

In order to encourage input from other groups, information must be made more widely available than at present. There is also a need for an improved information-base. It was felt that some sort of structure is necessary in order to funnel public input into the decision-making process. Legislative underpinnings of this process, and even an audit of the public participation effort, were recommended.

It was agreed that any planning which grew from such a process must be local or regional in scope. It also must be flexible enough to accommodate unexpected changes in time, and in order to do this must be rationalized in terms of the principles it is based on. Continuity of funding, staff, and commitment, were stressed as important.

The term 'withdrawal' was objected to for its implications of favouring an incumbent. The term 'allocation' was substituted as reflecting the desire of the delegates to see multiple- rather than single-use of our forest resources. Meanwhile the inadequate data-base was seen as a hindrance to fair allocations, while the status of wilderness designations was uncertain owing to lack of data.

Increasing forest productivity was recognized as a means to increase the forest land 'pie' and thereby reduce use-conflicts. Suggestions for improving productivity ranged from decreasing the waste in the industry, through searching for improved means of mechanization that favour subsequent regeneration efforts, and searching for alternative methods of pest control, to the development of the private woodlot, marginal farmland, and increased authority of the individual forest manager according to certain guidelines.

While it is difficult and perhaps dangerous to distil a few main points out of the hours of discussion and debate, one of them does stand out. There is a vital need for public understanding and support of forestry in Canada. To gain that support, which eventually is translated into political will and public dollars, more than just education is necessary. The essential feature of future efforts must be dialogue—multi-way communication in which members of the public and interest groups have some say in the management of the forest.

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CONFERENCE ON MANAGING CUMULATIVE EFFECTS IN
FLORIDA WETLANDS, HELD AT SARASOTA, FLORIDA,
USA, DURING 17-19 OCTOBER 1985

Wetlands are notoriously difficult to protect and even more difficult to manage. The direct effects of development, drainage, or flooding, may be apparent to the trained observer, but changes in wetlands often occur over a long period of time, as effects accumulate from a succession of alterations. The State of Florida in recent years has led the way in establishing programmes for wetland protection and management, and its recent legislation requires regulatory agencies to consider not only the immediate effects of a proposed development but also the effects of past and potential developments. This Conference was called to discuss the state of our understanding of cumulative impacts on wetlands, using the Florida experience as a model.

Speakers included John Hefner, of the US Fish and Wildlife Service, who described a quantitative study of the loss of wetlands in the USA—especially in Florida. Other speakers provided definitions and considerations of the

concept of cumulative effects. Case-histories of Florida wetlands included those of Indian River Lagoon, Kissimmee River, and the Everglades, while Gary Krapu expanded the consideration to North American northern prairie ecosystems.

The Conference brought forth a number of concepts of wetland management based *inter alia* on analyses of the effects of development, and concluded by providing specific guidelines for research, regulations, and policy, for use by regulatory agencies. It is encouraging to note that such discussions can be held for the benefit of regulatory authorities, and that the proceedings and recommendations of this Conference will be printed: for details contact Julie Morris, New College, University of South Florida, Sarasota, Florida, USA.

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INTERNATIONAL SYMPOSIUM ON ECOLOGY OF THE
DEVELOPMENT OF TROPICAL AND SUBTROPICAL
MOUNTAIN AREAS, HELD IN CHENGDU, CHINA, DUR-
ING 21-24 OCTOBER 1985

The need for ecological research focused on the wise use of natural resources is nowhere more pressing than in tropical and subtropical montane regions. Meeting in Sichuan Province (ca 31° North Latitude), at the western edge of the densely populated Chengdu plain, yet within only 100 kilometres of the Qionglai Mountains whose peaks reach 6,250 metres, scientists from ten countries exchanged views and discussed problems that are common to lower-latitude mountain areas throughout the world. The Symposium was co-sponsored by the Ecological Society of China, the International Association for Ecology (INTECOL), the Man and the Biosphere (MAB) Programme, and the Chinese National Committee of MAB. The Ecological Society of China, with support from the China Association for Science and Technology, organized the Symposium. Three themes served as a framework: the development and conservation of biological resources in tropical and subtropical mountain areas; strategies and development approaches in these regions; and environmental problems associated with development of mountain regions.

Plenary-session speakers outlined the need to improve understanding of the limits to human use of mountain resources and the implications of past and present environmental damage for future sustained utilization. Although linked by commonalities in climate, topography, and adapted vegetation, montane regions are complex and the history of their land-use has varied from continent to continent. Dr Maximina Monasterio (Merida, Venezuela), representing INTECOL, called for an intercontinental comparison of tropical mountains as a vehicle for providing the basic and applied data-base for wise management throughout tropical regions.

Many papers dealt frankly with serious problems of ecosystem degradation which had been brought about by human ignorance of the fragility of mountain environments. Thus Dr Alsam Khan (Peshawar, Pakistan) described increased flooding, deforestation, and severe erosion, of the Karakoram region of Northern Pakistan, and Dr Jean F. Dobremez (Besançon, France) reported on problems of development and adaptation in villages of the central hills of Nepal—particularly in relation to the inevitable consequences of population pressure. Along sim-