book reviews

2000 is only 50 pages long, has two basic science papers and five clinical articles, of which three are case reports.

The scientific and clinical excellence of the editors puts them in a good position to attract the high-quality manuscripts essential to making this journal a success. At present they have their work cut out for them.

http://www.wkap.nl/journalhome.htm/1386-341X

Stafford L. Lightman is in the Department of Medicine, University of Bristol, Bristol Royal Infirmary, Bristol BS2 8HW, UK.

The art of the saveable

Animal Conservation

editors Michael W. Bruford, John L. Gittleman, Georgina M. Mace & Robert K. Wayne Cambridge University Press. 4/yr. £89, \$145 (institutional), £41, \$69 (individual), £19, \$31 (student)

William J. Sutherland

If politics is the art of the possible and science the art of the soluble, then conservation is surely the art of the saveable. The widespread concern over local and global environmental change has produced an outburst of interest among students, a redirection of ecological research towards applied questions and an expanding community of conservation biologists.

Animal Conservation is a very welcome contribution to the art. It covers the spectrum of conservation science (with a particular strength in evolution and genetics) and balances practicalities with fundamental issues. Thus the latest issue includes the genetic management of chondrodystrophy in California condors, whether fluctuating asymmetry can be used to detect inbreeding in endangered species, a protocol for re-establishing the beaver in Scotland and using human densities to interpret declines of large carnivores. The contents are usually so interesting and topical that I find myself reading most of the journal, and the students on our MSc course in conservation biology successfully petitioned our librarian to start subscribing!

Animal Conservation focuses on conservation science and excludes associated subjects such as policy and education. It is thus more narrow in scope than the market leader, Conservation Biology. The restriction to animals seems somewhat old-fashioned, especially as so many concepts apply equally to the rest of biodiversity; general papers on communities, biodiversity and ecosystem processes are likely to be submitted elsewhere.

The journal has started well. Even the first



issue contained a series of interesting papers, and this quality has been maintained. Animal Conservation has the potential to become the major conservation science journal within a few years.

http://uk.cambridge.org/journals/ani

William J. Sutherland is at the School of Biological Sciences, University of East Anglia, Norwich NR47TJ, UK.

Strong growth in the environmental field

Journal of Environmental Monitoring

editor Harp Minhas Royal Society of Chemistry. 6/yr. £350, \$578 (institutional), £60, \$96 (individual)

Journal of Environmental Policy & Planning

editors Kevin Bishop, Andrew Flynn & Terry Marsden Wiley. 4/yr. \$190 (institutional), \$105 (individual)

Graham Wood

Environmental monitoring and the implementation of informed and effective environmental policies are essential components of any initiative that attempts to grasp the illusive Holy Grail of sustainable development. Continued growth in the status of environmental issues seems unquestionable, and a huge diversity of research activity now exists that could come under the environmental umbrella. The inherent interdisciplinary nature of environmental research means that material in an emerging sub-discipline has a tendency to be scattered among a plethora of journals. Reflecting the natural-science and socialscience traditions respectively, the Journal of Environmental Monitoring (JEM) and the

Journal of Environmental Policy & Planning (JEPP) both seek to provide a single coherent outlet for research within their individual evolving fields.

Published by the Royal Society of Chemistry, JEM focuses on all aspects of the measurement of chemical, physical and biological agents indoors, outdoors and in the workplace. The emphasis of the journal is on exposure assessment in relation to adverse environmental and health effects. To date, the journal has published contributions from a diverse international group of writers, featuring a good-quality mix of long and short research articles, many derived from programmes funded by national research councils, the European Commission and major industrial sponsors. Production quality is high and the journal can boast an impressive turnaround time, with an average duration between submission and publication of just four months. In addition to research papers, JEM incorporates a variety of short, magazine-style scientific articles covering topical issues of general interest, and a useful news section that often includes web links to further information. All in all, JEM is a well-rounded periodical that has got off to a good start in its first year.

JEPP aims to provide "a forum for critical analysis" in the field, a key theme being to facilitate integration of different communities (including academics and policy-makers), different policy sectors and spatial scales, from local through to global. The journal is primarily, though not exclusively, concerned with Europe and has attracted a range of good-quality articles. It covers a variety of theoretical and empirical studies. A useful feature is the "progress report" in each issue, which has either a thematic or a regional focus. It is a healthy sign that the editors have not strayed from the originally stated aims and scope of the journal, and although submission-to-acceptance times are painfully slow, they are not atypical (five to 18 months, with a further publication lag

of two to four months). At \$190 the journal represents good value, and it is pleasing to see that is moving from three to four issues in the forthcoming year. Overall, JEPP would certainly be a worthwhile addition to library stocks for institutions with specific research or teaching interests in environmental policy.

http://www.rsc.org/is/journals/current/jem/jempub.htm

http://www.interscience.wiley.com/jpages/1523-908X

Graham Wood is in the Impacts Assessment Unit, School of Planning, Oxford Brookes University, Oxford OX3 0BP, UK.

More than a breath of fresh air

Wind Energy

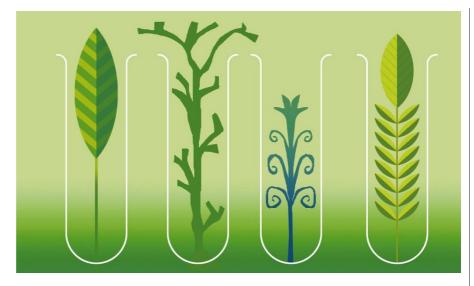
editor-in-chief Robert W. Thresher Wilev. 4/vr. \$320 (institutional), \$245 (individual)

Ian Fells

The wind bloweth where it listeth; and thou hearest the sound thereof, but canst not tell whence it cometh and whither it goeth. St John, ch. 3, v. 8

Man has harnessed the wind to power sailing ships, turn windmills to grind corn and, latterly, to generate electricity. Wind is fickle and unpredictable, as those who race yachts may know to their cost. But now wind energy, or rather, electricity generated by huge wind turbines — each producing two megawatts of power—is big business and growing at 30% a year. Worldwide there are 15 gigawatts of wind-generated electricity capacity.

As is so often the case, the practical engineering is well ahead of the science. The international journal Wind Energy has been set up to try to redress this imbalance and "offers a major forum for the reporting of advances in this rapidly developing technology ... to



harness clean energy from the wind".

The papers range widely, from "Wind power meteorology", through "Modelling methods for wind turbine wakes" to "Mature offshore wind technology". They are generally rigorous, with a nice balance of theoretical and practical content. The fluid mechanics of wind systems is crucial for energy to be generated efficiently and the journal's contents reflect this. Surprisingly, despite the journal's mission statement, the economics of wind-generated electricity and sociopolitical issues seem not to feature as yet, although a section on "Broader perspectives" is promised.

There is some competition from Wind Directions, a journal published by the European Wind Energy Association, and from Renewable Energy World, published by Edward Milford, but these are essentially trade magazines and so Wind Energy fills an important gap.

http://www3.interscience.wiley.com/cgi-bin/jtoc?ID

Ian Fells is principal consultant at Fells Associates, 29 Rectory Terrace, Newcastle upon Tyne NE3 1YB, UK.



Chemists exploring a verdant field

Green Chemistry

editorial board chairman Roger A. Sheldon Royal Society of Chemistry. 6/yr. £250, \$412 (institutional, including site-wide electronic access), £45, \$72 (individual)

Walter Leitner

"Green chemistry" may sound like an oxymoron to those who identify chemistry with cheap and nasty industry, and associate "green" with fundamental activists fighting against technological progress. But the need for clean and environmentally benign processes based on a sustainable development is now widely recognized and has found its way into many corporate targets and research policies. In this context, "green chemistry" is defined as the utilization of a set of principles that reduces or eliminates the use or generation of hazardous substances in the design, manufacture and application of chemical products (P. Anastas & J. C. Warner, Green Chemistry, Oxford Univ. Press, 1998).

Despite its seemingly clear focus on technological application, the above definition results in a tremendous challenge for fundamental science in chemistry. What impact do chemicals have on the environment? How can we develop alternatives to potentially hazardous reagents? Is it possible to replace traditional reaction sequences resulting in the inevitable generation of by-products with new transformations where all starting materials are incorporated in the product? Can we design, or efficiently screen for, new catalysts that make reactions cleaner or help to save energy? What are the chances of replacing organic solvents with more benign reaction media? These are just some of the questions that organic and inorganic synthesis, physical chemistry and chemical engineering can help to address in this field.