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Ecotones, herbivory, acceptance rate and electronic access

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Editor's Award, 2003

Each year, we choose a paper for the Editors' Award, normally from among those nominated by the Co-ordinating Editors (no money is handed out). This year, the voting was tied, so we settled for two joint winners: Walker et al. (2003) and Bakker & Olff (2003).

We had another problem this time: one of the papers nominated had a Chief Editor as a subsidiary author and another had the daughter of a Chief Editor as the first author. According to our rules a paper with a Chief Editor as first author can never win, and once we have a shortlist a Chief Editor cannot vote on a paper that his/her name appears on. We considered fiercer rules than this, but we thought it unfair for a young scientist to miss out on an award because s/he was associated with a Chief Editor. Anyway, as it turned out the two Chief Editors with any possible conflict of interest did not vote at all. In spite of this, the name of one Chief Editor appears on one of the joint awardees, and the daughter of a Chief Editor on another. Sorry. We tried not to.

Walker, S. et al. (2003)

Peter White writes of this paper: "Susan Walker and her colleagues have written a paper that takes a refreshingly hard and quantitative look at the nature of ecotones. In some ways their paper marks a common problem in our field. Vegetation scientists often assume that ecotones exist and either avoid or, conversely, select them for study in a way that is wholly subjective. As the authors note, tests of ideas about ecotones are rare – and they have jumped into this critical area with objective methods that are our only hope of truly understanding the phenomenon of change along gradients, whether relatively rapid or slow. Further, their paper is made more valuable because they compare five ecotones. Their finding that ecotones vary considerably is, itself, a cautionary tale that, we hope, will influence future approaches to the ecotone problem."

One of the authors, John Steel, explains how the paper came about: "We never meant to study ecotones. Six of us went by minibus to a bryophyte workshop in northern New Zealand, and we fancied a trip afterwards. Everyone knows that vegetation scientists can have a trip and call it research. We'd been to about the southernmost point in N.Z., near Bluff, and written a paper on it (Wilson et al. 1993). We'd done a study at the westernmost point, West Cape. So we thought we'd head for about the northernmost point, Cape Reinga. Just short of it we found the 'Restaurant at the End of the Universe', so it was clearly time to start sampling. There were some ecotones around. We knew from studying the literature that almost all assertions about ecotones are untested (or when tested, wrong), so there was our project. According to the philosophy of science one is supposed to generate a theory, find the best place to test it, and go there. We did the opposite: we found a nice place to work first, and thought of the theory we were going to test afterwards. We wonder how many vegetation scientists would have to admit the same if they were really honest."

Bakker, E.S. & Olff, H. (2003)

This paper examines the effects of herbivores on vegetation dynamics. It does this especially well in that it examines four crucial aspects of the process, and in that it includes an experimental approach: 1. The vegetation was characterised demographically by recording local colonisation and extinction for seven years. 2. The role of dung in dispersing species was examined by collecting dung from the field, and examining its seed bank in a greenhouse germination experiment, with a control (they were careful to collect cow dung less than a day old – they almost deserve the prize for this alone). 3. They recorded the gaps available for colonization by seeds at 51 times, categorizing the gaps where possible by the agent causing the disturbance (ants digging? rabbits using the latrine?). 4. Even when a seed arrives in a gap, it needs the right conditions to germinate and establish, and they examined the effect of dung here. Since dung might have various effects, they also used a simulated dung of toilet paper (appropriately!) plus nutrients, with other treatments including the paper and the nutrients alone. All this work was extended to the community level by examining relative abundance distributions.

Bakker & Olff demonstrated that the high species

richness is largely due to subordinate herbs. They have a high turnover rate, colonizing gaps. Dispersal of them is due mainly to the cattle, whose dung produced 13 times as many seedlings as rabbits. However, species diversity is better maintained when seeds are dispersed into bare soil, and for gap availability the community has mainly to thank the rabbits.

Theory, synthesis and experiment

Many descriptive manuscripts are submitted to *J. Veg. Sci*. We can accept those that test some theory or help to form a synthesis, and the paper by S. Walker et al. (2003) falls into this category. So does the study of Bossuyt et al. (2003), fitting dune slacks into the theory of island biogeography. Also commended was the study of Thompson et al. (2003), sampling 60 gardens in Sheffield. Ecologists have been disdainful of gardens, but the volunteer flora represents a valid community, and one largely ignored. Moreover, this paper starts a wider synthesis by comparing gardens with semi-natural habitats and with derelict land in terms of species richness, nesting and spatial autocorrelation.

However, we especially welcome those papers that examine the mechanisms behind vegetation, which Bakker & Olff (2003) do. The same mechanism/experimental approach is seen in the investigation by L.R. Walker et al. (2003) into succession on a volcano; their experimental treatments included artificial wind protection, transplanting seedlings and adding litter from *Coriaria* (an N-fixer) to other species. They found that facilitation was implicated both in the establishment of *Coriaria* and in its eventual replacement by other species. Our editor also commended the factorial experimental approach of Marcos et al. (2003) into the balance between two ericads in the Cantabrian Mts., Spain.

Two commended papers do not fit those two categories. Garcillán et al. (2003) accumulated 4205 herbarium records of woody legumes from Baja California, and used sophisticated analyses to find the hot spots in species richness and in endemism. Cody & Prigge (2003) found that in the Mojave Desert, when two large shrubs grew close they replaced their leaves at different times: one early and one late. "How do the two shrubs decide which will go first and which second?", the referees wondered.

Acceptance rate

The popularity of the Journal as judged by the number of submissions, and the need to keep the queue to publication short, has meant that the acceptance rate for *J. Veg. Sci*. now averages about 25%. Do not take offence if we cannot find space for your manuscript – we just do not have space for every competently-conducted investigation. However, do not be reluctant to send us papers that other ecologists / vegetation scientists will want to read and will find exciting (even controversial). The acceptance rate for such papers is 100%.

Electronic access

Opulus: The prime source for the journals is the web site of our publisher, Opulus Press (www.opuluspress.se). Electronic subscriptions, paper subscriptions or electronic (.PDF) copies of individual papers can be ordered there. The site includes free access for everyone to proofs of in-press papers. For authors of papers currently in the submission/editorial process, it offers free access to all issues.

Swets: Subscriptions and individual papers can also be purchased through Swets Blackwell (www.swetsblackwell.com), an option possibly of special interest to libraries

EBSCO: Similar facilities are available from Elton B. Stephens and Co (www.ebsco.com)

BioOne: *JVS* and *AVS* are available from BioOne, which was set up specially for society journals going through small publishers. The original idea was that libraries could subscribe to the whole package. However, BioOne now has a mechanism for giving access to individuals. BioOne has grown to the extent of one million accesses per month at the end of 2003.

Other means of access, e.g. JStor, are under consideration.

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