New IUCN Headquarters

The splendid new headquarters of the World Conservation Union were inaugurated on 3 November 1992 by President of the Swiss Confederation René Felber at a ceremony which was probably the most moving to conservationists since the time of the International Union for the Protection of Nature more than 40 years ago.

The Swiss authorities — Federal (Bern), Cantonal (Vaud), and Communal (Gland) — combined resources to provide the land and to fund construction of the building just off the Route Suisse, near the shores of Lake Léman, between Geneva and Lausanne. The total cost came to around 20 million Swiss francs, or about US \$17 millions. Of this sum the Confederation contributed SFr. 12.5 millions and the Canton de Vaud SFr. 5 millions. The town of Gland gave the World Conservation Union an 8,800 m² site, rent-free for 50 years, that is estimated to be worth SFr. 4.2 millions.

Switzerland's global-spirited generosity reflects the recently reaffirmed Government policy to attract many United Nations and international environmental organizations and secretariats to Geneva and the surrounding area, though to disappointed local regret these will not now include the Commission on Sustainable Development even if it does the permanent secretariats of the Climate Change and Biological Diversity treaties, which were both signed by more than 150 countries at the recent Earth Summit in Rio de Janeiro.

Even so, Geneva and vicinity must have by far the

world's richest agglomeration of environmental and conservational organizations, large and small, existing or foreseeable, anywhere in the world, and thus to constitute a natural centre of such interests. Among its most rightly influential leaders are IUCN — The World Conservation Union — which brings together a diverse membership of 59 governments, 92 government agencies (such as the Great Barrier Reef Authority of Australia), and about 550 international and national nongovernmental organizations (NGOs). Altogether it provides a quite unique environmental forum for dialogue between governments and NGOs.

In the last two years, IUCN has grown rapidly. While its Gland Headquarters staff has doubled to nearly 140, most of the expansion has been outside Switzerland, especially in developing countries: some 300 staff are employed elsewhere in the world. The Union's budget has risen from SFr. 42 millions last year to close to 60 millions this year. But although its staff and budget are still relatively modest in size, the Union plays a key role on the global environmental scene, creating partnerships for conservation and development, and bringing diverse interest-groups together for action and results.

The opening of the sandy-coloured, rectangular headquarters (Fig. 1) coincided with a day-and-a-half symposium on the world environment and the Union's strategic role, summed up by its Director-General, Dr Martin Wyatt Holdgate, as reported briefly on page 370.



Fig. 1. The new IUCN (UICN in French, the predominant language locally) as seen from near the Route Suisse between Gland and Morges (IUCN's earlier seat) skirting the Lake of Geneva (Lac Léman).

Rio Declaration on Environment and Development*

Principle 1: Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with Nature.

Principle 2: States have, in accordance with the Charter of the United Nations and the principles of

*Adapted from *Connect*, the UNESCO-UNEP Environmental Education Newsletter, in which it followed a preamble stating that it was from 'the historic United Nations Conference on Environment and Development, held in Rio de Janeiro, Brazil, 3–14 June 1992.' Over one hundred heads of state and government attended, as did delegates from more than 170 countries, virtually all pledged to preserve the endangered planet and its protective envelope — to the great credit of the organizer, Maurice F. Strong, of Canada, who evidently made them do their homework. — Ed.

international law, the sovereign right to exploit their own environmental and developmental policies, [but] the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment [or] other States or of areas beyond the limits of national jurisdiction.

Principle 3: The right to development must be fulfilled, so as to meet equitably the proper developmental and environmental needs of present and future generations.

Principle 4: In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.

Principle 5: All States and all people shall cooperate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world.

Principle 6: The special situation and needs of developing countries, particularly the least developed and those most environmentally vulnerable, shall be given special priority. International actions in the field of environment and development should also address the interests and needs of all countries.

Principle 7: States shall cooperate in a spirit of global partnership to conserve, protect, and restore the health and integrity of the Earth's [entire ecocomplex]. In view of their different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command.

Principle 8: To achieve sustainable development and a higher quality of life for all people. States should reduce and [ultimately] eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies.

Principle 9: States should cooperate to strengthen endogenous capacity, building for sustainable development by improving scientific understanding through exchanges and scientific and technological knowledge and by enhancing the development, adaptation, diffusion, and transfer, of technologies, including new and innovative technologies.

Principle 10: Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.

Principle 11: States shall enact effective environmental legislation. Environmental standards, management objectives, and priorities, should reflect the environmental and developmental context to which they apply. Standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries.

Principle 12: States should cooperate to promote a supportive and open international economic system that would lead to economic growth and sustainable development in all countries, to better address the problems of environmental degradation. Trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade. Unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country should be avoided. Environmental measures addressing transboundary or global environmental problems should, as far as possible, be based on an international consensus.

Principle 13: States shall develop national laws regarding liability and compensation for the victims of pollution and other environmental damage. States shall also cooperate in an expeditious and more determined manner [than hitherto] to develop further international law regarding liability and compensation for adverse effects of environmental damage caused by activities within their jurisdiction or control to areas beyond their jurisdiction.

Principle 14: States should effectively cooperate to discourage or [where possible] prevent the relocation and transfer to other States of any activities [or] substances that cause severe environmental degradation or are found to be harmful to human health.

Principle 15: In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing [effective] measures to prevent environmental degradation.

Principle 16: National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.

Principle 17: Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significantly adverse impact on the environment and are subject to a decision of a competent national authority.

Principle 18: States shall immediately notify other states of any natural disasters or other emergencies that are likely to produce sudden harmful effects on the environment of those States. Every effort shall be made by the international community to help States so afflicted.

Principle 19: States shall provide prior and timely notification and relevant information to potentially affected States on activities that may have a significant adverse transboundary environmental effect and shall consult with those States at [the earliest possible] stage and in good faith.

Principle 20: Women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development.

Principle 21: The creativity, ideals, and courage, of the youth of the world should be mobilized to forge a global partnership in order to achieve sustainable development and ensure a better future for all.

Principle 22: Indigenous people and their communities, and other local communities, have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture, and interests, and enable their effective participation in the achievement of sustainable development.

Principle 23: The environment and natural resources of people under oppression, domination, and occupation, shall be protected.

Principle 24: Warfare is inherently destructive of [environment and any attempted] sustainable development. States shall therefore respect international law, providing protection for the environment in times of armed conflict, and cooperate in its further development, as necessary.

Principle 25: Peace, development, and environmental protection, are interdependent and indivisible.

Principle 26: States shall resolve all their environmental disputes peacefully and by appropriate means in accordance with the Charter of the United Nations.

Principle 27: States and people shall cooperate in good faith and in a spirit of partnership in the fulfillment of the principles embodied in this Declaration, and in the further development of international law in the field of sustainable development.

Earthwatch Europe

Over the last thirty years, there has been increasing awareness that the Earth* really matters, and that species, habitats, and even the whole planet,* are at risk from human-induced change. Paradoxically, over the same period, funding for science has been in steady decline especially for environmental sciences. 'The field sciences have become the Cinderella of the sciences, due to decisions taken in the 1950s which led to the bulk of science funding going to medicine, physical sciences such as nuclear power, and space research. It was believed that part of the job of the field scientist could be done from orbiting satellites, but we now know that without an army of foot-soldiers to "ground truth" the images produced, they are vulnerable to misinterpretation'.

The concept of Earthwatch was born in 1971 in Boston, Massachusetts, with a group of Harvard and MIT academics. Their question was: with governmental and institutional funding declining, where could future human and financial resources be found for field research and implementation? Their answer was simple — Earthwatch volunteers would pay for the projects on which they would work. To a public demanding more than mere waving of a banner, or writing a cheque to help to solve environmental problems, Earthwatch offers practical involvement in a way which generates millions of pounds or dollars to finance field research and due implementation of its findings.

Enlightened Volunteers Welcome

Earthwatch volunteers need no special skills or attributes other than a willingness to share the costs and labour of field research with commitment, curiosity, a reasonable degree of work-rigour, and a lively sense of humour. But can volunteers be of value to scientists in the field? Much basic field-work requires simple, often repetitive, data-gathering techniques which can easily be taught in the field. Far from being a burden, many scientists find themselves enjoyably stretched and challenged by the talents and opinions offered by the public.

The human and financial resources that Earthwatch can generate are limited only by the numbers and qualities of people it can mobilize. To date, 28,000 volunteers have served in the Earth Corps, contributing over £10 million to field research. The potential for mobilizing a similar resource among Europe's 350 million inhabitants should be at least as good. Earthwatch Europe, now chaired by Sir Crispin Tickell (formerly British Ambassador to the United Nations in New York and currently Warden of Green College, Oxford), has an office in Oxford through which field researchers in all parts of Europe have access to the £1.3 million in grants and 300,000 hours of labour which Earthwatch supplies annually.

Research scientists can apply to the Oxford office for support as to any other grant-giving body. Basic, applied, and interdisciplinary, research projects in the Earth, Life, and Human, sciences are considered; grants range from £5,000 to £50,000 and above. The research must be labour-intensive to qualify, and be post-doctoral or equivalently enlightened field research of high scientific merit. After a decision, based on a preliminary proposal, that the project appears to be suitable, a full proposal is invited and this goes through a rigorous peer-review system.

Board of Science Advisers

Guidance on which areas of research should be supported is provided by a prestigious Board of Science Advisors, chaired by Professor Sir Richard Southwood, FRS, Warden of Merton College, Oxford. Scientists from anywhere in Europe, both East and West, and from developing countries, can apply for support for projects anywhere in the world. Collaboration between groups in more than one country is welcomed — for example, a project on restoration of landscapes after mining is running simultaneously in Wales and Bulgaria.

Volunteers, who must be or become members of Earthwatch, choose which projects they wish to join from descriptions in a two-monthly magazine. They enrol for two to four weeks and pay between £450 and £1,200 towards the costs of the projects. The value of their participation to science is an expanded range of results, while to society, it offers a growing group of betterinformed and enthusiastic people who can influence the way others think and act. Scientific literacy within the community is enhanced through Earthwatch participation. Earthwatch sponsors Education Awards to enable teachers and students to gain practical experience. Industry increasingly looks to Earthwatch as a training ground through which to encourage environmental good practice among its employees and, ultimately, employers. Small groups of members and volunteers are now to be found in Switzerland, The Netherlands, Germany, Italy, Spain, Sweden, and elswhere.

More than 3,500 people take part in Earthwatch projects each year, and more than a third of them return for more! Scientists also get the Earthwatch habit; some have received regular support for more than a decade. Earthwatch appeals to the spirit of adventure and discovery. It can change people's lives and the public's attitude to our environment. Further details may be obtained from the undersigned:

BRIAN W. WALKER, Director Earthwatch Europe Belsyre Court 57 Woodstock Road Oxford OX2 6HU England, UK.

> Tel. (44 865) 311 600 Fax: (44 865) 311 383

^{*} Really meaning The Biosphere, as we have striven to clarify for many years past, and plan to continue to emphasize world-wide. — Ed