

mab notes

The biosphere reserve concept continues to take deeper root as new reserves are planned and existing ones become more functional. Participants at a major international symposium will assess the concept's progress and recommend new steps to take.

Reserves on the drawing board. Of the many potential biosphere reserves under discussion, two merit special note for their magnitude and ground-breaking character. At its second meeting on July 2, 1987, a U.S.-Canadian MAB panel for the Acadian-Boreal Region prepared preliminary proposals for biosphere reserves in the Gulf of Maine and the Acadian Shelf. Both would be binational and contain major marine fisheries. The first would include Acadia NP, many small refuges and sanctuaries in the Maine archipelago, and nearby areas in Canada. The second would include Cape Cod NS, the Monomoy National Wildlife Refuge, and marine areas including Georges Bank. Several areas in the Gulf of St. Lawrence also were considered. Future meetings will identify specific boundaries and zonation and discuss management with area administrators.

A biosphere reserve including the Adirondacks and the lake Champlain Basin looks likely. Meetings have been held in New York and Vermont to discuss the idea, and strong support was voiced in both states, which already had created bi-state organizations for coordinating several types of resource management on Lake Champlain. Designations of core, buffer, and transition zones and mechanisms for biosphere reserve cooperation must be worked out. There is also the possibility of including Mont St. Hilaire, an existing biosphere reserve in Quebec on the river draining Lake Champlain. As the lower part of the Basin, including the lake's outlet, is in Quebec, the biosphere reserve may provide a framework for strengthening binational cooperation in research and management of the lake ecosystem. The Adirondack-Lake Champlain Biosphere Reserve would be the second largest in the world, after the gigantic Northeast Greenland NP.

Building true biosphere reserves. A major goal of the international MAB program is development of model biosphere reserves, and the U.S. MAB National Committee has decided to support such a project in the Southern Appalachians, where Great Smoky Mountains NP and the Forest Service's Coweeta Experimental Forest are units of the international network. Steps already taken include selection of Great Smoky Mountains NP as the pilot area for developing a model collections management plan and for evaluation of the Smithsonian MAB biological diversity protocol. Regional Director Robert Baker has identified five regions in the Southeast where strategies are planned for coordination on cross-cutting regional issues. He has decided that MAB should be the framework for integrating our concerns with those of other institutions in the Southern Appalachians. At the invitation of the U.S. MAB National Committee, state and Federal resource management agencies met at Clemson University in August to identify resource issues and mechanisms for cooperation under the MAB aegis.

The Virgin Island Biosphere Reserve also has made impressive progress toward regional involvement and adequate understanding of resource use problems. Twenty-nine research projects have been carried out through the Virgin Islands Resource Management Cooperative (VIRMC), which includes NPS and 13 other public and private organizations. Virgin Islands is the first U.S. biosphere reserve to establish its own BR

publication series — hopefully a precedent for others to follow. The first 14 reports in the series, which include the results of basic inventories and research on resource conditions and use, were published in October 1986. Eight additional reports dealing with biosphere reserve zoning and management, long-term monitoring programs, and watershed sedimentation studies, are expected by fall 1987; and seven more should be out in December 1987. (See *Park Science*, Summer 1987 for descriptions of research. Write to: Island Resources Foundation, Publications Center, 1718 P Street, NW, Suite T-4, Washington, D.C. 20036 for a list of reports and order form.)

Trans-border reserves. At a meeting in June of the Pacific Division of AAAS, Bill Gregg presented a paper on the potential for binational, cross-border biosphere reserves. Worldwide, 15 percent of BR's occur in border areas. In North America, binational reserves are under consideration in the Virgin Islands (with the British), southern California-Baja California, Arizona-Sonora, lower Rio Grande, Maine-New Brunswick, Lake Champlain Basin, and the Boundary Waters region of Minnesota and western Ontario. Such reserves would not only accomplish regional conservation development objectives but also would foster the international cooperation that is one of MAB's main goals.

Symposium at World Wilderness Congress. About the time you receive this issue, an important international symposium on biosphere reserves will be underway at the Fourth World Wilderness Congress in Estes Park, Colo. Speakers from eight countries plus UNESCO and the International Union for Conservation of Nature and Natural Resources (IUCN) will present case histories and review successes, problems, and opportunities. Participants will make recommendations on how best to develop fully functioning biosphere reserves.

International brochure. After an agonizingly long gestation period, a full-color brochure on biosphere reserves is expected to go to the printer this fall. Scripted largely by NPS, with design assistance from Meta-Graphics of Berkeley, Calif., and funded through US-MAB and MAB/UNESCO, the brochure will fill a long-standing need for printed information on the purpose, organization, and management of biosphere reserves around the world.

MAB and the IGBP. In September 1986 the International Council of Scientific Unions (ICSU) approved a report of its ad hoc planning group outlining an International Geosphere-Biosphere Program. The principal objective of the program, expected to begin about 1990 and to be well funded, is "to describe and understand the interactive physical, chemical, and biological processes that regulate the total Earth system." An internationally sponsored Earth-observing system will include remote-sensed observation from satellites and an Earth-based network of biospheric observatories. MAB, with its biosphere reserves, expects to be deeply involved in this program. We will be watching its development closely. Participation of NPS biosphere reserves as "observatories" could greatly improve basic resource information on these parks and their surrounding regions, which would be useful for local management as well as for understanding global systems and problems.

Napier Shelton

NPS Washington Office