tion about it for their own work. It would cover the entire area with a noble disregard for the author's own predilections, and provide the definitive bibliography for all subsequent research students. In practice, this journal, like many others similarly named, embraces a range of styles from the unashamed research article, through expositions of a new approach that is very pretty but has not produced any results yet, to articles (such as that by Stephen Summers) on the independence of local algebras in quantum field theory that almost reach the ideal. And what of 'mathematical physics', a term whose meaning narrows with every passing year? The scope of the journal turns out, with few exceptions, to be the most mathematical (and on the whole algebraic) end of quantum field theory and of soliton theory, verging on, nay often massively invading, pure mathematics. The scope is thus a proper subset of that of Communications in Mathematical Physics. The issues I inspected did not, for instance, cover general relativity (except as a source of

## **Star wars**

A.W. Wolfendale

**Experimental Astronomy.** Editors Jacques M. Beckers, Webster C. Cash, Thijs de Graauw, Robert J. Hanisch, Stephen S. Holt, Richard T. Schilizzi, Volker Schönfelder. *Kluwer. 4/yr. Dfl.* 240, £81.50, \$122 (institutional); Dfl.140, £47.50, \$71.50 (personal).

THE prospect of yet another international journal fills most scientists, and librarians, with horror, so I approach my task here with considerable scepticism and the need to be convinced of the new journal's value.

*Experimental Astronomy* is an "international journal on astronomical instrumentation and data analysis" launched in 1989. At first sight the papers represent a rather miscellaneous collection, with topics drawn from a variety of areas, from TeV gamma rays to rocketborne far-ultraviolet spectrographs. On reflection this is inevitable in a journal devoted essentially to techniques.

The papers read as something intermediate between the 'normal' scientific contribution and a PhD thesis, so only occasionally will readers find something of considerable interest. Libraries of adequate means should be encouraged to subscribe to the journal, but I doubt whether there will be many personal subscribers.

A. W. Wolfendale is in the Department of Physics, University of Durham, South Road, Durham DH1 31E, UK. interesting infinite dimensional Lie groups) or classical applied mathematics. Applied physicists would be forgiven if they assumed that the authors had no interest in 'real physical problems', even though this is very far from the truth.

The articles, although all interesting and of good quality from reputable authors, often had a tendency to be lightweight, as if the editors were still soliciting articles from prestigious friends who did not actually have anything new to say. Unfortunately, several articles were marred by constant grammatical errors that the editorial staff had failed to correct. Despite this, the impression is of a well produced journal bringing in good material, but in the end failing to achieve anything that is not already covered by the journals Physics Reports and Communications in Mathematical Physics.

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## **Eco-ethology?**

Darryl T. Gwynne

**Behavioral Ecology.** Editors Staffan Ulfstrand and Donald L. Kramer. Oxford University Press. 4/yr. US and Canada \$130, elsewhere \$140 (institutional); \$39.50 (members); \$22.50 (student members).

ABOUT 16 years ago a reviewer of my thesis proposal commented on my use of 'behavioural' by asserting that it did not exist in the Oxford Dictionary. Today certain biologists feel such an adjective to be sufficiently appropriate to describe their approach to ecology that it has been used as the title of at least four books and, with the addition of this new periodical, two journals.

Behavioural ecology usually refers to the study of behavioural (and related morphological) adaptations of organisms to their physical, biotic and social environments. Practitioners of this study area convened at the first meeting of the International Society of Behavioural Ecologists in 1986 and, at their second meeting in 1988, enthusiastically supported a new journal. Thus an important service of Behavioral Ecology is to the society, publishing not only original papers but also its editorial policy and announcements. But a good journal should be more than a 'societal organ'; more importantly, it should fill a need. Does it in fact succeed in doing this, especially given the existence of the similarly titled Behavioral Ecology and Sociobiology? The answer seems to be yes for two reasons. First, there is room for two journals in the subject area because of the rapid growth in behavioural ecology research in the past 10 years or so. This is evidenced by the great increase in the proportion of papers on



On best behaviour — green-backed heron with speared fish. (Reproduced from a cover of *Behavioural Ecology*.)

the subject appearing in ethological journals such as Animal Behaviour. Second, Behavioral Ecology is broader than Behavioral Ecology and Sociobiology both in format and scope. The new journal will publish reviews and scientific correspondence in addition to original papers. Details of the scope published in the society newsletter point out a use of behavioural ecology both in the sense defined above and in its other sense, the effect of behavioural processes on populations and communities. Taxonomic coverage includes animals "from invertebrates to humans" as well as plant studies related to the subject area, such as pollination biology and sexual selection. Surprisingly, the full broadness of scope is not (but should be) repeated in the most important place - the "instructions to authors" section of the two issues so far published.

The two issues I was sent make up a small sample on which to evaluate a journal. But the papers that have appeared so far are generally of a high calibre, as might be expected from the international range of editors and editorial board members (the strong taxonomic bias (avian) in the two issues will hopefully balance out with future issues).

Behavioral Ecology will attract the attention of library browsers with the alluring cover photograph on each issue. It will certainly attract the attention of personal subscribers: behavioural ecology at a low, low price.  $\Box$ 

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