Tundra to Desert: a Contrast in Biomes

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Holarctic Ecology. Editor-in-chief R. Vik. 4/yr. (Munksgaard, wonderful, wonderful, Copenhagen.) DKr. 250. Journal of Arid Environments. Editor J.L. Cloudsley-Thompson. 4/yr. (Academic.) £34 UK, \$89.50 elsewhere.

Holarctic Ecology (HE) is produced by the Nordic society Oikos (based upon Fennoscandia and Iceland), which is also responsible for the ecological journal of the same name. HE seeks to differ from Oikos in two respects: it restricts its interest to the holarctic regions of the world; and it "emphasizes descriptive and analytical studies" rather than the theoretical and experimental, which are the major concern of its sister journal.

The first definitive character is fairly precise and the papers are essentially concerned with ecological studies in boreal and arctic habitats; in this respect it overlaps somewhat with Arctic and Alpine Research and, to a lesser extent, Boreas. The second part of its policy statement is less precisely definable and the papers cover a wide range of subjects and approaches, many of which would rank as experimental in my book.

HOLARCTIC ECOLOGY

Most papers display a quantitative approach, so the word "descriptive" should not be taken to infer the admission of verbal waffle. On the contrary, the editing appears to be tight and the majority of papers are well lubricated with original data. Illustrations are frequent and well reproduced.

Topics covered are largely biological, ranging from general reviews to some very specific subjects. The overall quality of contributions is high and publication is rapid, about eight months.

Normally, papers are brief research reports of about 10–12 pages, but certain numbers are given over to lengthier topics. For example, one issue of 70 pages consisted of a condensed doctorate thesis on spring ecology (the aquatic kind), while another double issue was taken up with the results of the Norwegian IBP study on a subalpine lake.

Overall, the journal can be looked upon as a high-latitude counterpart of *Oikos*.

Like HE, the Journal of Arid Environments (JAE) has a basic geographical constraint, or more strictly a climatological one; but within that limitation its interests are far broader. Covering research studies in all the dry land areas of the world, it does not restrict itself to biological ecology, but includes environmental topics of a wide variety.

Publication takes about nine months.

Brief research papers predominate (averaging about 9 pages), a fair proportion of which are concerned with the physiological ecology of desert animals, but which also cover such disparate topics as weather modification, soil chemistry, dune geomorphology, climatic history and agricultural or sociological research.

The wide scope of the journal, which aims at an interdisciplinary audience, necessitates review papers which are designed to meet the needs of those readers whose research specialism lies elsewhere. This feature is valuable and could be more

extensively exploited. This being so, however, more care should be given to titles of papers, some of which have a general ring to them yet turn out to be very specific studies.

There can be no doubt that JAE fills a very important role, both in covering parts of the world which are somewhat neglected and which raise very specific environmental problems, and in bringing together papers from such different fields, from Islamic water law to the body fat of rodents. It is the single, over-riding factor of drought which makes this possible and provides a unifying theme for this journal.

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Current Research in Marine Biology

J.H.S. Blaxter

Journal of Plankton Research. Editor D.H. Cushing. 4/yr. (IRL Press, London.) £50. Marine Biology Letters. Editors-in-chief B.L. Bayne and R.K. Koehn. 6/yr. (Elsevier/North-Holland Biomedical.) Dfl.202. Marine Ecology, Progress Series. Editor O. Kinne. 4/yr. (Inter-Research, Halstenbek, FRG.) Subscription details not available. Marine Environmental Research. Editor G. Heath. 8/yr in 2 vols. (Applied Science, Barking, UK.) £86 UK, £95 US, £99 elsewhere.

OF THESE four journals, the Journal of Plankton Research (JPR) has the most precise remit, aiming to publish papers on marine and freshwater zooplankton and phytoplankton including results from experiments and field work. The editorial in Volume 1 has the down-to-earth philosophy of looking forward "to papers of all kinds from all parts of the world wherever plankton organisms live, in the sea, in lakes, ponds or rivers". The editor reminds us of the poet who wrote "truth, like love, resents approaches that are too intense". The opening paper of the inaugural issue contains 28 pages of concentrated data suggesting a moment of forgetfulness by the editor, or perhaps an example of unavoidable resentful truth!

Marine Biology Letters (MBL) offers rapid publication of three to four months following acceptance, especially of short papers of a biophysical, biochemical or physiological nature. Its opening editorial adopts the theme that there is a lack of a suitable journal for scientists "with a primary interest in fundamental biological and evolutionary mechanisms [and who] choose marine organisms either because they are best suited to the problem or in order to extend basic ideas over a wider phyletic and environmental range". A "laconic" style is recommended. The title of this journal seems to me to suggest

rather lightweight material or else an exchange of correspondence over marine biological issues, but this is misleading and certainly not the editors' main intention.

Marine Ecology, Progress Series (MEPS) hopes to publish papers, reviews and short notes on environmental factors, physiological mechanisms, cultivation, dynamics and ocean management to help "update, widen, deepen, or correct" the substantial series of volumes entitled Marine Ecology — a Comprehensive Integrated Treatise on Life in the Oceans and Coastal Waters, also edited by O. Kinne and published in the 1970s. This eclectic philosophy seems to pull the rug from under the feet of the other journals reviewed here, since it covers all their subject matter.

Journal of Plankton Research

Marine Environmental Research (MER) is particularly intended as a forum for work on marine monitoring with emphasis on results on natural or man-made, catastrophic or chronic, events including longterm climatological effects. The opening editorial, and to a lesser extent that in subsequent numbers, adopts a didactic note. Apparently too much environmental research "is conducted on an ad hoc basis without clear objectives. Much of it is a sad re-invention of wheels; some of it hardly meets the criteria of science". The editor implies that 75 per cent of what he reads can be consigned to the waste basket harsh and unendearing words for his future clientele.