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Viewpoint

Parks and automobiles

The problem of moving visitors into and out of national parks has always been troublesome. The USA now seems to have gone just about full circle in contending with these perplexing matters, and the experience of their National Park Service has much to offer the rest of the world.

In their early days of park development, it was considered highly desirable that visitors see the wonders of such parks as Yellowstone and Grand Canyon because public support for the new park system was essential. Railroads were encouraged to advertise the parks and concessioners to install hotels and other facilities to care for the slow but steadily increasing flow of visitors. Then came the auto, and since then parks have never been the same. If there were roads to reach them, automobiles carrying visitors came by the millions. In the last decade some parks have been literally overwhelmed by swarms of people and their cars during the visitors season, and the most popular parks found it was simply beyond reason as well as highly undesirable to build the additional roads, parking spaces, camping facilities and other service areas motorized visitors wanted. Under the increasing pressure something had to 'give', as the expression puts it, and, thanks to courageous park administrators, it has been the auto.

The trend was well-started with experiments in mass transport in the crowded Mall area of Washington, D.C., in the late 1960s, and later with trams in the restricted valley where most of Yosemite's visitors congregate. The innovations have been well received.

It must be recognized that in the USA the personal automobile is almost venerated. No other single possession receives quite the same attention, and, for many people, separation from their 'cars', even for a 200 or 300-metre trip to a nearby supermarket, is quite unthinkable. Indeed, some jokes were heard that so many people had forgotten how to walk that genetic changes in a few generations would reduce legs to vestigial appendages. Facing this sort of problem in its relations with the public, park officials, quite understandably, have been reluctant to move too quickly to separate visitors from their machines. Further, US park philosophy supports visitation and public use, and in most areas there have been no substitutes for the private automobile. Thus the effort has been one of gradual restraint—to restrict auto use where possible, and to provide adequate alternatives acceptable to the public. The energy situation in the USA has simply hastened the process of getting visitors out of their cars.

Now the US National Park Service is developing detailed plans for other forms of transport in all of its 298 areas, some of which, as noted, are already well-

started with innovative programmes. Beginning last spring, visitors to the South Rim of Grand Canyon National Park were able to ride propane-powered shuttle buses on two loops, one along the scenic West Rim Drive and the other through the Grand Canyon Village area. The mini-buses are operated for the Park Service by a concessioner on a contract basis, at no cost to the visitors.

The Park Service believes this new system will greatly improve the quality of the visitors' "park experience" as well as result in substantial fuel savings. West Rim Drive is closed to private cars. There is less congestion, pollution and driver frustration. Hikers and bicycles are encouraged.

Various other alternate transportation systems have gone into operation. These range from horsedrawn vehicles serving visitors at the Lyndon B. Johnson National Historic Site in Texas to mini-trains carrying visitors to widely spaced points of interest in Mesa Verde National Park in Colorado.

Shuttle buses bring visitors to Dinosaur National Monument, Colorado-Utah; Yosemite Valley in California; the Shark Valley area of Everglades National Park, Florida, and Mount McKinley National Park in Alaska.

Minivans will carry visitors through the Carl Sandburg Home National Historic Site in North Carolina, and at Point Reyes National Seashore in California.

Some transport solutions are new, like the electric bus being tested in the National Capital Parks to provide quiet, pollution-free travel within the city of Washington. Others are old, like the fleet of pre-1937 buses which are used in Glacier National Park to move visitors over the road from Lake McDonald to Logan Pass, a road too narrow for more modern vehicles.

The US National Park Service is confident that the new programme will succeed and that it will be of lasting benefit.

This new trend is expected to be a real blessing for the park visitor, who is urged to get away from his automobile and to find a whole new world of beauty and discovery waiting in the parks.

While the experience of the USA is not typical by any means, parks in Japan, Africa and Europe are most certainly facing enormous increases in use—and greatly increased impact of auto traffic with all its attendant evils.

National park managers might study the US experience. Growth is still clearly the wave of the foreseeable future for National Parks, and now is the time to make plans to cope with it.

R.I.S.

First International Congress of Ecology

The First International Congress of Ecology brought together an estimated 800 people in The Hague, The Netherlands, 8-14 September 1974. It was made apparent, in advance, by the prospectus sent out by the International Association for Ecology (Intecol) that this conference would be essentially a scientific meeting, rather than a congress aimed at finding solutions to the various environmental crises that the world faces today. Those who attended, with this viewpoint in mind, found a rich bill-of-fare of ecological papers, many of which presented the most recent ecological theory and confronted the conflicting viewpoints and controversies that beset the science today. Those who were more concerned with the application of ecology to environmental problems found far less of interest in the congress. Were it not for comments and discussion initiated from the floor, one might have left the congress with the opinion that there was an infinite amount of time during which academic ecologists could carry forth their dispassionate studies. A conservationist could scarcely resist the mental picture of an ever-growing

number of ecologists converging on the world's ever-diminishing natural areas, brushing aside all pleas for application of their knowledge to solutions of the crises.

The organizing committee of The Netherlands and Intecol must be congratulated for having planned and carried out this first International Congress of Ecology. One cannot expect a single meeting of this kind to satisfy all of the many conflicting viewpoints which are now included under the broad cover of ecology. One notes with dismay, however, that the next international congress will not be held until four years have passed, and regrets that this first congress could not have made more positive contributions toward arresting the deterioration of the human environment.

R. F. Dasmann

Biosphere Reserves

The Third Session of the International Coordinating Council of MAB, meeting in Washington, D.C., 17-29 September, 1974, brought marked progress toward the implementation of Project 8 "Conservation of natural areas and of the genetic material they contain".

All representatives of 26 countries who spoke on the subject indicated interest in establishing biosphere reserves. Some went much further. The representative of the Philippines reported on the establishment of its first biosphere reserve, a 23,525 ha area in Oriental Mindoro including the town of Puerto Galera and the Abra de Ilog in Occidental Mindoro. The United Kingdom reported the designation of Moor House National Nature Reserve as its first biosphere reserve. The United States took the lead in designating 20 areas as biosphere reserves including 10 major national parks and monuments. Establishment of biosphere reserves was also reported for Malaysia, France, Germany, Austria, Netherlands and the USSR indicated the likelihood that such areas as the Camargue, Bavarian National Park, Hohe Tauern National Park and Wrangel Island will receive biosphere reserve status in the near future.

It is, of course, good news to IUCN to hear of these preliminary steps toward more effective conservation of nature, and we must look forward to future measures to effectively implement the biosphere reserve concept within those countries that have taken this action.

Programme Activities

East African park authorities Agree on regional cooperation

Representatives of seven eastern African countries meeting at Seronera, Serengeti National Park, Tanzania, 14 through 19 October, have agreed on a programme to extend and elaborate the informal "wildlife conferences", which over the past few years have been held successively in Kenya, Tanzania and Uganda under auspices of the national parks authorities of the three countries.

The participants considered that the development and expansion of this idea would be the best method of obtaining coordination on a regional basis to carry out a two-part programme that would (1) define the various biomes and ecosystems of the area and classify them according to their management security, and (2) provide a mechanism to ensure the security of all representative biomes and ecosystems of the region within a national park or equivalent reserve and to improve management systems by active cooperation in training, research, exchange of information, etc.

Participants agreed that the "wildlife conference" idea would be recognised as the coordinating instrument. There would be an informal meeting at least once every year, and a formal conference every two

to three years. The group agreed to request IUCN, in possible conjunction with UNEP, to convene and support the meetings. Committees would have the responsibility for carrying out the groundwork to achieve proper reservation of biotic areas, recognising the need to cooperate with national MAB committees in examining possible areas for biosphere reserves. A set of principles was agreed by the meeting as a background to conservation action in each country working towards similar conservation goals.

This meeting represented a continuation of IUCN's programme to promote regional systems of national parks and reserves. Participation had been invited and background papers received from Sudan, Somalia, Kenya, Uganda, Tanzania, Zambia, Malawi and Botswana. Unfortunately, representatives from Sudan and Somalia were unable to attend the meeting, although experts from the other countries were present. The meeting was convened by IUCN with sponsorship and representation from UNEP, FAO and UNESCO. IUCN was represented by Dr. Hugh Lamprey and Tony Mence. The WWF/National Appeal of Kenya and the East African Wild Life Society sent observers.

Conservation Notes

Special group publishes report on the grizzlies of Yellowstone

Management of the grizzly bear population in the Yellowstone ecosystem, an area of more than 14,000 km² which includes Yellowstone National Park, has been marked for years by controversies, fragmented jurisdictions and conflicting policies. In February 1973, the National Academy of Sciences (USA), at the request of the Secretary of the Interior, established a "Committee on the Yellowstone Grizzlies" to look into all aspects of the situation.

Under the chairmanship of Prof. Ian McTaggart Cowan of Canada (a Vice-President of IUCN), the Group began a series of investigatory meetings in the autumn of 1973. Its report has now been published in a 60-page document. Copies are available from the Office of the Chief Scientist, US National Park Service.

A major controversy centered around the Park Service decision in 1968 to close the garbage dumps where bears had fed for years. This not only interfered with certain privately conducted bear research activities but led to the necessary removal of an average of 31.5 bears per year in the 1964-73 period, a substantially larger number than had been killed annually in previous years.

The Committee supported the closing of the dumps and recommends that they stay closed, that all other garbage sources be made bear-proof, and that no supplementary feeding be permitted.

The Committee concluded that there is no convincing evidence that the grizzly bears in the Yellowstone ecosystem are in immediate danger of extinction.

It recommends that the number of bears removed from the ecosystem be held to 10 per year until the population returns to the stable level of the 1959-1967 years, estimated at about 234 animals. This will require efforts by the States of Idaho, Montana and Wyoming to regulate the hunter kill, and by the Park Service "to eliminate the need" to destroy bears as hazards to humans. The Committee also recommended sheep grazing permits in the Yellowstone ecosystem be phased out.

The Committee found the research programme carried out by the Park Service since 1970 inadequate to provide data to back a sound management policy. It recommended that both the Park Service and Forest Service support policies to encourage independent research and called for a major project by qualified independent scientists to determine data on present

population size, trend and distribution, the most important question being whether bear numbers are increasing, decreasing, or relatively stable.

The present inter-agency research approach should be re-evaluated the Committee said, because its close ties to "management supervision and management authority impose severe restraints on its effectiveness".

Limnologists call for control of phosphorous

Scientists from 38 countries attending the XIX Congress of the International Association of Limnology, held at the University of Manitoba, Canada, 22-29 August, unanimously called for control of the amount of phosphorous entering inland waters.

The resolution cited the critical role of the element in the rapid eutrophication of inland waters. It urged restrictions of the use of cleaning products containing phosphorous, its removal at sewage treatment plants, and control over other sources such as feedlots and drainage from agriculture areas.

The scientists noted the importance of supporting legislation which bans or controls use of phosphates in soaps and detergents.

A second resolution dealing with air pollution called on governments, scientists, engineers and laymen everywhere to take action against sources of fall-out which contributes to acidification and other pollution of waters over large geographic regions.

Dr. John R. Vallentyne of the Freshwater Institute, Winnipeg, Canada, was named president of the the 3000-member organization, succeeding Dr. William Rodhe of Sweden.

IYF General Assembly sets Wetlands as 1975 Theme

The International Youth Federation for Environmental Studies and Conservation (IYF) held its 19th General Assembly in Bokrijk, Belgium, 2-14 August, to establish its programme for 1975 and elect officers.

Wetlands will be the 1975 Theme, with four working groups dealing with informational activities, efforts to obtain further ratifications of the Wetlands Convention (Ramsar), collection of data, and youth involvement in protection and management.

New this year is the IYF Working Group on Education. Task of the group is to function as an international clearinghouse on environmental education for youth, and to stimulate the production of new handbooks, method books and guides dealing with biology and environmental action. The Youth Training Course for young leaders, which is concerned with education in ecology and environmental protection, will be continued.

Projects for the 1974-75 period include study and publication of results of investigations in two areas: detergents and the environment, and nuclear energy and the environment. All IYF organizations will receive these publications for their use.

Officers elected were: Bo Landin of Sweden, President; Julian Cummins, UK, Secretary General; Julius Smeyers, Belgium, Treasurer; Gerard van Dijk, Netherlands, Project Officer; and Karl-Johan Bondeson, Sweden, Information Officer.

Sweden, Cypress ratify Convention on trade in endangered species

Two more States, Sweden and Cypress, have ratified the Convention on International Trade in Endangered Species of Wild Fauna and Flora. Their actions, which occurred on 20 August and 18 October, respectively, bring the number of States adhering to the Convention to 6. Ten are needed before it can enter into force.

Sub-Antarctic islands mapped

Conservation scientists will be pleased to learn that New Zealand's Department of Lands and Survey is bringing up-to-date all existing maps of the country's sub-Antarctic islands. Included are the Snare, Antipodes, Bounty, Auckland, and Campbell Islands in the sub-Antarctic and the Kermadecs, Tokelaus and some of the Cook Islands to the north of New Zealand.

Bangladesh to issue Tiger stamps

On 4 November, Bangladesh is expected to issue a set of three new postage stamps featuring the Royal Bengal Tiger. This is in support of World Wildlife Fund's "Operation Tiger". A special first day cover and postmark will be issued by the Philatelic Bureau, Dacca G.P.O. With the 3 tiger stamps, this costs US 52c. Orders for under US\$10 should include return airmail postage. The issue was originally planned for August 11.

Dr. F. Carlos Lehmann Valencia

Dr. F. Carlos Lehmann Valencia died on 15 August 1974 in Cali, Colombia, where he was the Director of the Natural History Museum. Dr. Lehmann was one of the earliest supporters to the cause of conservation in his own country and throughout the world. It was therefore only natural that he became a close supporter of IUCN. He was also closely connected with the WWF.

He was known to practically every conservationist who has been active in Colombia; for visiting scientists he was a magnificent guide and opened many doors. But, he was also known as an outstanding scientist in his own right and his numerous publications, particularly on birds in Colombia, and his proposals for reserves have received wide publicity throughout the world. Less known but perhaps even more significant was his role as an indefatigable educator.

Some years ago he was active in the IUCN International Commission on National Parks, particularly in Latin America, and later was a member of the Survival Service Commission. He was a corresponding member of SSC at the time of his death.

Several years ago while teaching a course on tree identification to the students of the University of Ibagué in Colombia, we all took advantage of Dr. Lehmann's hospitality and goodwill and in one day we learned more about conservation in Colombia than many of us had during our entire lifetime. Don Carlos insisted that all the students stay as his guests that night and he had prepared 30 beds within his own Museum. He knew how many university students live with meagre means. These things are not easily forgotten.

It is comforting to note how much his work is appreciated in Colombia today. Soon after his death the Department Museum of Natural Sciences of Cali changed its name to the Museo de Ciencias Naturales F. Carlos Lehmann, and one of the Museum's first tasks will be to publish his book "Aves de Colombia".

Dr. Lehmann has ploughed well for the future during his life and there is a whole new generation of conservationists in Colombia and elsewhere who owe much to him for their inspiration and knowledge. More than anything else, his publications on wildlife and the creation of some reserves, in particular Puracé, will stand as his permanent memorials.

Gerardo Budowski

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Staff Notes

Three leave IUCN staff

Dr. Bruce E. Weber and his wife, Katherine D. Weber, have left the staff at Morges. Both were US Peace Corps volunteers, serving for the past year as Assistant Executive Officers of the ICNP. They have returned to the USA where Dr. Weber has accepted a position with the National Park Service.

Robert L. Schiffer, External Relations Officer at Morges since November 1973, resigned as of 30 September for personal reasons. Mr. Schiffer, who came to IUCN from the United Nations Environment Programme, will remain in Switzerland.

Dasmann receives award

Dr. Raymond F. Dasmann of IUCN's Secretariat has received the 1974 Edward W. Browning Award for outstanding achievement in "Conserving the Environment". The Award, which carries a substantial financial prize as well as a bronze medal, is one of five annual Browning Awards. Presentation was in Washington, D.C. at ceremonies arranged by the New York Community Trust and The Smithsonian Institution.

Book Reviews

Kendeigh, S. Charles (1974). *Ecology with special reference to animals and man*. Englewood Cliffs, New Jersey: Prentice-Hall Inc., 474 pp., illustrated.

The growth of public interest in the environment and ecology during the late 1960s has produced a harvest of ecology textbooks in 1973-74, most of them of large size, great weight, and laden with abstruse mathematical formulae. Either there has been a great change in the quality of university students since 1965, when this reviewer left the academic ranks, or many textbooks are aiming at too high a level of mathematical comprehension. Kendeigh's textbook is large, heavy, and comprehensive, but does not lean heavily on mathematics. Furthermore it is orientated toward field situations, biotic communities and animal populations, and consequently will have more interest to any field naturalists that may still exist than will many of its rivals in the ecology arena.

S. Charles Kendeigh is an ornithologist and ecologist of high standing who has a long record of experience with nature conservation. The book reflects 40 years of experience in research and teaching. Along with the expected ecological subject matter it gives particular attention to biogeography, and elucidates Kendeigh's own development of the Clements-Shelford biome concept.

R. F. Dasmann

Longman, K. A. and Jenik, J. (1974). *Tropical forest and its environment*. London: Longman. x + 196 p. (including 50 p. of plates, references and indexes). £1.95.

This compact book is a model of its kind describing interactions between tropical trees and certain environmental factors, particularly in connection with physiological processes related to the different tree parts. Although many data were collected in Ghana, where both the authors had been teaching, there is also excellent material from other tropical regions.

One immediate conclusion that one derives from the book is the amazing diversity that can be found in tropical trees. As a result, the book is full of classification schemes. Among these, the most interesting refer to roots, particularly the "pneumohizal" or the various aerial roots that occur in poorly drained soils; their description and distinction adds much light to the confusing term of pneumatophores (p. 57-59). Another useful classification refers to the highly variable deciduousness habit.

There are interesting correlations between climatic factors, growth forms and biomass (for instance it is correctly stated that increased precipitation will reach a point where the biomass actually diminishes but a rather poor geographical example is used in support—the Rio Negro instead of the very convincing North West of Colombia). Unfortunately there are no correlations with animals, even if they play an important environmental role.

The book concludes with a chapter on the future of rain forests and an eloquent plea to maintain adequate samples of their magnificent diversity: "The tropics have a special contribution to make to biological knowledge in respect of phenomena that are unknown in temperate regions. Almost all our understanding of plant physiology and ecology has been gained from studies of temperate plants. It is not too much to say that when an equivalent amount of research has been done in the tropics it will be necessary to re-write the textbooks, including indeed this one."

It is unfortunate that the publisher, on the back cover blurb, introduced this book as "the first book in over 70 years to give a full and dynamic picture of the world's tropical forests from the standpoint of plant ecology and physiology of tree growth." This inopportune presumption will not be appreciated by many ecologists who have written important books on tropical forest ecology, perhaps least of all by the authors of this excellent book.

Gerardo Budowski

McClure, H. Elliott (1974). *Migration and survival of the birds of Asia*. United States Army Medical Component, South East Asia Treaty Organization, Bangkok. 476 pp., 249 map figs.

This compendium records 10 years' results from a remarkable cooperative bird banding operation in eastern Asia in which more than 1 million birds in 1216 species were ringed. Operating from a base in Thailand, Elliott McClure organized a network of collaborating institutions in most countries of the region, which, in addition to the migration studies reported, examined host-parasites relationships and made an extensive series of measurements of the birds they captured.

The present volume surveys previous information on bird migrations. It then discusses the movements, traced on a species by species basis, illustrated with maps showing the migration pattern that emerged. Survival records are also tabulated. The complete recovery records are given in almost 150 pages. Information of importance to conservation is included in the notes on species.

F. G. N.

New Zealand National Parks Planning Symposium (1972). Department of Land and Survey, Wellington.

This 225-page collection of the dozen technical papers delivered during the National Parks Planning Symposium for 75 senior park staff members held at Lincoln College in 1970 is still timely despite its age. It contains discussion on topics that are germane to both developing and developed nations, and demonstrates that New Zealand is one of the few countries in the world that takes the need for park planning seriously. It is to the credit of New Zealand's National Parks Authority and its various National Park Boards that such a meeting was held, and establishes this country as a source of refreshing and practical national park ideas. Hopefully, New Zealand will share its expertise with other countries whose park systems sooner or later will experience the same inevitable conflicts that come about while preserving nature in an industrial and recreation-oriented society.

No doubt New Zealand will favour us again with Conference excellence of this kind at the South Pacific National Parks Conference scheduled for next February.

Bruce E. Weber