princeton Univ. Press, Princeton, 1994).
7. Daly, M. & Wilson, M. *Homicide* (A. de Gruyter, New York, 1988).

Quote/misquote?

SIR — In the article “Warning of retaliation over access to physics facilities” (*Nature* **371**, 728; 1994), I do not recognize the quotation attributed to me: “Given the way the costs of major facilities are going in this country, there won't be a spallation source built in the United States, so we'll need to share facilities”; it neither reflects my opinion nor is it anything I could have stated with certainty. The US neutron science community has expended considerable effort in developing a consensus position on future neutron sources as represented in the report *Neutron Sources for America's Future* prepared for the US Department of Energy by a panel of experts from the neutron science community. The two primary recommendations from this report state:

Recommendation 1: Complete the design and construction of the ANS [Advanced Neutron Source] according to the schedule proposed by the project.

Recommendation 2: Immediately authorize the development of competitive

proposals for the cost effective design and construction of a 1-MW pulsed spallation source. Evaluation of these proposals should be done as soon as possible, leading to a construction timetable that does not interfere with rapid completion of the ANS.

I totally support these recommendations.

At present, the United States and Europe support both steady-state research reactors and accelerator-based spallation sources because they are complementary sources of neutrons necessary for science and industry, and both will be needed for the future.

Bill R. Appleton
Oak Ridge National Laboratory,
PO Box 2008,
Oak Ridge,
Tennessee 37831-6240, USA

■ Our reporter's shorthand note of the conversation, when transcribed, reads as follows:

“Given the way the costs of major facilities are going in this country there won't be a spallation source built in the US and a neutron source in Europe, so we will need to share facilities.

“We [would] provide access to ANS for European colleagues in return for us getting access to ESS [European Spallation Source].”

Editor, *Nature*

Advice to contributors

If you've got a thought that's happy,
Boil it down.

Make it short and crisp and snappy,
Boil it down.

When your brain its coin has minted,
Down the page your pen has sprinted,
If you want your effort printed,
Boil it down.

Take out every surplus letter,
Boil it down.

Fewer syllables the better,
Boil it down.

Make your meaning plain. Express it
so we'll know, not merely guess it;
Then my friend ere you address it,
Boil it down.

Cut out all the extra trimmings,
Boil it down.

Skim it well, then skim the skimmings,
Boil it down.

When you're sure 'twould be a sin to
Cut another sentence into,
send it on, and we'll begin to,
BOIL IT DOWN!

Anonymous. From *Treasure Trove*,
p.115, London 1924

Letters submitted for Correspondence should be typed, double-spaced, on one side of the paper only.