



BULLETIN

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A FEDERAL PLAN OF SUPPORT FOR MAB

The outlook for increased involvement in and support for the UNESCO Man and the Biosphere Program by Federal agencies improved considerably with the issuance on March 9, 1979, of the memorandum (see below) by the Executive Office of the President calling on agencies to take appropriate steps to participate fully in the program. Signed by the Directors of the Office of Management and Budget and the Office of Science and Technology Policy, the memorandum characterizes MAB as "an excellent opportunity for international cooperation and a focus for the coordination of related domestic programs aimed at improving the management of natural resources and of the environment." This action was the culmination of a

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF SCIENCE AND TECHNOLOGY POLICY
OFFICE OF MANAGEMENT AND BUDGET
Washington, D. C. 20503

March 9, 1979

MEMORANDUM FOR HEADS OF CERTAIN DEPARTMENTS AND AGENCIES

SUBJECT: U.S. Participation in UNESCO's Man and the Biosphere Program

The Man and the Biosphere Program (MAB) is an interdisciplinary applied research effort directed toward the solution of natural resources and environmental issues. The program provides an excellent opportunity for international cooperation and a focus for the coordination of related domestic programs aimed at improving the management of natural resources and of the environment.

We request that you bring this program to the attention of appropriate program personnel in your Department or Agency and take appropriate steps, in light of your existing budget priorities, to participate fully in the program and to cooperate with other agencies in the development and management of the program.

The Department of State is responsible for the international development of the MAB program, in consultation with the U.S. MAB National Committee which was created under the auspices of the U.S. National Commission for UNESCO. The Departments of the Interior and Agriculture will have joint responsibility for developing and coordinating domestic participation in the MAB program. All other major natural resources and environmental management agencies should work with the Departments of State, Interior and Agriculture and the MAB National Committee, as appropriate, in developing a plan for participating in the MAB Program.

/s/ J.T. McIntyre, Jr.
Director, Office of Management and Budget

/s/ Frank Press
Director, Office of Science and Technology
Policy

series of consultations and briefings to which members of the U.S. MAB National Committee contributed substantially.

Assistant Secretaries from the three agencies with the most substantial involvement in MAB thus far--State, Interior, and Agriculture--met on April 12 to reaffirm their strong support for the program and to consider appropriate follow-up actions. They agreed to call a meeting of high-level agency representatives to include the dozen additional agencies which have actual or potential interest in environmental research and natural resource management, to begin development of a plan for expanded domestic agency participation in MAB.

This meeting took place on June 12, with representation from the Departments of Agriculture, Commerce (NOAA), Defense, Energy, Health, Education and Welfare, Housing and Urban Development, Interior, and State, and from the Agency for International Development, Council on Environmental Quality, Environmental Protection Agency, NASA, National Science Foundation, Office of Management and Budget, Smithsonian, Tennessee Valley Authority, and from the planning office of the proposed Institute of Scientific and Technological Cooperation. The participants agreed to a proposed outline for a plan to facilitate coordinated agency participation in MAB and will name working-level representatives to a task force which will develop the plan this summer. Several agency principals indicated interest in providing funding and staff support to the program as available. The timetable for the further work is as follows:

- A. July 17, 1979 - Initial meeting of a Task Force to draft coordinated plan for FY 1982 U.S. MAB Program based upon agency participation in MAB project areas, cross-directorate themes, and regional projects.
- B. August 7, 1979 - Meeting of Task Force and MAB Directorate Chairmen to integrate agency contributions with directorate orientations.
- C. August 30, 1979 - Target date for plan completion.
- D. October 1979 - Report to U.S. MAB National Committee regarding final plan of action for U.S. MAB Program.

CONSORTIUM STATUS

More good news--another step forward in gaining more assured sources of MAB research funding was achieved in May with the agreement with the U.S. Forest Service to establish a "Consortium for the Study of Man's Relationship with the Global Environment." This MAB consortium will begin with \$300,000 in funds reprogrammed from the current fiscal year and initially concentrate on projects in three MAB areas: tropical forests, temperate forests, and Biosphere Reserves. Partners in the consortium are the Forest Service, the U.S. MAB Secretariat, and the relevant project area Directorates: MAB 1, MAB 2, and MAB 8. Copies of the consortium charter and guidelines for project proposals are available from the U.S. MAB Secretariat. Because of the requirement to obligate funds during this fiscal year, the deadline for project proposals under the initial grant was June 15.

The consortium provides a mechanism through which other agencies also can support MAB research projects. Individual MAB research projects continue to compete for and gain funding from traditional sources (e.g., the National Science Foundation has recently approved \$475,000 in support over several years for a MAB research project on grazing land productivity). The consortium arrangement with the Forest Service, however, marks the first time that funds have been specifically earmarked in advance for U.S. MAB research.

The next meeting of the U.S. MAB National Committee has been set for October 22-24, 1979, in Alexandria, Virginia. The following schedule is contemplated: October 22, meeting of Directorate Chairmen; October 23, meeting of full National Committee; October 24, National Committee session continues until noon.

INTERNATIONAL NEWS

The MAB Bureau (officers of the MAB International Coordinating Council) met May 14-16 in Paris. Eighteen Biosphere Reserves were approved for addition to the existing network, including four U.S. nominees:

Niwot Ridge (Arapaho-Roosevelt National Forest - Colorado)
Konza Prairie Research Natural Area (Kansas)
University of Michigan Biological Station (Douglas Lake - Michigan)
Virginia Islands Reserve (Barrier Islands)

Details will be forthcoming in the next bulletin.

There are now 33 U.S. Biosphere Reserves, part of a global network that now totals 162 reserves in 42 countries. Also at the Bureau meeting Paul Risser, Oklahoma Biological Survey, presented the Information Synthesis on U.S. Biosphere Reserves as a model for other national programs. The synthesis, which he and Kathy Cornelison prepared (see Publications), was well received.

The Bureau also reviewed the progress of the MAB Program. There are now 94 countries with National MAB Committees (an additional four are being formed); 887 field projects in 69 countries have been registered within the MAB Information System. Compilation #4 of the MAB Information System is in draft form and is expected to be available in the fall.

The U.S. Forest Service is detailing Brian Payne, Northeast Forest Experimental Station, to the UNESCO MAB Secretariat in Paris, where he will work in coordinating international MAB activities (including project areas concerned with tropical and temperate forests and with Biosphere Reserves).

ATTENTION TO ALL U.S. MAB DIRECTORATE MEMBERS*****

Directorate members who have not recently submitted a curriculum vitae to their directorate chairman are asked to send one directly to the Secretariat. They are needed for a comprehensive U.S. MAB resource directory which is being prepared and as background data for a paper on the interdisciplinary nature of MAB being prepared for presentation at the AAAS annual meeting in January. We suggest a one to two page summary including the following categories: education, professional experience, major fields of interest, professional societies, major research.

U.S. MAB PUBLICATION SERIES

In an effort to further disseminate MAB research results and project activities, a U.S. MAB Publication Series has been inaugurated. The first title in the series is: Guidelines for the Selection of Biosphere Reserves: An interim Report and Key, by Paul Risser and Kathy Cornelison of the University of Oklahoma and Christine Schonewald of the National Park Service. It is available from the Secretariat--no charge.

Directorate Chairmen are reminded to submit suggestions for publications in this series to the Secretariat.

OTHER PUBLICATIONS

MAB-2

U.S. Forest Service, Fire Regimes and Ecosystem Properties
Proceedings of the conference on the role of past and
present fire frequency and intensity on ecosystem developments.
December 11-18, 1978. Honolulu, Hawaii - Available from U.S.
Forest Service.

Content: I Ecosystem Distributions and Structure through Space
and Time
II Adaptation of Plants to Fire Regimes
III Analysis of Ecosystem Properties
IV Fire Policy and Ecosystem Management

MAB-7A

UNESCO/UNFPA Island Report Series - Population and Environment
Project in the Eastern Islands of Fiji

#1 - McLean, R.F. et al. The Hurricane Hazard and Small Populations
#3 - Brookfield, H.C. et al. Taveuni: Land, Population and Production
Available on loan from the MAB Library

MAB-8

Risser, P., and Cornelison, K., Information Synthesis on U.S. Biosphere
Reserves. Available from The Natural History Division, National Park
Service, Department of the Interior, Washington, D.C. 20240

Folio of U.S. Geological Survey LANDSAT Imagery and High Altitude
Aerial Photography for the U.S. Biosphere Reserves, available from
National Technical Information Service, U.S. Department of Commerce,
5285 Port Royal Road, Springfield, Virginia 22161

Selection, Management and Utilization of Biosphere Reserves, Proceedings
of the US-USSR Symposium on Biosphere Reserves - Moscow - May, 1976
Jerry Franklin and Stanley Krugman coordinators. Available from
Secretariat or from Pacific Northwest Forest and Range Experiment
Station, P.O. Box 3141, Portland, Oregon 97208

Grant, P., and McCallum, R. "Man and the Biosphere" in Living with Our
Environment, (Department of the Interior Yearbook, 1978-1979).

Shelton, N., "Biosphere Reserves Go to Work" In Parks, Jan. - Mar. 1979

Pierce, C.D., "Hunting Pollution in the Great Smokies" EPA Journal
March 1979. Reprints of the above can be obtained from the
Natural History Division, National Park Service, Washington, D.C. 20240

MAB-13

Proceedings of The International Symposium on Tourism and the Next
Decade March 11-15, 1979

Information: Professor Donald Hopkins
Department of Human Kinetics and Leisure Studies
George Washington University
817 23rd Street, N.W.
Washington, D.C. 20052

MAB SECRETARIAT LIBRARY

The Secretariat is building a library of MAB publications and documents, MAB-related research bibliographies, and other materials relating to environmental research and natural resource management. It is in the process of being unboxed and reshelfed at the moment in U.S. MAB's remodeled and expanded quarters. Please feel free to stop by and browse when in Washington. You will find us at the U.S. National Commission for UNESCO, Rooms 521-525, Department of State Annex 2, 515 22nd Street, N.W. (corner of 22nd Street and Virginia Avenue), Washington, D.C. Copies of library materials are available on one month loan by request.

MAB-8 UPDATE

Olympic National Park, Washington, has been chosen as the second site in MAB-8's pilot monitoring network. During the third week of April 1979, scientists from the National Park Service, the Forest Service, and the Environmental Protection Agency met with park managers and area scientists to develop a plan and schedule to carry out the monitoring program. Four watersheds will be monitored in addition to high and low elevation sites. Samples of water, air, soil, vegetation, and litter will undergo elemental analysis to determine their quality and the effects that air masses entering the park from the Pacific Ocean have on them. Olympic National Park was chosen because of its Biosphere Reserve status and as the most pristine, undisturbed area in the lower forty-eight states. The Department of Energy's Batelle Laboratory was also involved in the development of the plan and intends to locate several of its ecological monitoring stations in the park to complement MAB activities. Current Park concerns include the possible siting of an oil supertanker facility and its support units near the park and expanding populations of exotic species such as the Rocky Mountain goat. This new site will be a welcome addition to the first pilot environmental monitoring project conducted in the Great Smoky Mountains Biosphere Reserve.

AID/MAB

The AID/MAB project is progressing well and has allocated all funds presently available. Additional funds are anticipated for 1980 at which time the Project Officer intends to make full use of MAB Directorates to carry out activities under the program. An annual report on the AID/MAB Project is available from the MAB Secretariat and would provide interested directorate members examples of the types of training and field support activities MAB is developing for the Agency for International Development.

MAB Conference Reports

"International MAB Workshop on the Biological and Sociological Basis for a Rational Use of Forest Resources for Energy and Organics."

Approximately 50 scientists met May 6-11, 1979, at Michigan State University to identify strategies for more effective and efficient uses of woody materials for energy and organics. Representatives from 25 countries examined the environmental consequences of intensive timber management (tree plantations) and the clearing of tropical forests to produce fuelwood; the social and economic consequences of and constraints for the exploitation of forests for energy and organic resources; and the need for an interdisciplinary investigation and assessment of the problem. A summary of the workshops findings is available from the MAB Secretariat. Proceedings will be published by the Forest Service.

UPCOMING CONFERENCES AND WORKSHOPS

Conference on Environmental Management and Economic Growth in the
Smaller Caribbean Islands (MAB-7b)

DATE: September 17-20, 1979

PLACE: Barbados

PARTICIPATION: Limited

TOPIC: Review of existing development strategies and recommendations for actions to achieve environmentally sound development of Caribbean islands less than 10,000 km² in area and 500,000 in population. The review will take into account growth limiting factors such as water, energy, and land resources; carrying capacity; and the consequences of different development practices with respect to population pressure, land use, coastal erosion, pollution, and rapidly changing technologies. The workshop will also explore the institutional needs, opportunities for technical cooperation, and opportunities for international technical, financial, and training assistance to the smaller islands.

SPONSORS: U.S. MAB
UNEP/ECLA Caribbean Environment Program
UN Ocean Economics and Technology Office
Caribbean Development Bank
UNESCO

INFORMATION: William Beller, Chairman MAB-7b
2701 Largo Place
Bowie, Maryland 20715

Fire in Northern Circumpolar Ecosystems.

DATE: October 22-24, 1979

PLACE: Fire Science Center
University of New Brunswick
Fredericton, New Brunswick
CANADA

PROGRAM: I. Past and present fire frequencies in circumpolar ecosystems.
II. Physical effects of fire.
III. Concepts of fire effects on individuals and species.
IV. Fire effects in selected vegetation zones.
V. Fire control and management.

INFORMATION: Conference Secretary
Fire in Northern Circumpolar Ecosystems
Fire Science Center
P.O. Box 4400, Fredericton,
New Brunswick, E3B 5A3, CANADA

SPONSORS: SCOPE and MAB

UPCOMING CONFERENCES AND WORKSHOPS Continued

Workshop on Coastal Ecosystem Research (MAB-5b)

DATE: November 7-8, 1979 PLACE: Baton Rouge, Louisiana

TOPIC: Summary and review of coastal ecosystem research under the Sea Grant Program (NOAA). Workshops on the use of coastal ecosystem research for management purposes, system modelling and developing estuarine quality indicators.

INFORMATION: Jack R. Van Lopik
Dean, Center of Wetland Resources
Louisiana State University
Baton Rouge, Louisiana 70803

SPONSORS: National Sea Grant Program, U.S. MAB

Symposium on the "Effects of Air Pollutants on Mediterrean and Temperate Forest Ecosystems" (MAB-2)

DATE: June 22-28, 1980 PLACE: University of California
Riverside, California

TOPIC: Comparison of descriptive studies of the effects of major air pollutants on single species, with studies using models simulating the effects of pollutant stress in an ecosystem. Context: analysis of pollutant stress levels on ecosystem structure and function, and discussion of strategies for air quality and forest ecosystem management.

INFORMATION: Peter F. Ffolliott, Chairman MAB-2
School of Renewable Natural Resources
University of Arizona
Tucson, Arizona 85721

MAB-4 Symposium on National and International Impacts of Limited Water Resources for Southwest Agriculture.

DATE: Early October 1981 PLACE: Tucson, Arizona

TOPIC: Analytical consideration of physical and social impacts of expected water supply deficiencies in the Pacific-Southwest on agriculture and related environmental, social and political factors.

INFORMATION: Jack D. Johnson
Office of Air Land Studies
University of Arizona
Tucson, Arizona 85719

MAB CALENDAR

May 22-23	MAB-5a-5b (Freshwater, Coastal Zone Resources) Directorate meetings, Tallahassee, Florida
June 4	MAB-7b (Islands--Caribbean) Directorate meeting, San Juan
June 7-8	Pesticides Strategy Conference, Washington, D.C. (MAB-9, Pesticides Use)
June 19-20	MAB-4 (Arid Lands) Subgroup--limited water use conference, Reno, Nevada

MAB CALENDAR Continued

- July 2 MAB-11 (Urban Areas) Subgroup, Washington, D.C.
- July 5-7 International Workshop, "The Perception of Pests and Pesticides on Environmental Hazards", (MAB-9 and MAB-13 Environmental Perception) Cambridge, England
- August 5-11 MAB-3 Working Seminar, International Development of Rural Communities in Arid and Semi-arid Lands, Saltillo, Mexico.
- August 20-21 MAB-4 Directorate meeting, Fort Collins, Colorado
- August 27-31 International MAB Workshop on Problems of Bioindication to Recognize Ecological changes occurring in Terrestrial Ecosystems due to Anthropogenic Influences, Halle, Germany
- September 17-20 Conference on Environmental Management and Economic Growth in the Smaller Caribbean Islands, Barbados, MAB-7b.
- September 17-20 Second International Reindeer-Caribou Symposium, Røros, Norway (MAB-6b, Arctic).
- October 29-
November 2 MAB-2 International Symposium - Stability of Spruce Forest Ecosystems, Brno, Czechoslovakia
- October 22-24 Fire in Northern Circumpolar Ecosystems, Fredericton, New Brunswick, CANADA (MAB-2)
- October 22-24 MAB National Committee Meeting, Alexandria, Virginia
- November 7-9 Workshop on Coastal Ecosystem Research and MAB-5b Directorate meeting, Baton Rouge, Louisiana.