

A couple of cross-pollinators

Jerry A. Coyne

Evolutionary Ecology. Editor-in-chief Michael L. Rosenzweig. *Chapman & Hall*. 4/yr. UK £60, US \$110, elsewhere £67.50 (institutional); UK £25, US \$37.50, elsewhere £30 (personal).

Trends in Ecology & Evolution. Editor Andrew M. Sugden. *Elsevier*. 12/yr. UK and elsewhere £144, US \$265 (institutional); UK £29, US \$53, elsewhere £37 (personal).

ECOLOGISTS and evolutionary biologists would seem to be natural partners, but do not often have much to do with each other because few meetings and journals appeal to mutual interests. The problem has been lessened by the introduction of these publications. Despite their similarity of title and price per page, they are very different: *Evolutionary Ecology* is a vehicle for primary research, while *Trends in Ecology & Evolution* is a secondary



source that summarizes and calls attention to research published elsewhere.

Evolutionary Ecology is devoted to "conceptually oriented" papers, that is, proposals of new theories or descriptions of data designed to evaluate theories. Each 100-page issue includes about seven papers. The journal does not print review papers or book reviews, but does publish special symposia (for instance, a recent issue devoted to habitat selection). Other papers deal with the evolution of sex ratio, optimization, competition, and sexual selection — topics familiar to readers of *The American Naturalist*. Indeed, the content of these two journals is almost identical, the editors of *Evolutionary Ecology* having chosen the route of competition instead of niche shift.

How does the new journal fare in the competition for good papers? The quality is more variable than it should be, with the contributions ranging from the truly excellent and provocative (most of these being data-orientated) to those flawed by substantial errors in reasoning. In addition, there are too many theoretical studies that have no obvious relationship to real organisms. This makes the average quality somewhat lower than that of *The American Naturalist*, but things may change as *Evolutionary Ecology* ages.

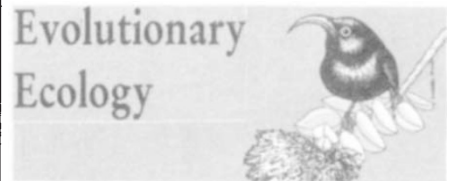
The source of the journal's problem is twofold. First, the editor's desire for rapid publication, although admirable, has produced a policy of critical review by only a single associate editor. Yet multiple refereeing is the surest route to improving manuscripts, and might have prevented

some unfortunate errors in the first few issues. In addition, the journal's statement of purpose implies a much higher respect for theory than for data: "Facts may endure, but what does raw fact do to advance science? José Clemente Orozco could well have been summarizing the philosophy of this journal when he wrote: 'Errors and exaggerations do not matter. What matters is boldness in thinking'" (Vol. 1, p.3). Such a cavalier attitude towards the facts is unbecoming of a journal devoted to understanding organisms in the wild.

It is hard to get new publications off the ground, and the editors of *Evolutionary Ecology* can be excused for some early lapses in quality. Nevertheless, if it is to enter the first rank of journals it must either harmonize rapidly with quality, or sacrifice speed by encouraging multiple review of submissions.

Trends in Ecology & Evolution, on the other hand, is uniformly excellent, having established itself in only two years as a 'must read' journal. It is designed to keep evolutionary biologists and ecologists up to date in both fields despite the explosion of publications relevant to them. Each 30-

40-page issue includes brief research notes about single papers (similar to *Nature's* News and Views section), three or four longer review papers on more general topics, book reviews, and occasional letters and commentaries on previous papers. Some issues are devoted to single areas (for example, evolution on the Hawaiian Islands). Regular topics covered include not only those that are trendy (sexual selection, genetics and conservation, primate infanticide), but also — to the editor's credit — fascinating areas that are not widely appreciated (gut



fungi, the effects of air pollution on plants, the evolution of bird song). The quality of the articles is very high, especially considering that this is not a journal of primary research, and the review articles not only summarize the literature but evaluate it critically. Special praise should be given for the graphics, which are the best of any journal in the field.

There have been a few weak articles, to be sure, but I find myself reading each issue in its entirety, something that I rarely do with journals in my own area. *Trends in Ecology & Evolution* deserves to be looked at (and subscribed to) by every population biologist. □

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Eclectic ecology

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Functional Ecology. Editors P. Calow and J. Grace. *Blackwell Scientific*. 6/yr. UK £92, US \$189, elsewhere £110.

Functional Ecology is a slightly odd title — what other kind of ecology is there? Still, at least there is no mention of the word 'environmental', the kiss of death for any serious scientific endeavour.

Judging from its natal year, the journal is succeeding in its expressed aim of covering the physiological, biophysical and evolutionary aspects of ecology. Papers published to date deal with topics as diverse as wilting in tropical trees, the ranging behaviour of tortoises, and why a cladoceran is not a bang-bang strategist when it might be expected so to be.

Functional Ecology is unusual in that, as well as standard research papers, it contains a regular series of essay reviews (the first of which is an attempt by one of the editors to define exactly what functional

ecology is) and a 'forum section' (first occupied by two eloquent critics of the editor's definition of his subject). In addition there is a series of technical reports, which tell us how to measure the fat on a hungry gull, the speed of a sprinting lizard, and the effectiveness of plants in dealing with acid rain. The journal is elegantly produced, and is a worthy newcomer to the British Ecological Society's existing stable of three successful and well-established ecological journals.

The ecological and evolutionary journal ecosystem is becoming crowded, with at least ten competing publications in the field. Each is affected to a greater or lesser extent by the topics exploited by the new arrival. As is the case with all invaders into an established community, only time can tell whether the future will bring the evolution of niche displacement to reduce joint dependence on a shared resource, or extinction; for in ecology, as in life, nothing succeeds like succession. □

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