

ISSN 0376-8929

Published Quarterly

Volume 9, No. 4 — Winter 1982

[*Stressing: Parks & Reserves*]

Environmental Conservation

The international Journal
devoted to maintaining global
viability through exposing and
countering environmental
deterioration resulting from
human population-pressure
and unwise technology

Founded and Edited by **NICHOLAS POLUNIN**

Conferences & Meetings: **Dr M.A. Farid**

Reviews & Notices: **Miss C.A. Trangmar-Palmer**

Editorial Assistant: **Dr N.V.C. Polunin**



Published for the
**FOUNDATION
FOR ENVIRONMENTAL
CONSERVATION**
by
ELSEVIER SEQUOIA S.A.
Lausanne, Switzerland



with the collaboration of the

United Nations Environment Programme (UNEP)

International Union for Conservation of Nature and Natural
Resources (IUCN)

International Association for Ecology (INTECOL)

International Conferences on Environmental Future (ICEFs)

World Environment and Resources Council (WERC)
and World Wildlife Fund (WWF)

ENVIRONMENTAL CONSERVATION

advocates timely action for the protection and amelioration of the environment of Man and Nature throughout the world. Topics range from pertinent case-histories of the past and present to rational use of resources, foreseeing ecological consequences, enlightened environmental policy, anti-pollution measures, low-impact development, environmental education and law, and ecologically sound management of all land and fresh water, sea and air, for the lasting future of Earth's fragile Biosphere.

The following are the main types of contributions which may be accepted for publication in this Journal: Survey articles on important aspects of its subject; Research papers whether basic or 'confirmatory'; Case-history accounts of wide significance and interest; *Short Communications & Reports*: not exceeding three pages of the Journal;

Notes, News & Comments: preferably *ca* half to one page of the Journal;

Ecosystems for Conservation: examples from around the world;

Conferences & Meetings: summary reports; important prospects;

Reviews & Notices: of new books etc.

Each issue is generally headed by an *Editorial* or *Guest Editorial* and/or *Open Letter* or *Editorial Notes*.

Founded and Edited by Nicholas Polunin

Conferences & Meetings: Dr M.A. Farid

Reviews & Notices: Miss C.A. Trangmar-Palmer

Editorial Assistant: Dr N.V.C. Polunin

ADVISORY EDITORS

African Developments: Prof. Mohamed Kassas (Cairo, Egypt)

Animal Ecology: Prof. Raymond F. Dasmann (Santa Cruz, California)

Animal Impact: Prof. Jean Dorst (Paris, France)

Australasia: Dr Donald F. McMichael (Canberra City, Australia)

Biological Productivity: Dr E. Barton Worthington (Nr Uckfield, England)

Biosphere Maintenance: Prof. Hon. Beatrice E. Willard (Boulder, Colorado)

Central America: Dr Anne LaBastille (Big Moose, N.Y.)

Climatic Variation: Provost F. Kenneth Hare (Toronto, Ontario)

Conservation Policy: Prof. Duncan Poore (Oxford, England)

Economic Aspects: Prof. Marshall I. Goldman (Cambridge, Mass.)

Ecosystems Research: Prof. Eugene P. Odum (Athens, Georgia)

Education and Training: Dr Jan Cerovsky (Praha, Czechoslovakia)

Endangered Biota and Ecosystems: Dr Norman Myers (Oxford, England)

Energy: Dr Amasa S. Bishop (Genolier, Switzerland)

Environmental Engineering: Prof. Philip H. Jones (Toronto, Ontario)

Evolutionary Ecology: vacant

Fresh Waters: Prof. W. Thomas Edmondson (Seattle, Washington)

Geographical Aspects: Prof. Gilbert F. White (Boulder, Colorado)

Human Behaviour: Dr Ivan Polunin (Singapore)

Human Settlements: Dr Pierre Laconte (Louvain-la-Neuve, Belgium)

I.C.E.Fs: Nicholas Polunin (Geneva, Switzerland)

Indian Subcontinent: Dr Jai Kishan Maheshwari (Lucknow, India)

Indian-Malaysian Wildlife: Dr G.M. Oza (Baroda, India)

INTECOL: Prof. Amyan Macfadyen (Coleraine, N. Ireland)

Island Ecosystems: Dr F. Raymond Fosberg (Washington, D.C.)

I.U.C.N.: vacant

Land Use and Recovery: Prof. Kai Curry-Lindahl (Stockholm, Sweden)

Law and Enforcement: Prof. Homer G. Angelo (Davis, California)

Marine Geology: Prof. Eric S.W. Simpson (Rondebosch, South Africa)

Marine Waters: Prof. G. Carleton Ray (Charlottesville, Virginia)

Medical Aspects: Dr Bent Juel-Jensen (Oxford, England)

Meteorology and Climatology: Prof. Reid A. Bryson (Madison, Wisconsin)

Microbiological Implications: Prof. Donovan P. Kelly (Coventry, England)

Parks and Reserves: Prof. Jean-Paul Harroy (Bruxelles, Belgium)

Pesticides and Toxicants: Dr Norman W. Moore (London, England)

Physics: Sir John Adams (Meyrin, Switzerland)

Plant Ecology: Prof. Makoto Numata (Chiba, Japan)

Plant Physiology: Prof. Terence A. Mansfield (Lancaster, England)

Pollutants and Disposal: Prof. Kenneth Mellanby (Abbots Ripton, England)

Population Impact: Prof. Paul R. Ehrlich (Stanford, California)

Resources Conservation: Prof. S. Fred Singer (Charlottesville, Virginia)

Social Studies: Prof. Lynton K. Caldwell (Bloomington, Indiana)

Soils and Erosion: Prof. Victor A. Kovda (Moscow, U.S.S.R.)

South America: Dr José C. de Melo Carvalho (Rio de Janeiro, Brazil)

South-East Asia: Prof. 'Otto' Soemarwoto (Bandung, Indonesia)

South-West Asia: Christopher D.W. Savage (Petworth, England)

Tourism and Recreation: Dr Michael B. Usher (York, England)

U.N.E.P.: Dr Ruben Olembo (Nairobi, Kenya)

W.E.R.C.: in abeyance

W.W.F.: Dr Luc Hoffmann (Gland, Switzerland)

SUBMISSION OF MANUSCRIPTS

All contributions must be in precise English and original, submission of a 'manuscript' implying that it is unpublished and is not being considered contemporaneously for publication elsewhere. Manuscripts (two or preferably three copies, *including one on light airmail paper*) and allied materials should be sent to:

Prof. Dr Nicholas Polunin, Editor
ENVIRONMENTAL CONSERVATION
15 Chemin F.-Lehmann
1218 Grand-Saconnex
Geneva
Switzerland,

or to one of the Advisory Editors (listed above). There is a set of Instructions for Authors at the end of each issue: failure to follow these in reasonable degree may lead to, at best, protracted correspondence or return of a manuscript for restyling before it can be considered or even refereed.

PUBLISHING AND SUBSCRIPTION INFORMATION

Environmental Conservation is published by Elsevier Sequoia S.A., Lausanne, for the Foundation for Environmental Conservation, with the collaboration of the United Nations Environment Programme (UNEP), the International Union for Conservation of Nature and Natural Resources (IUCN), International Association for Ecology (INTECOL), International Conferences on Environmental Future (ICEFs), World Environment and Resources Council (WERC), World Wildlife Fund (WWF), and others. It is covered in about twelve international contents and abstracting journals emanating from Great Britain, the United States, Italy, and West Germany.

Environmental Conservation is published quarterly, corresponding to the four seasons in the Northern Hemisphere. Size 28 × 20 cm, comprising at least 352 pages of text per annum. The volume subscription price for 1982 will be SFr. 155 including postage (with air-freighting to main centres). The ISSN is 0376-8929.

Subscription orders and inquiries should be sent to:

ENVIRONMENTAL CONSERVATION
Elsevier Sequoia S.A.
P.O. Box 851
1001 Lausanne 1, Switzerland.