

EDITORIAL

Actions for a New Decade

Let us start this new year and decade with a resounding affirmation of our belief in a robust future for mankind—**L**if only he will use his unique intelligence and cognate capabilities to save his world from himself! But for this there will have to be far more concerted effort than has hitherto been evident towards curbing population-pressures—basically through limiting human numbers, whose continuing growth is causing the gravest apprehension among free-thinking people.

During this coming decade we hope most ardently to see those religious and other leaders who have been advocating more and more children—if only through preaching against contraception, abortion, and divorce, even where clearly needed—realize the dire consequences of such advocacy and teach accordingly *for the global cause*. For this matter of human population-pressure and its seemingly inexorable increase is probably the most worrisome, and surely the most fundamental, of all those which have made knowledgeable people throughout the world increasingly apprehensive about the future of Man and Nature.

But many other actions are needed, and one of them is, clearly, attainment of a wider and wider public appreciation and understanding of what *the biosphere* really is, and what, as inhabitants and indeed components of it, we humans should do towards *maintaining and protecting it*. *The biosphere is the peripheral envelope of the Earth together with its surrounding atmosphere in which living things exist, ranging from the deepest layers of soils and oceans upwards to the highest levels of the atmosphere in which any form of life—including dormant spores or bacterial or other cells—is present at all naturally.* (By use of the last phrase, we exclude artificial projections into space and descent into deep mines, etc.)

We humans not only live in the biosphere but are absolutely dependent on it for almost every facet of our life-support system and aspect of our existence. Even more important for the world at large is the fact that we constitute an integral—though surely not essential—part of the biosphere and are so prominent and active that we are changing it very considerably. Some of the changes which we are effecting are extremely dangerous*—at least potentially when irreversible—and so it is clearly of vital importance that we should know what the biosphere really is and understand its constitution, caprices, and local vicissitudes.

Yet the changes which we are bringing about or at least triggering in the biosphere—our own and Nature's total natural environment—are apt to be so insidious that this very fact makes it ever-more-necessary for us to learn all we can about our vital envelope. Moreover, new and sometimes quite unexpected threats of potential ecodisasters keep on emerging; yet still the average 'man in the street' has precious little—if indeed any—inkling of what the biosphere really is, and so, as an action to help remedy this, we advocate, in the proposal by three of us from different continents now published on the reverse of this page, that 1982 be designated, by the United Nations and other interested organizations: *'The International Year of the Biosphere'*.

Handled with dedicated vigour (including, if deemed desirable, some suitably dignified advertising), such an event could do widespread good in informing the world's public about the biosphere and the paramount requirement of preserving it. Nor need any huge and wasteful budget be involved—or perhaps any central budget at all—if the matter were placed in the right hands and thereby activated with due resolve and pursued with dedication. By such means, economists and planners should have their eyes opened and enlightened politicians should be persuaded to 'look beyond the next election' and become true statesmen at least in the global context. Moreover a concomitant feeling of 'togetherness' might well help to calm a troubled world and bring back hope as indeed springing 'eternal in the human breast'.

As was concluded from our *Second International Conference on Environmental Future*, publication of the proceedings of which is at last imminent,[†] mankind now has the knowledge and means to save his world but still shows precious little sign of acting adequately and in time. *Why* this is so we hope to elucidate in our next such conference, besides considering strategies for global resources—more or less as outlined in the editorial in our issue of last summer. At present it seems that a combination of ignorance and apathy, partisan politics and greed, personal and corporate selfishness, national arrogance and ambition, lack of foresight on the part of economists and leaders, lack of sound ecological bases but yet some imagination in planning, lack of adequate financing throughout, religious or other beliefs and teaching, over-powerful financial or other vested interests, virtual absence of discipline and restraint reaching right down to the individual or amorous couple, and a number of other considerations, play their parts in the increasingly deplorable world situation resulting in large measure from Man's failure to act unselfishly—despite

*If anyone doubts our veracity in speaking of some of the man-engendered changes in the biosphere in such strong terms, let him or her consider such topics as the build-up of atmospheric carbon dioxide, the threats to the stratospheric ozone shield, the increasing capability for nuclear holocaust, pollution of fresh and salt waters and of soils, erosion and other effects of devegetation, and loss of much of the potential for genetic variability—all of which topics have been elucidated in earlier issues of this Journal.

[†]*Growth Without Ecodisasters? Proceedings of the Second International Conference on Environmental Future (2nd ICEF), held in Reykjavik, Iceland, 5–11 June 1977*, Edited by Nicholas Polunin. Macmillan, London & Basingstoke, UK, and Halsted Press Division of John Wiley & Sons, New York, NY: xxvi + 675 pp., illustr., March 1980.

his ever-increasing scientific and other knowledge. Nor does it help to be told that 'science will find a way', when science has for long been offering solutions, the means of attaining which are not followed by the world at large.

To try in a modest but continuing way to help in the necessary remedying of this last quite deplorable situation of widespread failure to apply available knowledge to alleviate environmental ills, we are founding and convening an open-ended series of *Environmental Monographs and Symposia* for a leading international publisher, concerning which it is hoped to make a detailed announcement in our next issue. Their object will be to synthesize and distil, through leading specialists, the knowledge available—including the results of the latest research—in particular subjects or narrower topics, for the widest possible dissemination and practical use. At the same time, with the ever-changing situations to be found wherever life is concerned, research must go on, and this we shall continue to encourage through publication of research papers in our Journal—using the device introduced last year, in its sixth volume, of adding to an issue either four or eight pages where necessary to take care of more or longer papers.

The other set of actions which we feel constrained forthwith to advocate for this new year and decade, but in the present instance continuing through and far beyond the latter, is towards saving the world's forests—particularly those that remain in the tropics and subtropics. Tropical rain-forests constitute the richest biome in the world, and many of their component ecosystems teem with more different species of plants, microbiota, and animals—particularly insects—than any other on Earth, although they may be rivalled in this respect by some coral-reefs. But even though it does not help to exaggerate, as has been done, that their 'destruction' would be 'a greater threat to human life than a nuclear war'— unless, of course, it was a narrowly limited one if such were possible—there are also very strong climatic and other reasons for preserving all the areas of tropical rain-forest that can be conserved or turned into tracts of sustained agri-silvicultural productivity.

Consequently we are devoting an unusually large proportion of our Spring issue of this year to the urgent topic of *preserving tropical rain-forests*—starting the issue (after this Editorial and our following Proposal) with three possibly practicable suggestions from two noted authors, and continuing with examples from South America (between those two authors) and Africa. Further items are under consideration from other parts of Africa and from south-eastern Asia for our Summer issue, so we may find ourselves helping to launch a campaign in this vital cause.

N. P.

PROPOSAL

International Year of The Biosphere*

'The time is ripe to step up and expand current efforts to understand the great interlocking systems of air, water, and minerals, that nourish the Earth', wrote Gilbert F. White (President of the International Council of Scientific Unions' Scientific Committee on Problems of the Environment) and Mostafa K. Tolba (Executive Director of the United Nations Environment Programme) in *Environmental Conservation* (Vol. 6, No. 2, p. 88, 1979).

If, ten years after the United Nations Conference on the Human Environment, which was held in Stockholm in 1972, there still persists no greater public understanding of the biosphere than goldfish have of their aquaria, all other efforts to achieve harmony among ourselves and with our environments may fail.

The onus for action in developing this much-needed understanding lies, unmistakably, with the United Nations—particularly, we would think, through their Environment Programme.

It is unfortunate, but true, that the vast majority of people now living in the biosphere do not understand what it is, or realize how utterly dependent they are on it for their life-support and very existence.

**Biosphere*: The outer 'envelope' of the Earth (including its atmosphere) in which life exists; the total ecological system of our planet Earth.

As a practical step towards creating the necessary public understanding, strengthening measures for the welfare of mankind, and developing initiatives for safeguarding the biosphere, we urge that 1982 be designated by the United Nations and other International Organizations as:

The International Year of The Biosphere.

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