

tones are clear. Copy editing is of a high standard, despite the use of much camera-ready copy prepared by authors. On the other hand, there have been long delays in the editorial processing of manuscripts. Many authors (including myself) have experienced delays of around six months between submitting manuscripts and receiving referees' reports. Many authors of the Magellan 'six month' reports have been particularly frustrated by these delays. The editor has described the reasons for the delays in a recent leading article and promises to improve turnaround times in the future.

Pricewise, *JGR - Planets* is a bargain, especially for members of the American Geophysical Union. Whether it will succeed as a journal independently of the

other *JGR* divisions, however, is not yet clear. At the moment, the number of papers in any one issue (excluding the special issues) is smaller than most of the topical groupings now used in *JGR - Solid Earth* (in which papers are divided into groups dealing with a common theme, such as seismology and mineral physics). And it is not obvious why papers with more of a planetary orientation could not be handled in a similar way. Such an arrangement would emphasize the role of planetary studies as an extension of traditional geophysics rather than a disjointed endeavour. □

H. J. Melosh is in the Lunar and Planetary Laboratory, University of Arizona, Tucson, Arizona 85721, USA.

Redressing the balance

Michael Rowan-Robinson

Astronomical and Astrophysical Transactions: The Journal of the Soviet Astronomical Society. Editor-in-chief Nikolai G. Bochkarev. *Gordon and Breach*. 4/yr. \$245, DFI550 (institutional); \$445, DFI858 (corporate); \$87, £59 (personal).

THE emergence of a new Soviet Astronomical Society in 1990, and of its journal *Astronomical and Astrophysical Transactions* in 1991, is a development that will be welcomed throughout the astronomical community. The leading article in the first issue of this journal points out that: "The formation of our society is in a definite sense a re-creation of professional astronomical societies. These societies operated in Russia from the end of the last century until the beginning of the 1930's, when the majority of society organisations in the USSR were forced to cease their activity."

An independent astronomical society will clearly be of great importance for the development of astronomy in Russia and in the other republics of the former Soviet Union (like the new society, I will use Soviet to refer to the republics of the former Soviet Union). It is excellent that the society is showing its determination to thrust itself into the international limelight by publishing in English. The insularity of much Soviet astronomy has in the past been a real obstacle to progress. Too many papers were published in Soviet journals that showed little effort to become acquainted with the international literature. This meant that despite many outstanding individuals and some good institutes and observatories, the impact of Soviet astronomy has been rather limited since the Second World War. The domi-

nance of some brilliant theorists has perhaps encouraged a cavalier attitude to observations. It is in this area of observational astronomy that most effort will be needed to put Soviet astronomy on a level-footing with European astronomy.

Astronomical and Astrophysical Transactions intends to publish normal-length and short papers, review articles, short items reporting current research and book reviews, as well as longer papers in the form of supplements. The first volume consists of four slim parts each of about 80 pages. The price per volume is therefore high. The quality of the papers in the first volume is very variable, the main problem being that there are too many short papers with very little detail. There is a good review by V. I. Slysh of radio supernovae and particle acceleration and an important article by N. A. Tikhonov *et al.* on the distances to three nearby dwarf galaxies in the M81 group. The interesting review by Yu. N. Pariskij on radioastronomy in the next century would have benefited from more detail, more explanation and some references. As it is, it will be fully appreciated only by those already familiar with Soviet radioastronomy.

It will be vital for Soviet astronomy that this new journal succeeds. Whether it does will depend on whether the editors are willing to give adequate space for work of real quality and to demand the highest standards of referencing and explanation. With its beautiful production, *Astronomical and Astrophysical Transactions* is off to a good start. □

Michael Rowan-Robinson is in the School of Mathematical Sciences, Queen Mary and Westfield College, Mile End Road, London E1 4NS, UK.

Mutual aid

Timothy O'Riordan

Journal of Environmental and Resource Economics. Editors-in-chief J. B. Opschoor, H. Folmer and H. M. A. Jansen. *Kluwer*. 6/yr. DFI488, \$305 (institutional); DFI270, \$169 (personal); DFI195, \$122 (members).

ENVIRONMENTAL economics is slowly coming of age, after a long period of being an odd intellectual fetus in the not-so-nurturing womb of mainstream economics. The basic principles of traditional environmental economics rest on the welfare theories of the early part of this century. In many respects there is nothing theoretically radical about much of what this subgroup of the profession has to offer. Welfare functions, production functions, indifference curves, discount rates and willingness-to-pay measures abound in a thoroughly unstartling fashion. So why has environmental economics taken so long to have been born?

One reason is that there have been few champions in a sufficiently powerful position to move the profession. Another is the internal debate between extending existing economic theory and creating a whole new model. A third is the failure, until recently, to attract the attention of policy-makers, especially those in finance and developmental bureaus, simply because environmental damage was the Cinderella of economic-growth theories and practice. A fourth is that there were few mainstream journals that catered for this aspect of research, particularly as it applied to 'real world problem solving'.

This lively new journal is one of three now offering a haven for the burgeoning band of environmental economists. The other two are thoroughly complementary. The *Journal of Environmental Economics and Management*, despite its name, is essentially geared to the theoretical end of the economics spectrum, whereas *Ecological Economics* (reviewed in last year's supplement) focuses on the interface between valuation and environmental functioning of ecosystem processes. The new journal specifically seeks to bridge the gap between economic theory and applied case studies as they relate both to management and to policy. The coverage includes not only evaluation of non-market goods and bads, the hallmark of this area of research, but, equally importantly, the economic consequences of policies, for example carbon taxes or waste-recycling regulatory measures.

The early issues reflect the interests of the senior editors, who are distinguished agents in the use of economic instru-