

U.S. MAB

BULLETIN

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

APRIL 1996

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New U.S. MAB Biosphere Reserve Coordinator

Elizabeth Renee Owen has accepted the position of Biosphere Reserve Coordinator to begin April 1996. Ms. Owen is charged with assisting the biosphere reserve managers to implement the Strategic Plan for U.S. Biosphere Reserves.

Ms. Owen has served as Assistant Superintendent at Death Valley National Park since December 1994 to aid in the implementation of the California Desert Protection Act and the transfer of Bureau of Land Management administered lands into three national parks created by that act.

Elizabeth served previously with the Bureau of Land Management for 15 years in a variety of senior staff positions. Her assignments involved development of mineral leasing policy and programs, recreation resource management, new program development, and wilderness policy and management issues. She has an extensive background in policy development, program implementation, and in forging effective partnerships not only among other Federal agencies, but with many private groups and NGOs.

In her 25 year Federal career, Ms. Owen has served in the Office of the President, the Environmental Protection Agency, The Federal Trade Commission, the U.S. Department of Commerce (International and Domestic) and the Department of Interior's Heritage Conservation and Recreation Service.

Elizabeth has traveled extensively and has lived in Lebanon, France, and various U.S. locations. Her interests include canoeing, kayaking, hiking, reading, and remodeling a cabin in West Virginia.

From U.S. MAB Chair D. Dean Bibles

Land Use Zones and Biosphere Reserves.

At the request of the National Committee, the Directorate on Biosphere Reserves is developing recommendations on how U. S. MAB can encourage various groups and areas to utilize the biosphere reserve framework to assist in achieving a sustainable society within the U.S. early in the 21st century.

We hope that by broadening the biosphere reserve concept here in the U.S. we can help to provide a framework for promoting cooperative regional activities that can be of greater service to all Americans. Voluntary, educated actions of our citizenry are our best insurance for a sustainable future.

Some local groups may simply not want to be involved in international agreements, programs or activities, but they are vigorous in their actions to protect their local and regional interests and environment. U.S. MAB wants to encourage those groups and to facilitate and promote local activities with that goal.

We have found that many people, managers and stakeholders, do not have a clear concept of the various land use zones which are inherent within the biosphere
(Continued to page 7)

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From the Executive Director

In all of my years here at MAB, fiscal year 1996 is shaping up to be the most uncertain and difficult to make any firm program plans. The off and on again Federal government, and month to month or week to week continuing resolutions have made it impossible for the supportive agencies to determine their levels of financial support for MAB. Without benchmark figures, it is difficult for the National Committee to provide adequate guidance to the directorates in program plans and activities and consequently the level of support that they should seek.

To ensure that the best programs be developed, the National Committee always encourages more proposals and larger plans than in the aggregate we can support. That is the nature of the competitive review process of MAB: the substance of proposals attracts the form, the dollars, to most effectively implement MAB policies and programs. All proposals are reviewed by the agencies. After intense interchange and discussion of the peer review comments, the National Committee determines



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"The mission of the United States Man and the Biosphere Program (U.S. MAB) is to explore, demonstrate, promote, and encourage harmonious relationships between people and their environments building on the MAB network of Biosphere Reserves and interdisciplinary research. The long-term goal of the U.S. MAB Program is to contribute to achieving a sustainable society early in the 21st Century. The MAB mission and long term goal will be implemented, in the United States and internationally, through public-private partnerships and linkages that sponsor and promote cooperative, interdisciplinary research, experimentation, education and information exchange on options by which societies can achieve sustainability." Adopted by the U.S. National Committee for the Man and the Biosphere Program, July 26, 1995.

U.S. MAB is supported by the Agency for International Development; the Department of Agriculture-Forest Service; the Air Force; the Department of Commerce-National Oceanic and Atmospheric Administration; the Department of Energy; the Department of the Interior-Bureau of Land Management, - National Biological Service, - National Park Service; the Department of State; the Environmental Protection Agency; the National Aeronautics and Space Administration; the National Institutes of Health; the National Science Foundation; the Peace Corps; and the Smithsonian Institution.

The program is organized into six directorates: Biosphere Reserve, High Latitude Ecosystems, Human-Dominated Systems, Marine and Coastal Ecosystems, Temperate Ecosystems, and Tropical Ecosystems.

the best projects to support and the appropriate levels of that support. But, the continuing resolutions of fiscal year 1996 is a very different context. Our sincerest appreciation goes out to those on the directorates who have to labor under these conditions.

The MAB secretariat is also in an unusual position this year. A part of our normal tasks is to arrange for the appropriate peer review of the directorate initiated projects and to ensure that all Federal funding guidelines are followed. This year, however, because of the uncertainties of funding levels, we have been writing proposals ourselves to outside funding agencies to support the international connections of biosphere reserves.

The products of these proposals will eventually link the biosphere reserves with emerging regional MAB networks and with the UNESCO MABNet. It is quite a different perspective being on the "fund seeking" side of the ledger. This experience should make future U.S. MAB requests for proposals clearer and less ambiguous.

Finally, we are delighted to welcome Elizabeth Owen to the U.S. MAB staff as the Coordinator for U.S. Biosphere Reserves. Our Biosphere Reserve Directorate is pulling together some very ambitious plans and programs to fully implement this concept within the U.S. Elizabeth will occupy a key position in developing and implementing these plans. We especially appreciate the cooperation between the National Park Service and the Bureau of Land Management to make this position a reality in U.S. MAB.

Roger E. Soles

Society for Ecological Restoration Annual Conference

June 20-22
Rutgers University On-campus Sessions
June 17-19, 22,23
New York/New Jersey Off-campus Sessions

The conference theme, Paved to Protected: Restoration in the Urban/Rural Context, presents papers and discussion groups in five areas: urban restoration, regional and global impacts on restoration, critical links in the biotic world, integrating social and cultural systems with restoration, and science and restoration.

For registration information please contact:
Society for Ecological Restoration Conference
1207 Seminole Highway, Suite B
Madison, WI 53711 USA
Tel. (608) 262-9547, Fax. (608) 265-8557
E-mail: ser@vms2.macc.wisc.edu



Biosphere Reserve Directorate Funds Six Projects

The Biosphere Reserve Directorate of U.S. MAB has chosen six workshops/activities for funding in FY 1996. The grantees were selected from proposals submitted in response to a Request for Proposals issued by the directorate in October 1995.

The funded workshops and activities are:

"Intercultural Cinema Lab," submitted by Valdosta State University. The funds will support a workshop for middle grades teachers at the Central Gulf Coastal Plains Biosphere Reserve at Apalachicola, Florida. The topics of the workshop will be the physical geography, social studies, and science education approaches to the study of the watersheds and ecosystems of south Georgia and north Florida.

"A Multiple Species Habitat Conservation Plan for the Mojave and Colorado Desert Biosphere Reserve," submitted by Coachella Valley Mountains Conservancy. The proposal is a series of three workshops for the purpose of developing reserve design and connectivity criteria for a multiple species reserve system in an approximately 1,850 square mile area of the western Colorado desert in Riverside County, California.

"Putting the 'Man' (Human) Back into the U.S. Man and the Biosphere Program," submitted by Phillip Gibson and Kieran J. Fogarty. The funds will support a workshop to identify resources for health related information to identify regional health concerns within the southern Appalachian area and their relation to the future of regional resource management; and identify health related data sources to be added to the existing Southern Appalachian Assessment GIS database.

"Delineation of Critical Areas for Selected Rare Wildlife of the New Jersey Pinelands," submitted by the New Jersey Division of Fish Game and Wildlife-Endangered and Nongame Species Program. The funds will support workshops focused on umbrella species, and populations, specifically certain reptiles, amphibians, and insects, that depend upon the Pinelands for habitat.

"The Mammoth Cave Biosphere Reserve GIS/GPS Training Workshop," submitted by the Barren River Area Development District. The funds will support staffing for training sessions in the proper use of the Federal Geographic Data Committee endorsed Content Standards for Digital Geospatial Metadata. Participants will come from various data creation and management organizations of the ten county area of central Kentucky.

"Sonoran Bioregion Network: Establishing Cross-border Communication Linkages," submitted by the Sonoran Institute. Funds will be applied to establishment of the Sonoran Biosphere Communications Network, a computer link among El Pinacate y Gran Desierto de Altar BR, Alto Golfo BR in Mexico, and Organ Pipe Cactus National Monument BR.

MABNetAmericas Meeting Builds Consensus

January 15 to 18, 1996, 28 scientists, biosphere reserve managers, and administrators from 13 countries met at the La Selva Biological Station in Costa Rica to discuss the MABNetAmericas initiative and to plan future activities. The meeting was organized and co-chaired by Bill Teska, the MABNetAmericas Coordinator of the U.S. MAB Secretariat and Mario Rojas, the Coordinator of the CYTED network (the Iberoamerican Program of Science and Technology for Development). Financial support for this meeting was provided by UNESCO, CYTED, and supporting MAB programs.

The goal of the MABNetAmericas initiative is to create and support an ecological network for the Americas, with the linking of the 100 biosphere reserves of the Western Hemisphere serving as the initial core of an interactive system. This information network, with the collaborative efforts of researchers and resource managers at the regional level, will make the data and information stored at the reserves more available to scientists and policymakers.

The meeting participants endorsed the "Goals, Implementation Strategy & Discussion Paper" that was drafted after the initial May, 1995 meeting as the guiding document for the program.

A proposal was drafted to request support for an inter-American meeting to be held in autumn 1996 for policymakers, administrators, biosphere reserve managers, scientists, NGOs, and other interested parties to explore the development of the MABNetAmericas concept. The proposed meeting will include a training program on information technology and sustainable development; and discussions related to adopting standardized metadata bases, sharing of data, and creating cross boundary research and environmental analysis activities.

Training programs for managers and scientists is an important component of the autumn meeting and also of a second proposal for funding which focuses on utilizing the biosphere reserve system and MABNetAmericas as the mechanisms by which researchers could conduct collaborative work through metadata bases. Bill Teska is facilitating the completion of these proposals and exploring options for funding.

The meeting participants recommended the creation of a Consultative Group made up of representatives from organizations such as U.S. MAB, CYTED, UNESCO and SI/MAB. The Group will provide advice during the next phase of the development of MABNetAmericas.

Current activities of the program include an update of the contact list for the biosphere reserves of Central and South America, promotion of the MABNetAmericas concept at regional and national levels, and development of demonstration projects at selected biosphere reserves.



Biosphere Reserves Managers' Survey

In preparation for the October 1995 Biosphere Reserves Managers' Workshop, William Gregg of the National Biological Service, surveyed the managers' perceptions about their biosphere reserves.

Twenty-nine of the 47 U.S. Biosphere Reserves (BRs) responded to the survey. Various categories relating to management benefits, stakeholder participation and concerns, and administrative needs were surveyed.

Analysis of the survey found that BRs which reported cooperative programs that identify explicitly with MAB concepts benefited in the areas of ecosystem management, environmental awareness, research, international cooperation, addressing environmental problems, political support, data/information on natural systems, ethic of sustainability, public recognition, and planning/decision-making.

Universities and research institutions, federal agencies, state and regional agencies, local governments, con-

servation groups, and resource users were the most frequently mentioned participants in BR partnerships. There was more participation by biosphere reserve staff, local governments, and groups promoting economic development in BR partnerships when the partnerships were explicitly identified with MAB concepts.

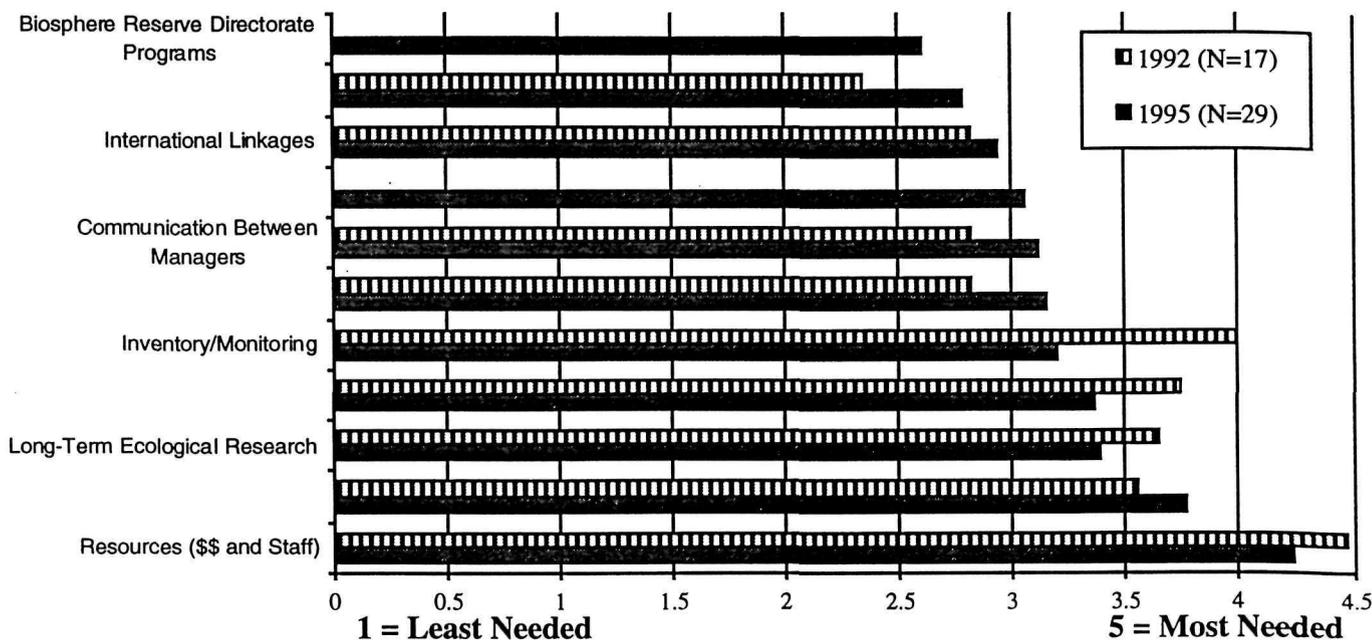
Managers reported that identification with biosphere reserve concepts is greatest among managers, less among staff and partner agencies and organizations, and least among local people.

About half of the responding managers indicated having received expressions of concerns about biosphere reserves such as:

- the uses of private property
- infringement of economic development
- international influence on local affairs
- traditional uses of resources

These concerns were from local residents, private organizations, resource users, state and local governments, Federal agencies, and visitors.

Managers' Assessment of What is Needed to Enhance Biosphere Reserve Related Activities (Comparison 1992-1995 Surveys)



Managers offered several suggestions to U.S. MAB for enhancing their biosphere reserve programs including: improving politicians' awareness of biosphere reserves; greater U.S. MAB support for managers' efforts to address regional threats; encouraging agency recognition of local staff and time requirements in implementing biosphere reserves; providing clear channels of communication and policy approval for agency participation in MAB activities; and encouraging integrated interpretation of natural resources, history, and cultural resources.

A comparison was made between responses of biosphere reserve managers in 1992 and 1995 on current needs of the biosphere reserves to better meet the challenges of full participation in the biosphere reserves concepts. (See the graph page 4) The managers were most concerned with the need for more staff and monetary resources. Inventory/monitoring, local constituency, long-term ecological research, and support of existing staff were also mentioned as important.

For additional information on the Biosphere Reserves Managers' Survey please contact: Dr. William Gregg, International Affairs Office, National Biological Service, 1849 C Street, NW, Mailstop 3070, Washington, DC 20240. Fax. 202-208-7275, E-mail: William_Gregg@NBS.GOV

Earthwatch Call for Proposals

The Center for Field Research invites proposals for 1997 field grants awarded by its affiliate Earthwatch. Earthwatch is an international, non-profit organization dedicated to sponsoring research and promoting public education in the sciences and humanities. Information about Earthwatch field grants is available on The Center's World Wide Web site (<http://gaia.earthwatch.org/WWW/cfr.html>)

or you can contact:

Dr. Any Hudson
Director, The Center for Field Research
680 Mt. Auburn St.
Watertown, MA 02172
Tel. (617) 926-8200, Fax. (617) 926-8532
E-mail: ahudson@earthwatch.org

or

Sean Doolan
Science Officer, Earthwatch Europe
Belsyre Ct., 57 Woodstock Rd.
Oxford OX2 6HU UK
Tel. (865) 311600, Fax. (865) 311383
E-mail: ewoxford@vax.oxford.ac.uk

Colorado Rockies Regional Cooperative Affiliates with U.S. MAB

At the U.S. MAB National Committee meeting February 21, 1996, the Colorado Rockies Regional Cooperative (CORRC) was officially recognized as an affiliate of U.S. MAB.

CORRC was founded in 1992 as a voluntary organization of Federal, state, and local agencies, private organizations, and universities working to address regional issues affecting ecosystems and biodiversity. The CORRC steering committee of 14 partners is under the leadership of Chairman James C. Crain, and Partnership Coordinator, Howard R. Alden. Projects of 1994 and 1995 included development of a Geographical Information System Data Coop, and education and outreach programs. Current facilitated cooperative research includes natural variability of forest ecosystems, biodiversity of open space grasslands at suburban/agricultural interface, and an overview paper on biodiversity issues of the area.

With a grant from the U.S. MAB Biosphere Reserve Directorate, CORRC is publishing a neighborhood environmental planning guidebook. The guidebook was developed as a cooperative effort by CORRC, staff of Rocky Mountain National Park, and a community association of 130 landowners.

At the February 1996 CORRC annual meeting land use resource management issues were discussed for focus in the coming year. A part time data manager was hired to work with the Data Coop.

Russian Speaking Graduate Students Wanted

U.S. MAB is creating a registry of Russian speaking/reading/writing/ U.S. graduate students in the biological sciences for one to two month work in the former Soviet Union.

U.S. MAB is working on a project to increase access to biological diversity information that exists on the 18 biosphere reserves in Russia. Over the next several years activities will include sending small teams to Russia to convert the biological inventories and species lists on the nature reserves to a standardized metadata format (MABFauna and MABFlora). Funding will be available for travel and an in-country living allowance. Living conditions may be rustic in some cases.

If interested, please send a brief resume that includes name, social security number, statement of fluency in Russian, educational level, dates **when and when not** available, and computer fluency/experience, to:
U.S. MAB
SA-44C, Department of State
Washington, DC 20522-4401



D. Dean Bibles Appointed to Advisory Committee for Biosphere Reserves

D. Dean Bibles, chairman of U.S. MAB, has been appointed to the Advisory Committee for Biosphere Reserves by Federico Mayor, Director-General of UNESCO. The Advisory Committee convenes yearly to advise the Director-General on scientific and technical matters concerning biosphere reserves and the World Network of Biosphere Reserves. Mr. Bibles attended the Advisory Committee meeting April 11-12 in Paris.

LUCAS Update

The Land Use Change Analysis System (LUCAS) is a computer-based application designed to integrate information for a multidisciplinary modeling environment which can be used to address research and management questions concerning land use and its impacts. LUCAS was developed as part of a previous core project of the U.S. MAB Temperate Ecosystems Directorate. <http://www.cs.utk.edu/~lucas>

LUCAS is being used in the Integrated Modeling Project sponsored by the USDA-Forest Service as part of the "Southern Global Change Program" begun in September 1995. LUCAS provides a regional grid for assessment of impacts of environmental changes, landscape processes (fire, insect, disease), and land use change on forest resources for 13 states of the southeastern United States. The project is expected to run through September 1998.

Licensing for LUCAS by the University of Tennessee and the University of Washington is expected in May 1996. The license agreement will require no fee but will allow the developers to keep track of the uses of the program.

LUCAS has recently been upgraded so that the response time has been cut by approximately 66%.

New U.S. MAB Directorate Members

The U.S. MAB directorates are composed of individuals with some expertise in the work of the directorate. Members serve on a voluntary bases but do receive reimbursement for travel if not a Federal employee. There are presently openings on the Tropical Ecosystems Directorate and the Biosphere Reserve Directorate. The application procedure begins with approval by the directorate which in turn presents the candidates of choice to the U.S. MAB National Committee for acceptance. Anyone with an interest in applying may contact the directorate chair listed below.

The mission of the Biosphere Reserve Directorate is to provide the leadership to implement the Strategic Plan for the U.S. Biosphere Reserve Program. Briefly, the members will work cooperatively to establish and support a U.S. network of designated biosphere reserves that are fully representative of the biogeographical areas of the United States. The program promotes a sustainable balance among the conservation of biological diversity, compatible economic use, and cultural values, through public and private partnerships, interdisciplinary research, education, and communication.

Contact: Hubert Hinote
Chair, Biosphere Reserve Directorate
1314 Cherokee Orchard Lane, Gatlinburg, TN 37738
Fax. (423) 436-1701

The mission of the Tropical Ecosystems Directorate is to provide accurate scientific information, along with the management, policy, and scientific implications of this information, to those sectors of society involved in seeking solutions for human and ecological problems in the tropics. This will involve the rigorous synthesis of knowledge, fostering of interdisciplinary communication, education, and the promotion of integrated systems-oriented research that can be applied directly to the resolution of problem issues. The directorate has focused its efforts on the Maya tri-national region of Belize, Guatemala, and Mexico.

Contact: John Wilson
Bureau for Research and Development
Rm. 509SA-18, USAID, Washington, DC 20523
Fax. (703) 875-4639

Dr. Gary Hartshorn New Executive Director of the Organization for Tropical Studies

Dr. Gary Hartshorn, former member of the U.S. MAB Tropical Ecosystems Directorate, has been named the Executive Director of the Organization for Tropical Studies, a non-profit consortium of more than 50 universities and research institutions. Most recently Dr. Hartshorn was Vice President for Research and Development at the World Wildlife Fund which he joined in 1989 as the first director of the Biodiversity Support Program.



Temperate Ecosystems Directorate Presents at Symposium

The U.S. MAB Temperate Ecosystems Directorate research group will present papers and a panel discussion at the 6th International Symposium on Society & Resource Management May 18-23, 1996 at The Pennsylvania State University, University Park, PA. The conference will focus on the usefulness of the social sciences to natural resource decisionmakers and managers.

The topics of papers to be presented are: "Land Ownership and Land-Use Change at the Watershed Scale: Explaining the Past and Predicting the Future;" "Hydrological Modeling for a Land Use Change Analysis System (LUCAS);" and "Comparative Land Ownership Characteristics and Land Cover Change in Three Watersheds, 1986-1991." The panel discussion and summary is titled, "How Can Integrated Social and Ecological Research be Used?"

Participating in the presentations and panel discussion will be: Robert G. Lee, social science; Michael W. Berry, computer science; Susan M. Bolton, hydrology; Penelope J. Eckert, social science; Richard O. Flamm, research science; Scott Pearson, wildlife; David N. Wear, economics; and Shiva Achet, hydrology.

For registration information for the symposium please contact:

Jim Finley, Program Co-chair
School of Forest Resources
The Pennsylvania State University
2B Ferguson Building
University Park, PA 16802 USA
Fax. (814) 865-3725
E-mail: fj4@psuvm.psu.edu

Protected Areas Virtual Library

The World Conservation Monitoring Centre (WCMC) has established The Protected Areas Virtual Library, a new information service, dedicated to assisting the location of information on protected areas on the Internet.

The virtual library is an organized set of links to items (documents, software, images, databases) resident on different computers on the Internet. WCMC regularly reviews information to identify new sources.

The Protected Areas Virtual Library is at URL:
<http://www.wcmc.org.uk/~dynamic/pavl/>

For those with Internet access but without a graphical

interface, a non-graphical interface can be accessed by using the following commands:

telnet rsl.ox.ac.uk, login: lynx, and then type g
<http://www.wcmc.org.uk/~dynamic/pavl/>

For further information please contact: The Information Officer, WCMC, 219 Huntingdon Road, Cambridge CB3 0DL UK
Tel. +44 1223 277314, Fax. +44 1223 277136
E-mail: info@wcmc.org.uk

(Continued from page 1 - Chair D. Dean Bibles)

reserve concept. The idea of a "core" zone being surrounded or connected to a "zone of managed use" and that being surrounded by an undefined "zone of cooperation" is intellectually appealing. Though these zones are ecological models and are not attached to zoning in the legal sense, many private landowners fear that they will lead to increased layers of interference in the use of their land. Through the actions and programs of local groups the various land use zones of the biosphere reserve concept can be properly explained and become reality.

Within U.S. MAB we hope that the application of the biosphere reserve concept primarily results in the adoption of a cooperative community framework for promoting conservation programs and regional activities. An ecosystem approach to management and sustainability will be achieved, we believe, not through increased legal means and zoning laws, but rather through open and democratic dialogue, education and community participation.

In order to achieve full participation, it is necessary to have an understanding and appreciation that property rights are inherent in property ownership. Within this context, U.S. MAB is based on the premise that Americans, no matter where they reside, have a deeply abiding conservation ethic. In MAB we know that when people know and understand the downstream effects of their actions, they will generally seek to develop means to "do the right thing". This intrinsic spirit is what U.S. MAB seeks to promote, stimulate and facilitate.

There has been confusion over being a part of the world-wide network of biosphere reserves. Part of this may be due to signs and brochures at some U.S. Biosphere Reserves that to some imply jurisdiction or authority being passed to UNESCO. There is clearly no change in ownership or sovereignty by being a part of the network. The recommendations being developed by the Directorate on Biosphere Reserves should allow a place in the U.S. MAB community for those who for whatever reason prefer to develop innovative approaches in a local partnership but not be part of an international network.



Publications

To order publications from the U.S. MAB Secretariat, OES/ETC/MAB, SA-44C, Department of State, Washington, DC 20522-4401, please include self-addressed mailing labels.

NEW PUBLICATIONS

from others:

La Participacion Comunitaria en la Gestion Ambiental y el Co-manejo en la Republica Dominicana is the proceedings of the conference held October 1994 in Santo Domingo to discuss strategies in community participation in natural resource management. The conference was organized by the Centro para la Conservacion y el Ecodesarrollo de la Bahia de Samana y su Entorno (CEBSE), in conjunction with the regional Caribbean Natural Resources Institute (CANARI) and brought together more than 50 organizations working throughout the Dominican Republic. Available from CEBSE, Jose Contreras 131, 2 Piso, Matahambre, Santo Domingo, Dominican Republic, 1996, available in Spanish only 200pp., US\$15.

STILL AVAILABLE

from U.S. MAB:

Strategic Plan for the U.S. Biosphere Reserve Program, is an action plan describing the mission, goals, and implementing activities of the U.S. Biosphere Reserve Program. The plan was developed by the U.S. Biosphere Reserve Directorate in its work to support the 47 biosphere reserves of the U.S. 1994. (28pp.)

from others:

South-South Perspectives: A Newsletter of the South-South Cooperation Programme on Environmentally Sound Socio-Economic Development in the Humid Tropics is published annually through UNESCO in English, French, Spanish, and Chinese. The current issue, Number 2, October 1995 contains the final report, list of participants, and abstract of working documents from the Second Annual Meeting of the South-South Cooperation Programme on Environmentally Sound Socio-Economic Development in the Humid Tropics held in Mananara Nord, Madagascar, June 1995. Requests should be addressed to: UNESCO, Division of Ecological Sciences, Programme de Cooperation Sud-Sud, 7 Place de Fontenoy, 75 700 Paris, FRANCE

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