

# U.S. MAB BULLETIN

THE UNITED STATES NATIONAL COMMITTEE FOR THE MAN AND THE BIOSPHERE PROGRAM

July 1990

Volume 14, No. 2

## U.S. National Committee for the Man and the Biosphere Program

### Request for Proposals FY 1991

#### Introduction

*The mission of the United States Man and the Biosphere Program (U.S. MAB) is to foster harmonious relationships between humans and the biosphere through an international program of policy-relevant research which integrates social, physical and biological sciences to address actual problems. These activities—broadly interpreted—include catalytic conferences and meetings, education and training, and the establishment and use of biosphere reserves as research and monitoring sites.*

To implement its mission, the U.S. National Committee for U.S. MAB hereby announces its priorities and criteria for the selection of original research proposals and projects to receive U.S. MAB support in Federal fiscal year 1991, contingent upon the availability of funds. While the currently available funds are relatively modest (less than \$1 million), it is intended that these funds will enable scientists to begin in a limited, yet timely, manner interdisciplinary pilot projects and programs. U.S. MAB funding is aimed at stimulating scientists from different disciplines to work together in the areas described below.

Scientists are encouraged to seek complementary funds from other sources. Funding from U.S. MAB is not intended to substitute for discipline specific support available from other sources. Proposed research and projects, such as symposia, workshops, or other activities which further the U.S. MAB objectives, may be spread over several years. Proposed workshop and similar activities must be especially innovative to merit consideration. Research activities proposed should be innovative and

interdisciplinary in order to comply with the interests of the U.S. MAB Program.

Because of limited available funding, U.S. MAB will give priority consideration to proposals that complement the missions of the U.S. MAB directorate programs. Interested scientists and individuals are encouraged to write to the U.S. MAB Secretariat to receive copies of the full U.S. MAB Directorate Mission Statements on:

- High Latitude Ecosystems;
- Human Dominated Systems;
- Marine and Coastal Ecosystems;
- Temperate Ecosystems; and
- Tropical Ecosystems.

#### Program Areas

*In the area of High Latitude Ecosystems, U.S. MAB seeks proposals that enhance the understanding and rational management of resources and ecosystems in the high-latitude regions of the United States and other circum-polar northern lands. Proposals to accomplish this should seek participation in and support of cooperative international endeavors; foster integrated research in biological, physical, and the social sciences in applying scientific and*

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#### In This Issue

- U.S. MAB FY 1991 Request for Proposals
- Positions Available on U.S. MAB Directorates

## Newly Reduced Price! New Version of Biosphere Reserve Brochure

The new version of the Biosphere Reserve Brochure/Map, updated to contain all biosphere reserves designated through July 1989 and containing a new code for more easily locating all biosphere reserves worldwide, is now available at a reduced price and with a new stock number. The stock number is now #044-000-02277-0.

For orders of 100 copies or more the brochure is available through the Government Printing Office (GPO) Bookstores, 941 North Capitol Street, NE, Washington, DC 20401 or 1510 H Street, NW, Washington, DC 20005 or by telephone order : (202)783-3238, Stock # 044-000-02277-0 at a cost of \$225.00 per hundred. **Please note. The stock number printed in the last bulletin has been changed. Please order Stock # 044-000-02277-0.**



### U.S. MAB BULLETIN

The U.S. MAB Bulletin is published quarterly by the U.S. MAB Secretariat, OES/EGC/MAB, Department of State, Washington, DC 20520. Tel. (202) 632-2816, 2786.

*"The mission of the United States Man and the Biosphere Program (U.S. MAB) is to foster harmonious relationships between humans and the biosphere through an international program of policy-relevant research which integrates the social, physical, and biological sciences to address actual problems. These activities—broadly interpreted—include catalytic conferences and meetings, education and training, and the establishment and use of biosphere reserves as research and monitoring sites."*

**Adopted by the U.S. National Committee for the Man and the Biosphere Program, January 6, 1989.**

U.S. MAB is supported by the United States Department of State, the United States Department of Agriculture-Forest Service, the United States Department of the Interior-National Park Service, the Agency for International Development, the Environmental Protection Agency, the National Oceanic and Atmospheric Administration, the National Aeronautics and Space Administration, the Peace Corps, the Smithsonian Institution and the National Science Foundation.

The program is organized into five directorates: High Latitude Ecosystems; Human Dominated Systems; Marine and Coastal Ecosystems; Temperate Ecosystems; Tropical Ecosystems; and a U.S. MAB Coordinating Committee for Biosphere Reserves.

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technological advances to societal needs; and include the concerns of multi-cultural residents and indigenous peoples of the north. Proposals should foster and support informed and rational policy formulation relevant to high-latitude

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## Notes From the Executive Director

This is the year's most popular issue of the U.S. MAB Bulletin, as U.S. MAB hereby announces its research and project priorities for funding in fiscal year 1991. Your attention is also being called to some outstanding products of past MAB efforts as exemplified in the new MAB book series.

Those interested in being considered to serve on a U.S. MAB directorate must send their applications to the Secretariat by September 1, 1990. The application and selection process is described again in this issue. Applicants are reminded that volunteering to serve on a U.S. MAB directorate does entail time and effort in working to implement the directorate's mission statement and develop the directorate's program. Service on a directorate, to provide expert guidance and management in implementing the directorate's mission, will constitute a real interdisciplinary working experience.

Readers will notice that this year's Request For Proposals (RFP) focuses on the five program areas that are being developed by U.S. MAB, yet it also calls more explicitly for inter-disciplinary projects. To accomplish this within the \$50,000 project budget limit, we recognize, is a challenge, and that perhaps in most cases only pilot projects can be initiated with U.S. MAB funding. This is where, I believe, U.S. MAB should be at this stage. We are casting a broad net seeking the best in interdisciplinary project proposals with a distinctive policy relevance that would not normally be eligible for funding from the more traditional sources.

As the U.S. MAB directorates' programs are implemented, future requests for proposals will seek projects that complement this program development. Our long-run objective is to build strong policy-relevant programs in areas of specific interest to furthering our mission of improving the interrelationships of man(kind) and the biosphere.

Roger E. Soles

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regions including: sustainable development, global change, and maintenance of biological diversity and stability in high-latitude ecosystems.

***In the area of Human Dominated Systems, U.S. MAB seeks*** proposals that address the issues arising in connection with human activities that overwhelm or threaten to overwhelm natural ecosystems and their life-support functions. Research topics are sought on indicators of sustainable or regenerative development; human decisionmaking processes and institutions related to ecosystem management; urban systems issues such as pollution, health sustainability, and ecological functioning; agricultural systems issues such as the integration and sustainability of agriculture, rural communities, and the environment; and the impact of population and local institutions on biosphere reserves.

***In the area of Marine and Coastal Ecosystems, U.S. MAB seeks*** proposals that assess the sources, impacts, and control of marine pollution, including but not limited to nutrient loading, eutrophication, siltation, and relationships to freshwater resources; analyze sea-level rises, coastal erosion, and other land margin disturbances; assess habitat loss or alteration, including implications for biological diversity; identify and estimate the means for and benefits of preservation of traditional marine and coastal uses; clarify the relationships between natural fluctuations and human perturbations, as with red tides and harmful algal blooms; and, investigate fisheries and other living resource management issues.

***In the area of Temperate Ecosystems, U.S. MAB seeks*** proposals that complement the directorate's major theme of management of the temperate landscape for diversity, resilience, productivity, and sustainability for the long term. Proposals are sought that will enhance opportunities for sustaining human and environmental systems by integrating socio-economic and ecological processes influencing landscape patterns and their effects. Proposals and the products of the projects should address immediate or emerging issues and be of use to major land management agencies, land owners, and authorities coordinating multi-ownership resources.

Successful projects will be encouraged to function as satellite programs to provide pertinent information about specific issues that are either beyond the scope of the more comprehensive U.S. MAB directorate level projects or to provide comparative information from other regions. Principals should be prepared to work in close cooperation with the U.S. MAB Directorate on Temperate Ecosystems.

***In the area of Tropical Ecosystems, U.S. MAB seeks*** proposals on tropical ecosystem restoration and management of tropical ecosystems. Proposals should be interdisciplinary, with a holistic focus, have strong scientific underpinning, and have clear implications for policy and/or decisionmaking. More specifically, the Tropical Ecosystem Directorate is interested in advancing the field of Social Ecology, which addresses the interface between the social and natural sciences. Successful proposals must demonstrate that the human aspects of the research are an integral part of the study and must include a clear effort to address the human-biosphere interaction.

### General Instructions:

Preference will be given to proposals which:

- are inter- or trans-disciplinary;
- request \$50,000 or less;
- when international, involve scientists from the host country;
- deal with environmental policy issues relevant to agencies that support U.S. MAB;
- are submitted by U.S. citizens or persons studying or teaching at U.S. institutions / universities; and
- within the program areas, utilize units of the International Network of Biosphere Reserves as sites to integrate appropriate project components of monitoring, research, education or demonstration and promote biosphere reserves as focal points for special regional and interagency cooperation. Regional MAB/Biosphere Reserve projects are encouraged.

All proposals must first be submitted as a prospectus of a maximum length of three (3) pages. They must be accompanied by a summary biographic sketch of the potential principals(s), which includes exceptional qualifications and lists any relevant publications. It is encouraged that bibliographic sketches demonstrate that principals have worked with others from different disciplines. The bibliographic sketch of each principal may not exceed three (3) pages. The prospectuses must also be accompanied by a

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cover sheet clearly indicating how the potential proposal meets the above stated requisite criteria.

U.S. MAB will not pay overhead fees on grants.  
Mail prospectuses to:

U.S. MAB Secretariat  
OES/EGC/MAB  
Room 833, SA-5  
U.S. Department of State  
Washington, D.C. 20522-0508

No prospectus will be accepted after November 5, 1990. Prospectuses will be subject to an administrative review for adherence to the requirements listed and will be returned without review if deficiencies are found.

### **Evaluation and Review Process of Prospectuses**

The U.S. MAB Secretariat will distribute prospectuses to the appropriate U.S. MAB Directorate. Individual Directorates will review the prospectuses based on their responsiveness to this call, relevancy of the proposed activity to their mission statements, and the performance competence of the proposed principal(s) as evidenced by the summary biographic sketch.

Prospectuses favorably reviewed by a Directorate will be sent to the U.S. National Committee for MAB for evaluation at the January 1991 National Committee meeting. The National Committee will review each of these prospectuses for its relevance to the U.S. MAB program priorities. The National Committee will then determine which principals will be invited to submit a full proposal. The U.S. National Committee, at its own initiative, may request that additional proposals on specific subjects be submitted for review and consideration.

### **Evaluation and Review Process of Proposals**

Invited prospective investigators should submit proposals that clearly state the objectives, scientific rationale, methodology, personnel, time and funding requirements.

Complete project and research proposals must be received by the U.S. MAB Secretariat by close of business May 1, 1991. Proposal texts may not exceed 25 pages, double-spaced, including a two-page executive summary describing the objective of the proposed effort and the method of approach.

If proposed project activities are international in scope, the proposal must provide written evidence that host-country permissions on an appropriate level have already been obtained to carry out the project.

All proposals must contain: (1) clearly defined objectives; (2) a feasible work plan to achieve those objectives within the time frame and resources of the grant; and (3) specified products that will result from the grant.

Proposals must identify one individual for contract purposes and specify one institution to receive and sub-allocate funds for the proposed activities.

Proposals will be subject to an administrative review for adherence to listed requirements and if deficiencies are found, will be returned without further consideration.

Appropriate U.S. MAB Directorate and peer reviewers, including specialists in the areas of the proposals, will be selected by U.S. MAB to evaluate the proposals. Evaluative criteria for assessing the proposals include but are not limited to: the intrinsic scientific or technical merit of the activities; the utility or policy relevance of the research or activities; the interdisciplinarity of the proposed activities; and the performance record of the principal(s).

A final ranking of the proposals will be made by the U.S. National Committee for the Man in the Biosphere Program based on all of the above factors and their assessment of each proposal's relevancy to the goals of U.S. MAB. Proposals will then be funded in the order of their assigned rank and based on available funds.

Principals will receive copies of all peer review evaluations made of their proposal and a written notification of the Committee's decision on their project. Winning proposals become part of the public domain. Proposals not selected for funding by the U.S. National Committee for MAB will be returned to the authors.

The National Committee will notify all principals of its final decisions in August/September 1991. Funds will be committed to the managing institutions identified in the selected proposals by September 30, 1991.

Agencies supporting the U.S. MAB Program:  
Agency for International Development, Department of Energy, Environmental Protection Agency, USDA Forest Service, National Aeronautics and Space Administration, National Oceanic and Atmospheric Administration, National Park Service, National Science Foundation, U.S. Peace Corps, the Smithsonian Institution, and the Department of State.

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## Positions Still Available on U.S. MAB Directorates

The U.S. National Committee for MAB will accept applications until September 1, 1990 for a limited number of 3-year appointments to the U.S. MAB Directorates. Openings still exist on each of the directorates. Applicants from both the social and biological sciences as well as others will be considered for the directorates on High Latitude Ecosystems, Human Dominated Systems, Marine and Coastal Ecosystems, Temperate Ecosystems, and Tropical Ecosystems.

The travel and related costs of attending directorate meetings by scientists and others employed by government agencies must be supported by the attendee's agency. The travel and related costs of attending directorate meetings by scientists and others from institutions in the private sector will be supported by the U.S. MAB Program.

Persons who are interested in applying must first contact the U.S. MAB Secretariat for an application form and for a copy of the appropriate directorate mission statement. The mission statement outlines the core of each directorate's program. Applications will be accepted by the Secretariat through September 1, 1990; appointments will be made in November.

## Symposia

**RESOURCE TECHNOLOGY 90** will be held November 12–15, 1990 at the Georgetown University Conference Center, Washington, D.C. Resource Technology 90 will focus on the applications of new or emerging technologies in natural resource management. For more information, preliminary programs, and registration forms call or send a FAX to (303) 226–1688 or write to: Resource Technology 90, 2625 Redwing Road, Drake Executive Plaza, Ste 120, Fort Collins, Colorado 80526–2878.

**SUSTAINABLE CITIES SYMPOSIUM: Preserving and Restoring Urban Biodiversity** will be held October 4–6, 1990 at the Chicago Academy of Sciences in Lincoln Park, Chicago, Illinois. It will be sponsored by the U.S. EPA, the USDA Forest Service, and the National Park

Service. For further information contact: Kathy J. Olsen, Land and Water Policy Center, Department of Geology and Geography, University of Massachusetts, Amherst, MA 01003. Tel. (413) 545–2499.

**New Perspectives for Watershed Management: Balancing Long-Term Sustainability with Cumulative Environmental Change.** This symposium will be co-sponsored by the University of Washington's Center for Streamside Studies and Oregon State University's College of Forestry and will be held from November 27–29, 1990 on the University of Washington campus in Seattle. The objectives of the symposium are to: present the current status of watershed research and regional models; identify indicators of environmental change at different scales; investigate new technical tools and system models; and explore how to relate the tools to management and human needs. For further information contact Betty Johanna, (206) 543–0867, or FAX (206) 685–0790.

## Newest Release From the UNESCO/MAB Book Series

**Volume 5, Sustainable Development and Environmental Management of Small Islands**, edited by William Beller (of the U.S. MAB directorate on Caribbean Islands), P. d'Ayala, and Philippe L. Hein. This book is composed of three parts. The first addresses issues related to islands in general. The second provides case studies of particular islands and island groups. The final part coalesces the first two into recommendations for sustainable development and environmental management of small islands in specific geographic regions.

Also recently released:

**Volume 3, Exploiting the Tropical Rainforest, An Account of Pulpwood Logging in Papua New Guinea**, edited by D. Lamb of the Botany Department, University of Queensland, Australia. This book describes a large pulpwood logging operation in the lowland rainforests of Papua New Guinea. It examines the events leading up to the decision to begin pulpwood logging, and some of the consequences the project has had on the forests and people of Papua New Guinea.

These publications are available from The Parthenon Publishing Group, Inc., 120 Mill Road, Park Ridge, NJ 07656, USA.

## PUBLICATIONS

### Free publications available from U.S. MAB:

Remember, enclose your self-addressed mailing label (or labels, if you are requesting several items).

**Forest Inventory and Analysis Workshop Proceedings**, results of a 1989 workshop sponsored by U.S. MAB and hosted by the Society of American Foresters, of representatives of the USDA Forest Service, and of the environmental community to address the applicability, proper use, and interpretation of Forest Inventory and Analysis (FIA) data sets for noncommodity forests evaluations.

Puerto Rico Workshop on **LAND-BASED SOURCES OF MARINE POLLUTION IN THE WIDER CARIBBEAN REGION**, August 7-9, 1989, San Juan, Puerto Rico.

**THE NATIONAL SCIENCE AND TECHNOLOGY WEEK POSTER, APRIL 22-28, 1990**, including a directory of available educational materials.

### Still available from U.S. MAB:

**THE FORESTED WETLANDS OF THE SOUTHERN UNITED STATES**, proceedings of the symposium, July 12-14, 1988, Orlando, FL.

UNESCO Publication, MAB Digest 4, **The Role of Land/Inland Water Ecotones in Landscape Management and Restoration, Proposals for Collaborative Research**, edited by Robert J. Naiman, Henry Decamps, and Frederic Fournier. To determine the management options for the conservation and restoration of land/inland water ecotones through increased understanding of ecological processes.

### Available from others:

Newly Reduced Price!

**WHAT IS A BIOSPHERE RESERVE?** Brochure/Map. Listing and location of all (international and U.S.) biosphere reserves as of July 1989. Containing a new code to the location of all biosphere reserves. Available from: GPO

Bookstore, 710 North Capitol Street, Washington, DC 20401. Tel. (202) 783-3238. New Stock # 044-000-02277-0 @ \$3.00 each or \$225.00 for 100.

**Proceedings of the U.S. Man and the Biosphere sponsored workshop on Non-Commodity Forest Resources**, held at the national headquarters of the Society of American Foresters on August 24, 1989. The workshop was designed to encourage better communication between the environmental community and the USDA Forest Service regarding the need for Forest Inventory and Analysis data sets for the evaluation of noncommodity forest resources. The document contains some valuable information and will be of assistance in the identification of additional sources of information. It is available from the Society of American Foresters, 5400 Grosvenor Lane, Bethesda, MD 20814.

**Ecoregions Map of the Continents, A New Aid to Monitoring Global Change**, by Robert G. Bailey. A map which shows the Earth's land areas subdivided into regions based on macroscale patterns of ecosystems. These regions delimit large areas within which local ecosystems recur throughout the region in a predictable fashion. The map can, therefore, be used to spatially extend data obtained from limited sample sites. Copies of the map are available from: Robert G. Bailey, USDA Forest Service, 3825 E. Mulberry St., Fort Collins, CO 80524.

**World Resources 1990-91**, a complete reference book produced by the World Resources Institute on global environmental trends and conditions. It contains new findings on the rate of tropical deforestation; rankings of greenhouse gas emissions, by country; an overview of Latin America's environment; and reports and analyses of the most critical environmental and natural resource problems. This publication is available at a cost of \$17.95 plus \$3.00 for handling from WRI Publications, P.O. Box 4852, Hampden Station, Baltimore, MD 21211.

UNESCO Publication, MAB Digest 1 on **Eutrophication Management Framework for the Policy-Maker** by Marjorie Holland, Walter Rast, and Sven-Olof Ryding. Eutrophication of lakes and reservoirs is one of the most pervasive water quality problems worldwide. This digest aims to provide: quantitative tools for assessing the state of eutrophication of lakes and reservoirs; a framework for

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developing cost-effective management strategies; specific technical guidance; and case studies for effective management of eutrophication. Available from: MAB-UNESCO, 7, place de Fontenoy, 75700 Paris.

UNESCO Publication, MAB Digest 3 on **Contributing to Sustained Resource Use in the Humid and Sub-Humid Tropics, Some Research Approaches and Insights**, by Malcolm Hadley and Kathrin Schreckenber. An overview of recent, ongoing, and planned activities within the MAB framework pertaining to the ecology of humid and sub-humid tropical ecosystems, principally forests and savannas. Available from: MAB-UNESCO, 7, place de Fontenoy, 75700 Paris.

**FINAL REPORT OF THE INTERNATIONAL WORKSHOP, "LONG-TERM ECOLOGICAL RESEARCH—A GLOBAL PERSPECTIVE,"** September 18–22, 1988 in Berchtesgaden, Federal Republic of Germany. It is available from: MinR Wilfried Goerke, Dipl.-Biologe, Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit, Godesberger Allee 90, 5300 Bonn 2, Federal Republic of Germany.

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DEPARTMENT OF STATE PUBLICATION 9731  
Bureau of Oceans and International Environmental  
and Scientific Affairs

*Released July 1990*

U.S. Man and the Biosphere Program, OES/ENR/MAB

**DEPARTMENT OF STATE, U.S.A.**  
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