

and productive, but this one was surely both. It was enjoyable because of the company and fare provided in Oxford's grandest college—incidentally accommodating this participant in the rooms he had occupied as an undergraduate all-too-many years previously—and it was productive of several impressively good and/or important papers, much lively debate, and the makings of what should prove to be a valuable book. The only pity was the lack of recording of the discussions, which often provided further enlightenment that contained a goodly sprinkling of seemingly new points.

The Symposium was convened by Dr Paul W. Kent, Master of Van Mildert College in the University of Durham, whose senior Professor of Geography, Professor William B. Fisher, was General Chairman—though a usually wise rotation of sessional chairmen helped further to keep us on the alert. The general organizer was Herr Franz Eschbach, Director of the London Branch of the German Academic Exchange Service, who made and subsidized the arrangements on behalf of the Board of Management of the Foster–Wills and Theodor Heuss Scholarships, Oxford University, to whom our warm thanks are due for their foresight and generosity. May we express the hope that, when the turn of science comes again in this auspicious series, some other propitious environmental theme will be chosen for due consideration by a similarly impressive selection of leading proponents?

As befits a small invited group having the good fortune to avoid any serious crisis of means or logistics, the programme went off practically as planned and consisted (in the order of giving) of the following papers, their writers-cum-givers being indicated in brackets: The Regional Problem (William B. Fisher, Durham, U.K.); The City as an Incubator of the Environment (Jean Gottmann, Oxford, U.K.); The Balance of Resources in the Microelectronics Age (Peter L. Kirby, Newcastle upon Tyne, U.K.); Contributions of Geoscientific Cartography to the Solution of Conflicts between Protection of Natural Resources and the Protection of the Environment (Gerd W. Lüttig, Hannover, West Germany); Land Use and Population (Carlo Vanzetti, Verona, Italy); Resource Exploitation and the Carbon Dioxide Cycle (F. Kenneth Hare, Toronto, Canada); On the Political Economy of Transferable Discharge Permits (Holger Bonus, Konstanz, West Germany); The Future of the Desert (John L. Cloudsley-Thompson, London, U.K.); Problems of the Use and Disposal of Household and Industrial Wastes and their Solution (Georg Redeker, Hannover, West Germany); Environmental and Energy Problems in Western Europe (Gerald Manners, London, U.K.); Simulating the Future of Oil: the Interrelationships of Resources, Reserves, Development, and Use (Peter R. Odell, Rotterdam, The Netherlands); Economic Aspects of Environmental Allocation (Horst Siebert, Mannheim, West Germany); Economic Growth with Energy Constraints (Robert B. Stobaugh, Soldiers Field, Massachusetts, U.S.A.); Constraints to Development—the Importance of the Data Base (David W. Rhind, Durham, U.K.); Aesthetic Constraints upon Exploitation (Bruce Allsopp, Newcastle upon Tyne, U.K.); Thoughts on the forthcoming World Decade of the Biosphere 1982–92 (Nicholas Polunin, Geneva, Switzerland); and Technical Education as a Crucial Resource (Paul W. Kent, Durham, U.K.). In addition there were a few other invited participants who contributed to discussions on various occasions.

Despite the wide range of topics treated, the Symposium 'held together' well as a constructive whole, and this seems attributable to the generally excellent choice of participants on one hand and, on the other, arrangements for their accommodation and frank airing of views. On only one occasion of a clash between rival specialists from neighbouring countries, did it require the chairman's dexterity to bring the discussion to a happily agreed conclusion. All-in-all this augurs well for the real usefulness for the book of collected papers of the Symposium, to be edited by Professor Fisher and published, probably late in 1981, by the Oriel Press (of Routledge & Kegan Paul), Stocksfield, Northumberland, England.

Nicholas Polunin

INTERGOVERNMENTAL MEETING ON MEDITERRANEAN
SPECIALLY PROTECTED AREAS, HELD ON THE AEGEAN
COAST NEAR ATHENS, GREECE, DURING
13–17 OCTOBER 1980

This Meeting was convened by the United Nations Environment Programme (UNEP) within the framework of the Mediterranean Action Plan, while the documentation was the fruit of joint efforts by FAO, UNESCO, and IUCN (with the help of ICBP and IWRB) in cooperation with UNEP.

Twelve Mediterranean countries and the European Economic Community (EEC) participated and agreed on the first text of a new treaty for the region: a draft protocol concerning Mediterranean specially protected areas, linked with the Convention for the Protection of the Mediterranean Sea against Pollution (Barcelona Convention).^{*} Before adoption, this agreement will have to be reviewed again and signed by a sufficient number of the Mediterranean Coastal States and the EEC, though there is hope that the text may be formally adopted within the next year or so.

Participants also reviewed principles, criteria, and guidelines, for the selection, establishment, and management, of Mediterranean marine and coastal protected areas, and recommended that a revised version of the pertinent items be prepared for use by Governments as a reference document that could be drawn upon within the context of any activities related to protected areas. Summarized criteria and guidelines for the selection and management of protected areas, elaborated during the course of the Meeting, will become a key annex to the protocol, and will provide guidance of an unusually detailed kind for such an international treaty.

Much has been written about pollution in the Mediterranean: rather less has been heard about the destruction of the region's plant and animal life on land and in the sea. However, the position is serious, as illustrated by IUCN's studies on species in need of attention. More than 1,000 species of plants in the region are threatened—indeed some have become extinct in recent years—12 species of mammals are threatened, as are 34 species of reptiles and amphibians. Moreover a survey by ICBP

^{*}See the reports by Peter S. Thacher and Dr Stjepan Keckes published in *Environmental Conservation*, 3(2), pp. 152–3, 1976, and 6(3), p. 245, 1979, respectively.—Ed.

indicates that some 200 species of birds need special protection in the Mediterranean region, where much of the marine life is seriously depleted. Thus a great slice of the region's natural heritage is in danger of destruction from the effects of ill-planned development, pollution, over-fishing, etc. The list of threatened species is a good measure of how widespread have become the dangers to the Mediterranean environment, affecting not only Nature but Man himself.

Protected areas provide places where commercially exploitable fish may breed, where endangered species can find refuge, and where people—both from the Mediterranean region and visitors—can enjoy beautiful surroundings that are free from the damaging impact of large-scale tourist or other development. Some 90 protected areas exist in the Mediterranean at present—according to another survey from IUCN. But these are too few, too small, not all ideally sited, and frequently far less protected than they should be.

The significance of the Athens meeting is that the Governments involved are declaring their intention to put their weight behind a programme to create many more such areas, and to do so in cooperation with one another. They also agreed on the need to set up a special activity centre for protected areas, probably to be established in Tunisia.

Adrian Phillips & Pierre Hunkeler
IUCN
Avenue du Mont-Blanc
1196 Gland
Switzerland.

Important prospect: XIII INTERNATIONAL BOTANICAL CONGRESS, TO BE HELD IN SYDNEY, AUSTRALIA, DURING 21–28 AUGUST 1981

The Thirteenth International Botanical Congress will be held at the University of Sydney, in Sydney, Australia, in August 1981. It is of interest to observe that this is the first time, since the initial such event took place in Paris in 1900, that an International Botanical Congress has been held outside of Europe and North America. On this occasion the Congress is sponsored by the Australian Academy of Science, and it will be held as usual under the auspices of the International Union of Biological Sciences. The IUBS sponsors and provides support to appropriate international congresses and symposia, and thus upholds its role of enhancing the coordination of biological research and international communication among biologists. This unifying function assumes particular significance when viewed in the context of the consequences of increasing population, degradation of the environment, inadequate nutrition, and a host of other problems that are at least in part biological in nature.

The objectives of an International Botanical Congress have been the subject of much debate, but there is probably widespread agreement that they should strive for four main achievements:

- Interaction between botanists from many countries at both the personal and formal levels;
- Integration of the Science of Botany as a whole through identification of ideas transgressing the bound-

aries between narrow day-to-day specialities and the delineation of the current frontiers of botany;

- International agreement on technical matters in the field of botany, which is perhaps epitomized by the nomenclature section; and
- Exposure of the international botanical community to the scientific and cultural scene of the host country.

Realization of these objectives relies on both the skill of the organizers and the enthusiasm of the participants.

The significance of the Congress to be held in Australia is that it will afford an opportunity for botanists around the world to visit a country that is in many ways botanically unique. Australia was the last of the settled continents to be inhabited by Man. Its plants and animals evolved in the absence of Man, and in many ways the impact of Man and his technology has produced great changes in the communities of plants and animals of the Australian continent in less than two hundred years.

Australia is probably best known botanically as the main home of *Eucalyptus*, *Casuarina*, phylloclad *Acacia* spp., and the Epacridaceae. However, its vegetation has many other interesting features. Affinities with the other southern continents are seen in its numerous species of Proteaceae and Restionaceae—a characteristic shared with Southern Africa—and in the presence of species of *Nothofagus* and *Araucaria* (a characteristic which it shares with South America).

Although Australia is renowned as the world's driest continent, it has a series of rain-forests scattered in patches down the eastern coastal fringe from the Cape York Peninsula in the tropics to Tasmania in the cool-temperate zone. In some of these rain-forests, primitive angiosperms occur which are known nowhere else in the world. In Australia one can travel from rain-forests to deserts and from the extensive mangrove forests to alpine vegetation, though the distances between them are often deceptively large.

The scientific programme of the Congress has been designed with emphasis on the level of biological organization, so that narrow disciplinary subdivisions may be avoided. Half of the total programme is being filled with invited symposia convened by active research workers from all areas of botany. There are twelve separate sections in the Congress, ranging through molecular botany, developmental botany, environmental botany, and community botany, to a section in applied botany. Each section is organizing a multiplicity of symposia, and it is planned to present some one hundred and fifty different symposia in all. In addition to the scientific programme, there will be extensive ancillary field-trips, local excursions, and social events for participants, in an effort to show them something of the beauty and culture of Australia.

It is hoped that the expected influx of plant scientists from around the world will not go unnoticed by the fourteen million Australians who inhabit this largely arid continent. The Congress should moreover awaken widespread interest in the economic, social, and even political, importance of plants to the human community at large, and emphasize the potential that scientific discovery in the plant sciences has for changing human society.

More locally, it is envisaged that many of the controversial conservation issues in Australia—such as the commercial utilization of the Great Barrier Reef, logging of our remaining rain-forests, the effects of mining on native vegetation, and the destruction of various coastal eco-