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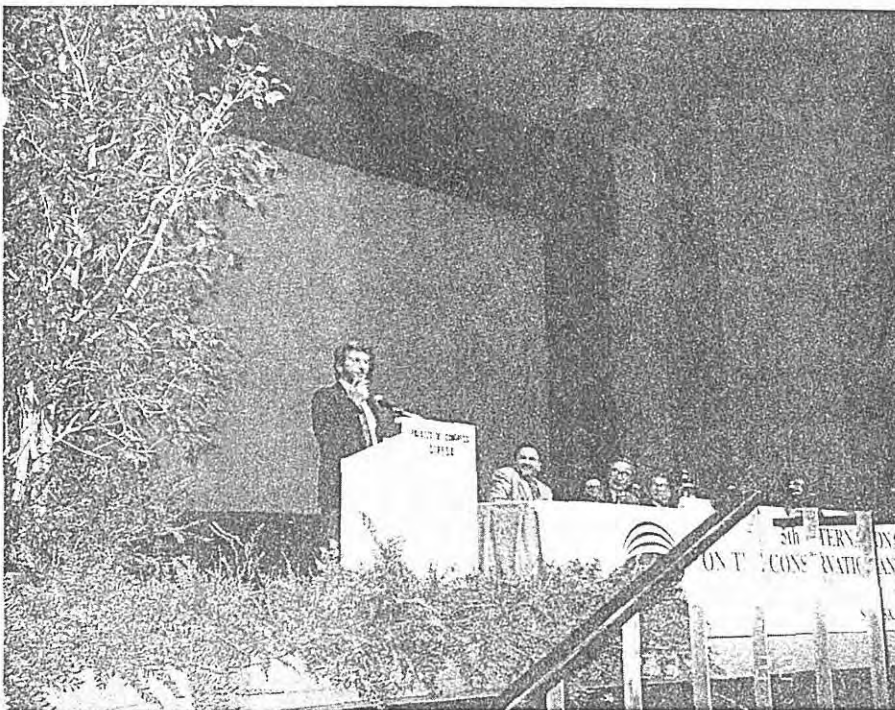
NEWSLETTER

INTERNATIONAL LAKE ENVIRONMENT COMMITTEE FOUNDATION

— For Better Lake Management —

This Newsletter is also available in Japanese.

Stresa '93



ILEC organized the 5th International Conference on the Conservation and Management of Lakes (World Lake Conference) at Stresa, Italy, on 17 - 21 May 1993. More than 350 people, including scientists, administrators and citizens, met on the shore of Lake Maggiore, the second largest lake in Italy, to discuss the environments of lakes and reservoirs around the world.

Almost two hundred contributions were made at the Conference held at the Congress Centre located at the central part of Stresa. Participants came from more than 40 countries around the world. The UNEP Regional Office for Asia and the Pacific (Bangkok, Thailand) and the Overseas Environmental Cooperation Center (Tokyo, Japan) kindly provided financial assistance for total 11 participants from developing countries.

Since its initiation at Shiga, Japan, in 1984, the

conference has provided an arena for scientists, administrators and citizens to discuss and collaborate on the lake/reservoir environments. It could be said that conference of this new style has finally established with high scientific achievements.

At the opening address, Dr. Walter Rast of UNEP illustrated socio-economic aspects of lakes as a basic resource for development focusing upon the role of decision-makers. Governor Minoru Inaba from Shiga, Japan, called for all participants and people outside of the hall to take actions before it becomes too late.

The conference chose eight themes as main topics: (1) Scientific basis for managing eutrophication, (2) Water quantity and quality in lakes and reservoirs for human uses, (3) The fate and effects of in-lake micropollutants, (4) Non-point nutrient sources and their control, (5) Acid rain and effects on aquatic ecosystems on a global scale, (6) Scientific findings and their utilization at socio-economic and administrative levels for lake/reservoir management, (7) Lakes and environmental education, and (8) Citizen participation.

"A survey of the contributions presented reveals that eutrophication and problems connected with it, is still the topic which attracts most attention, even though there has been successful discussion of other environmental issues that can longer be considered of secondary importance, such as the problem of the distribution of organic and metallic micropollutants, as

well as the quality of atmospheric deposition and its negative impact on life in aquatic environments."

"Many of the contributions have on the other hand shown how the scientific knowledge and the appropriate technological solutions for many problems do in fact exist: we must believe, therefore, that the problem is one of allocation of funds, and in some cases one of political will. In this connection, it is highly significant how in the course of our work here it has emerged that a correct environmental education from the earliest years of elementary school and an active, responsible involvement by pressure groups formed by members of the public can be of great assistance in the common struggle to conserve the quality of existing healthy aquatic environments or to improve the quality of those which have to a greater or lesser extent suffered deterioration."

"It is our belief that today there is a need for greater international cooperation to effect a transfer of knowledge, technology and resources from the rich to the less rich countries, a transfer which must, however, take place on terms of absolute equality. To achieve this it is essential to create the conditions for the autonomous development of scientific and management capabilities also in developing countries, so that they can find in themselves the human resources and knowledge necessary for the correct management of their own territory."

(Excerpt of Dr. de Bernardi's closing address)

Seriousness and difficulty of the current global environmental problems, including lakes and reservoirs environment, require all human beings to cooperate to struggle with these problems. It is time for scientist who has scientific knowledge, administrator who makes policy and decision, and citizen and business people who are mostly affected by environmental change to get together and collaborate in each own field. This conference "Stresa '93" was the opportunity to promote the collaboration.

Next (6th) International Conference on the Conservation and Management of Lakes is scheduled for October 1995 at Ibaraki, Japan. (see ILEC Newsletter No. 21)

Bureau Meeting of the ILEC Scientific Committee

Bureau Members of the ILEC Scientific Committee met at Stresa, Italy, on 16 May 1993. After the ILEC activities since last General Meeting (June 1992) were reported, members discussed on ILEC's future direction especially new joint project with UNEP, collaboration with the UNEP International Environmental Technology Centre and new publication.

UNEP/ILEC International Training Course in Hungary

The International Training Course on Limnological Basis of Lake Management was held at Tihany, Hungary from 24 May through 5 June 1993. This course was organized by UNEP and ILEC with strong collaboration of the Balaton Limnological Research Institute of the Hungarian Academy of Sciences.

From Asia, Africa and eastern European countries, 25 trainees participated in this training course. The Course was to provide basic biological and chemical information on protection of lakes and reservoirs, harmful effects of different pollutants, as well as basic limnological knowledge necessary to identify sources of pollution, to plan and realize effective management measures. The Lake Balaton restoration program gives the practical aspect to the trainees.

Lectures were:

(1) Role of ILEC in lake conservation and management (T. Kira)

Six major problems which world lakes are facing today were introduced. They are acidification, decline of water level and decrease of water volume, eutrophication, accelerated siltation, contamination with toxic chemicals and extinction of indigenous ecosystem and biota.

(2) Water quality management and sewage treatment (L. Somlyódy)

The chemical element circulations in freshwaters together with the description of trophic models were focussed on.

(3) Origin and transport of hazardous substances in water basins (S. Matsui)

Fate of heavy metals and pesticides were described, and the Ruhr River Basin case was introduced.



(4) Biological monitoring of water quality

(J. Salanki)

General principles and advantages of using bioindicators in monitoring environmental pollution was outlined.

(5) Environmental impact assessment of lakes and reservoirs (J. Tundisi)

Adequate management of a (system of) reservoir(s) was mentioned. EIA, cost/benefit analysis, monitoring prior to/during the construction and the follow-up measures were focussed upon.

(6) Water quality and lake management modelling

(S.E. Joergensen)

General overview of the mathematical models as management tools was provided. Attention was paid to the elements of modelling.

(7) Basic principles of eutrophication

(S. Herodek)

Process of eutrophication and its concomitant effects, and different approaches to the solution were discussed in details.

(8) Nitrogen loading and turnover in lakes (J. Olah)

Main pathways of global nitrogen circulation, and nitrogen uptake and release within particular ecosystems were covered.

(9) Use of algae in water quality monitoring

(J. Padisak)

Basic principles of some non-taxonomic ("bioassay") and taxonomic use of algae in monitoring saprobity, trophic states, pollution by heavy metals, hazardous organics and pesticides were mentioned.

(10) Biomanipulation in conservation and management of lakes (R. de Bernardi & I. Tatrai)

Philosophy and practice of biomanipulation as a tool of water quality regulation with planktonic organisms and fish were reviewed.

(11) Management initiatives of fish stocks (P. Biro)

Problems in managing fish populations, stocks or their environment were presented.

(12) Use of fish in monitoring water quality (J. Nemcsok)

Conditions of using fish for toxicological experiments in the field and in laboratory were specified.

Field trips were to Kis Balaton Reservoir and Lake Velence. Moreover, laboratory demonstrations were made every afternoon.

This Course contributed to broaden participated policy makers and researchers view for environmentally sound management of lake and reservoir basins especially in some countries where late development-first policy had neglected sustainability of freshwater resources.

Ramsar Conference

successfully held in Kushiro

The 5th Meeting of the Conference of the Contracting Parties to the Ramsar Convention was successfully held at Kushiro in Japan from 9-16 June 1993, with over 900 registered participants (221 delegates from Contracting Parties, 26 from Observer States; 6 inter-governmental organizations; 42 international NGOs; 273 national NGOs, including 39 foreign NGOs; 70 local government organizations; 250 press and 49 Ramsar Bureau Staf.

The Kushiro Conference was held at a crucial time in the history of the Ramsar Convention. Since the last meeting in Montreux, the Convention has undergone an exciting period of the growth with an increase of almost 50% in the number of Contracting Parties, and of about 25% in the number of sites included on the Ramsar list. This expansion has come during a period of mounting global concern for environmental matters, evidenced by the UN Conference on Environment and Development in 1992.

Prior to the conference, the Government of Japan registered five additional wetlands, including Lake

