and facilitate the evaluation of conservation policies and methods.

- 20. Military activity damaging to Nature should be avoided.
- 21. States and, to the extent that they are able, public authorities, international organizations, individuals, groups, and corporations, shall:
  - (a) Cooperate in the task of conserving Nature through common activities and other relevant actions, including information exchange and consultation;

(b) Establish standards for products and processes that may adversely affect Nature, as well as agreed methodologies for assessing their effects;

(c) Implement the applicable international legal provisions for conservation of Nature and environmental protection;

(d) Ensure that activities within their jurisdictions or control do not cause damage to natural systems located within other States or in the areas beyond the limits of national jurisdiction; and

(e) Safeguard and conserve Nature in areas beyond

national jurisdiction.

- 22. Taking fully into account the sovereignty of States over their natural resources, each State shall give effect to the provisions of this Charter through its component organs and in cooperation with other States.
- 23. All persons, in accordance with national law, shall have the opportunity to participate, singly or with others, in the process leading to the formulation of decisions which directly concern their environment, and shall have access to means of redress when their environment has suffered damage or deterioration.
- 24. Each person has a duty to act in accordance with the provisions of this Charter; acting alone, in groups, or through the political process, each person shall strive to ensure that the objectives and requirements of this Charter are met.

## Tasmania's Proposed Dams in Its South-West Wilderness

The alarm caused by the Hydro-electric Commission's plan to flood the Franklin and other valleys in South-West Tasmania has now spread to the whole of Australia and is keenly felt in conservationist circles all over the World. The wilderness of South-West Tasmania contains one of the few remaining temperate rain-forests of the globe that are still relatively undisturbed, and the portion of it that holds the greatest interest for scientists is precisely the valleys where, owing inter alia to very high moisture, the flora is exceptional. Besides the many interesting plants which are endemic to the Central Plateau and western and South-West Tasmania, a list of some thirty species has been drawn up (including the well-known Huon Pine, Dacrydium franklinii) which are unique to the region.\*

It is always difficult, when practical interests are involved, to obtain a hearing for arguments along such general lines as the protection of the Biosphere or even

\* These include the 23 listed by Kedar N. Baidya on page 60 of this issue as 'likely to be endangered through inundation by the [Franklin] dam impoundment'—See that article for further details, and a longer paper from another source for which we hope to find space in an early issue.—Ed.

for pressing appeals from the world of science. The irritation felt by some Tasmanians at any intrusion into what they feel to be their private affairs is perhaps understandable, and it is unfortunate that the problem was allowed to become a political one instead of being confined to dispassionate discussion among men of good will. One can only pray that the efforts made by the Federal Government to find a reasonable, negotiated solution satisfactory to all parties will be successful, thus preserving a region which UNESCO recently declared to be an essential part of the 'World Heritage'.

ROGER DE CANDOLLE, President International Dendrology Society 41 Chemin du Vallon Chêne-Bougeries 1224 Geneva, Switzerland.

## New Director-General for IUCN

The International Union for Conservation of Nature and Natural Resources (IUCN) has elected as its new Director-General Dr Kenton R. Miller, who will assume the post in the World Conservation Centre, at Gland, Switzerland, in July 1983. Dr Miller is currently Director of the Center for Strategic Wildland Management Studies and Associate Professor of Natural Resources at the University of Michigan, Ann Arbor, Michigan. He is Chairman of the IUCN Commission on National Parks and Protected Areas\*\* and a member of the IUCN Species Survival Commission as well as of the Union's Programme Planning Advisory Group.

Dr Miller has spent more than twenty years in the exacting field of conservation, and has worked with various international bodies—including the United Nations Food and Agriculture Organization (FAO), with whom in Rome, Italy, he was responsible for national parks and wildlife management. Later, in Santiago, Chile, he developed and directed FAO's Wildlands and Environmental Conservation Programme for Latin America and the Caribbean. He has carried out missions and consultancies for international organizations—including FAO, UNESCO, and UNEP— in various parts of the world. Most recently, he has served as a consultant to UNEP on the development of the World Charter for Nature<sup>+</sup> and on environmental policy to the World Bank.

Recently (in October 1982) Dr Miller was the Secretary-General of the World National Parks Congress, held in Bali, Indonesia<sup>++</sup>, which brought together over 500 experts from 70 nations to define the expanded role for protected areas *inter alia* in implementing the goals of the World Conservation Strategy. Dr Miller has also carried out field-work very widely in Latin America and the Caribbean, Africa, and Asia, and is the author of numerous articles and books—including a textbook on concepts and techniques for the management of wild-lands.

<sup>\*\*</sup> As such he contributed, with the Commission's Executive Officer Jeffrey A. McNeely, the key paper on 'IUCN, National Parks, and Protected Areas: Priorities for Action' which is published on pp. 13-21 of this issue.—Ed.

<sup>+</sup> Printed on pp. 67-8 of this issue.—Ed.

<sup>&</sup>lt;sup>++</sup> See the account by Raisa Scriabine on pp. 78-9 of this issue.—Ed.

IUCN's new Director-General holds a PhD degree from the State University of New York College of Environmental Sciences and Forestry at Syracuse, NY, in natural resources management and economics with special studies in tropical forestry. He has been a member of a number of scientific expeditions, including ones to the upper Amazon (1959–60) and to Venezuela (1962) to prepare a management plan for the then little-known Canaima National Park.

Dr Miller is a licenced pilot and certified SCUBA diver, and is fluent in Spanish. He replaces Dr Lee Merriam Talbot, who resigned recently and now comments: 'As outgoing Director-General, I am happy to extend a warm welcome and best wishes to my very able successor and respected colleague, Dr Kenton Miller. I know that he will enjoy, as I have, the warm and productive working relationships with the IUCN membership and with the individuals who make up all the other components of IUCN's global network.'

## Declaration by the Canadian Pugwash Group\*

A quarter-of-a-century ago a small group of 22 distinguished scientists from 10 East-West countries assembled in Pugwash, Nova Scotia, on the invitation of Mr Cyrus Eaton, to seek ways of ending the Cold War, preventing a hot war, and avoiding a nuclear holocaust. They were inspired by the Russell-Einstein Manifesto pointing to the dangers of a nuclear war that could put an end to the human race.

That meeting gave its name to the Pugwash Movement, which has spread around the world and now encompasses some 2,000 scientists from 75 countries.

Today, on the invitation of Canadian Pugwash, another small group of scientists, including signers of the Russell-Einstein Manifesto and participants in the first Pugwash Conference, have gathered in Pugwash to commemorate the 25th Anniversary of that first meeting. There follows the statement adopted by the Canadian Pugwash Group:

During the intervening years, the nuclear peril facing the nations and the peoples of the world has escalated and is now much greater than it was 25 years ago. Nine multilateral treaties and thirteen bilateral American–Soviet treaties and agreements on arms limitation have failed to halt the arms race which continues to escalate. The arms race, and in particular the nuclear arms race, is proceeding in a more dangerous way than ever before. The threat it poses to human survival knows no parallel in all history.

Increasing numbers of scientists and the public realize that peace and security cannot be found in the vast and continuing accumulation of weapons of destruction or in the current concepts of deterrence. Unfortunately, however, others, including some in positions of authority, speak of fighting, surviving, and even winning, a 'limited' nuclear war, a protracted nuclear war, or an all-out nuclear war. We believe that these illusions verge on insanity and can only lead to a mad race to oblivion.

We agree with and fully support the declaration of 1978 of the United Nations General Assembly's First Special Session on Disarmament: 'Removing the threat of world war—a nuclear war—is the most acute and

urgent task of the present day. Mankind is confronted with a choice: we must halt the arms race and proceed to disarmament or face annihilation.'

There now exist some 50,000 nuclear weapons whose destructive power is more than one million times greater than the bomb that destroyed Hiroshima. Not only is the number of weapons increasing but, what is worse, the nuclear arms race is now mainly a qualitative race rather than a quantitative one. The rapid pace of technological innovation and the development of new, more accurate, and more devastating, weapon systems so far exceeds the slow pace of arms control and disarmament negotiations as to make a mockery of the efforts to halt and reverse the arms race. The threat of nuclear annihilation, either by design or as a result of accident, desperation, miscalculation, or panic, grows greater year by year.

In these circumstances, the only sure way of halting the nuclear arms race is by freezing the testing, production, and deployment, of all nuclear weapons and their delivery vehicles by the two superpowers. Such a freeze is a necessary first step to major reductions in the stockpiles of these weapons and towards the goal of their eventual elimination. Indeed, a reduction in the number of nuclear weapons and their delivery systems, without a freeze, could be meaningless. The modernization of older weapon systems, and the development of ever-more-horrible and threatening new ones, could completely negate the effect of any reduction in numbers. A technological freeze is as necessary as numerical reductions, and even more urgent. Moreover, if small nuclear delivery vehicles, such as cruise missiles, are produced and deployed in large numbers, it will be extremely difficult, if not impossible, to verify their limitation and reduction. Thus, time is indeed running out on efforts to halt and reverse the nuclear arms race.

Recently there have been several hopeful developments as people all over the world have become alerted to the dangers of the nuclear arms race. Millions have rallied to demand a stop to the arms race, and a great human cry for a nuclear freeze is surging around the world.

Another hopeful development is the growing demand that additional Governments pledge\*\* not to be the first to use nuclear weapons. Declarations of no-first-use by all the nuclear weapon powers would be tantamount to declarations never to use these weapons. We believe that any imbalance in conventional forces is not of such dimensions as to prevent the making of no-first-use pledges: the making of such pledges, however, could be more readily agreed to if there were agreement on mutually balanced conventional forces in Europe.

It is also encouraging that several scientific inventors of some of the most sophisticated nuclear weapon systems ever conceived by the mind of Man now oppose their use and urge their abolition.

In the light of these developments, we believe that the scientists of the world—and particularly those who are members of the Pugwash Movement—have a duty to help inform and educate the governments and peoples of the world about the dangers of the nuclear arms race, and to explore ways of improving international security in order to avoid a nuclear war.

The members of the Canadian Pugwash Movement, and the distinguished guests invited to join them at this

<sup>\*</sup> On the 25th Anniversary of the holding of the First Pugwash Conference at Pugwash, Canada, in July 1957.

<sup>\*\*</sup> Such pledges were made by China in 1964 and by the USSR during the Second U.N. Special Session on Disarmament in 1982.