

Appendix A: Sponsor Description

Founded in 1986, at the Smithsonian Institution, the Monitoring and Assessment of Biodiversity Program (MAB) was established to “set protocol standards for the measurement and composition of vegetation in the international network of Man and the Biosphere Reserves around the world and provide biodiversity conservation training associated to the research.” (Alonso, Personal Communication) Then Smithsonian Secretary Robert M. Adams and UNESCO Director-General Amadou-Mahtar M'Bow founded MAB from UNESCO's original Man and the Biosphere Program. Up until 1994 the MAB program was under the Smithsonian's Assistant Secretary for Science, when Robert Hoffman retired. During subsequent Secretary I. Michael Heyman's administration, the Program moved to the office of Biodiversity Programs. Starting in 1999 MAB became associated with the Conservation and Research Center (CRC), a division of the National Zoo. This was the occurrence of an internal reorganization of the National Museum of Natural History. As a result, MAB became more closely associated with the CRC due to their frequent program interactions.

The Smithsonian Institution receives most of its revenue from the federal government yearly through appropriations pre-signed by Congress. The Smithsonian also receives funding through grants for specific projects. Between the fiscal years of 2002-2004 the Smithsonian received from \$1.5 billion to \$1.7 billion yearly, with 2004 marking the most money the Smithsonian has ever received to date. From the \$1.7 billion total received, the National Zoological Park receives between \$30 million to \$32 million yearly. This money is used to fund special programs, research, animal maintenance, and employee salaries.

The Smithsonian Institution's (2004) policy is by its secretary, appointed by the board of regents. The board of regents is made up of the Vice-President of the United States, the Chief Justice (who is the chancellor), three members of Senate, three members of the House of Representatives, and nine private citizens.

The mission of the Smithsonian (2004) is "to increase and diffuse knowledge." The National Zoo (2004) and the Conservation and Research center narrow this goal to promoting leadership and research in conservation science. The MAB program, specifically, aims to further awareness and leadership in the conservation of global biodiversity through education and research. MAB's main research goals are to promote biodiversity data collection and to increase knowledge of ecological functions so that decision-makers can reach informed conservation-based land management decisions.

MAB's Research Program has four main objectives:

- Test and implement protocols for long-term, multi-taxa monitoring of forests.
- Establish biodiversity assessment and monitoring projects to further regional conservation needs.
- Provide data management and analytical procedures that allow rapid assessment and dissemination of information.
- Coordinate the International Biodiversity Monitoring Network (IBMN) to facilitate information exchange, information dissemination, and data quality standards formation. IBMN has a large number of research sites.

The original project description from the Smithsonian Institution explaining our project:

Smithsonian Institution

Monitoring and Assessment of Biodiversity Program

Education and Training Initiative (#1)

Under the National Zoological Park's Conservation and Research Center lies the Smithsonian Institution's Monitoring and Assessment of Biodiversity Program (MAB). MAB uses an integrated approach of research, education and training to promote the long-term conservation of biodiversity on a global scale. We believe sustainable use of resources is possible if reliable data about changes in ecosystems and the impacts on biodiversity can be brought to bear in considering the consequences of human-caused disturbances such as development.

Since 1986, the MAB Program has conducted international research and professional training courses. Recently, countries participating in the Convention of Biological Diversity and the World Summit on Sustainable Development have established 2010 as the target year for significantly reducing the loss of biodiversity. It is, therefore, not only essential that MAB's work continues, but expands to match current and future needs.

For the past ten years, MAB's Education and Training Initiative has conducted two successful professional training courses for scientists, resource managers, and policy-makers. The MAB Program intends to expand its educational reach and audience base. Together with the WPI student group, the MAB staff will select a target area and

audience for an education and outreach project. Subsequently, the WPI interns will conduct research to evaluate existing educational programs and develop a current needs assessment. Based on the information obtained, WPI students will help design an education and outreach plan for the target area and assist in developing the plan's components. MAB's ultimate goal is to implement this education and outreach project to further its work in promoting the conservation of biology. As this pilot project becomes successful, other target areas and audiences may be addressed by MAB in the future.

<http://nationalzoo.si.edu/ConservationAndScience/MAB/training/> (my.wpi.edu)

The purposes of our project were to give MAB an idea of the current state of biodiversity education in the world and to give MAB recommendations for a biodiversity education plan for middle school students. MAB works internationally with governments, industries, academia, non-governmental organizations, local communities, and others to assess and monitor the biodiversity in their regions. MAB does this through an integrated approach of research and training. Our project relates to the education and training part of MAB's mission. Through our research, we have given MAB an idea of the current state of biodiversity education and have given recommendations for a biodiversity education program for middle school students. These topics are both related to biodiversity education and thus are related to MAB's mission.

The staff members of MAB as stated on their website:

Francisco Dallmeier, Ph.D.



MAB Director

Since 1975, Francisco has initiated and managed a number of national and international biodiversity surveys and impact assessments. As a Smithsonian scientist and educator since 1986, he has used his B.S. from the Central University of Venezuela and his M.S. and Ph.D. in wildlife ecology from Colorado State University in his work to link biodiversity conservation and development. He has coordinated over 60 international research and training programs in developing countries. In addition, he has advised national and international committees such as the US National Park Service Inventory and Monitoring Program for Vital Signs, the International Union for Forestry Research Organization (IUFRO), the US and UNESCO Man and the Biosphere Program, the EPA National Advisory Group for Place-Based Ecosystem Management, and the IUCN Species Survival Commission, among many others.

Alfonso Alonso, Ph.D.

Assistant Director for Conservation and Development

At MAB, Alfonso does everything from planning project budgets to writing and



reviewing scientific papers and educational materials on biodiversity assessment and monitoring to developing and carrying out strategies and designs for vegetation and invertebrate sampling protocols. He manages MAB's international research programs in conservation and development. He

also teaches invertebrate assessment and monitoring protocols for many of MAB's international conferences and training courses.

Patrick Campbell, MS

Research Ecologist



Currently, Patrick works on a number of projects, including the Urubamba Biodiversity Monitoring Project in the Camisea region of Peru. Here, he is examining the structure and composition of the region's tropical forests and their associated mammal community. He is also helping write a book on the Camisea project, which will include information on the natural history and species diversity of the project's sites. In addition, he is co-editor for a special edition journal volume discussing protocols used by MAB researchers in Camisea. Recently, Patrick has taught courses on assessment and monitoring of vegetation and mammals in Cameroon and at the Smithsonian's Conservation and Research Center in Virginia.

Tatiana Pacheco

Administrator



Tatiana's role has expanded to managing all of MAB's logistics, including contracts, budgeting, procurements, personnel actions, travel, training course development and insurance. An expert in the Smithsonian Institution's policies and procedures, Tatiana also handles requests for outside information and works frequently with MAB's overseas teams.

Jennifer Sevin

Education and Training Coordinator



It has been through these endeavors that Jennifer realized the importance of research and education in protecting the environment and biodiversity. She is looking forward to coordinating the Monitoring and Assessment of Biodiversity Courses as well as the Smithsonian Environmental Leadership Courses. She anticipates initiating other MAB education and training programs in the future, and to create partnerships with other organizations and agencies in accomplishing MAB's objectives. Jennifer likes "to get things done," and believes the MAB Program is a good place for her.

Roger E. Soles, Ph.D.

Director of Global Species Address Book project



For over 18 years Dr. Soles lead the U.S. Man and the Biosphere Program at the U.S. Department of State as Executive Director. He was also the team leader in the development of the predecessor project for the current Smithsonian Global Species Address Book project (Biosphere Reserve Integrated Monitoring/ Biodiversity Resources for Inventorying and Monitoring (BRIM)). In that capacity he successfully promoted the application of the initial methods of standardizing and harmonizing biological inventory data among the world biosphere reserve network involving international conservation and scientific organizations.

Smithsonian
Institution

National Zoo

MAB

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Patrick Campbell, MS
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Jennifer Sevin, MS
**Education and Training
Coordinator**



Roger E. Soles, Ph. D.
**Director of Global
Species Address Book
project**

Krista Milich
Program Assistant

Our project has set the wheels in motion for MAB to expand its target audience from a solely professional- and researcher-education workshop focus to now include middle school students. The start of our survey process will allow MAB to continue our survey nationwide. In addition, our inventory has given MAB a list of organizations that are currently educating people about biodiversity so they are not repeating the same projects that are already being done.