

Commissioned Papers and Authors

This report was possible because of the valuable information and analyses contained in the background reports commissioned by OTA. These papers were reviewed and critiqued by the advisory panel, work-groups, and outside reviewers. The papers are available in a separate six-part volume through the National Technical Information Service,¹

VALUES

Papers

An Economic Perspective of the Valuation of
Biological Diversity
Values and Biological Diversity

An Ecological Perspective on the Valuation of
Biological Diversity
Impact of Changing Technologies on the
Valuation of Genetic Resources (Ist draft only)
Critical Assessment of the Value of and
Concern for the Maintenance of Biological
Diversity

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MANAGED SYSTEMS—PLANTS

Status and Trends of Wild Plants

Status and Trends of Agricultural Crop Species

Diversity and Distribution of Wild Plants

New Technologies and the Enhancement of
Plant Germ Plasm Diversity
Plant Germplasm Storage Technologies

Technologies To Evaluate and Characterize
Plant Germplasm
Assessment of Plant Quarantine Practices

Assessment of Market Institutional Factors
Affecting the Plant Breeding System
Historical Analysis of Genetic Resources
Valuation
Technologies To Maintain Microbial Diversity

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MANAGED SYSTEMS—ANIMALS

Status and Trends of Wild Animal Diversity	Nate Flesness ISIS—Minnesota Zoo
Status and Trends of Domesticated Animals	Hank A. Fitzhugh, Will Getz, and F.H. Baker Winrock International
Technologies To Maintain Animal Germplasm (draft form)	Betsy Dresser—Cincinnati Wildlife Federation Stan Liebo—Real Vista International
Concepts and Strategies To Maintain Domestic and Wild Animal Germplasm	David R. Notter—Virginia Polytechnic Institute Thorn J. Foose—Minneapolis Zoo
Management of Animal Disease Agents and Vectors Potentially Hazardous for Animal Germplasm Resources	Werner P. Heuschele San Diego Zoo
Constraints to International Exchange of Animal Germplasm	William M. Moulton Consultant

NATURAL ECOSYSTEMS—U.S.

Status and Trends of U.S. Natural Ecosystems	David Crumpacker University of Colorado
Geographic Information Systems As A Tool To Assist in the Preservation of Biological Diversity	Duane Marble SUNY—Buffalo
Planning and Management Techniques for Natural Systems	Herman H. Shugart University of Virginia
A Science of Refuge Design and Management	Daniel Simberloff Florida State University
Assessment of Application of Species Viability Theories	Mark L. Shaffer U.S. Agency for International Development
Diversity of Marine/Coastal Ecosystems	Maurice P. Lynch and Carleton Ray Coastal Environment Associates, Inc, Michael Bean Environmental Defense Fund
Federal Laws and Policies Pertaining to the Maintenance of Biological Diversity on Federal and Private Lands	Lynn Corn Congressional Research Service
Mandates to Federal Agencies To Conduct Biological Inventories	Bill Jordan—University of Wisconsin Arboretum Edith Allen—Utah State University Rob Peters—WWF/Conservation Foundation
Ecological Restoration As A Strategy for Conserving Biological Diversity	

NATURAL ECOSYSTEMS—INTERNATIONAL

Status and Trends of Natural Ecosystems Worldwide	Jeremy Harrison Conservation Monitoring Center
International Inventory and Monitoring for the Maintenance of Biological Diversity	N, Mark Collins Conservation Monitoring Center
The Role of protected Areas in Maintaining Biological Diversity in Tropical Developing Countries	James W. Thorsell IUCN

Role of Traditional Agriculture in Preserving
Biological Diversity

Compatibility of Development and the In-Situ
Maintenance of Biological Diversity in
Developing Countries

The Role of Development Assistance in
Maintaining Biological Diversity *In-Situ* in
Developing Countries

Socioeconomic Considerations for the *In-Situ*
Maintenance of Biological Diversity in
Developing Countries

Conservation of Biological Diversity by *In-Situ*
and *Ex-Situ* Methods

International Institutional/Legal Frameworks for
Ex-Situ Conservation of Biological Diversity

International Laws and Associated Programs
for *In-Situ* Conservation of Wild Species

International Laws and Associated Programs
for Conservation of Biological Diversity—
Joint Options for Congress

Living Collections (Plants and Animals)

Technologies to Maintain Tree Germplasm
Diversity

Causes of Loss of Biological Diversity

Gene Wilken
Colorado State University

Richard Saunier and Richard Meganck
Organization of American States

Bruce Rich and Stephen Schwartzman
Environmental Defense Fund

Terry Rambo
East-West Center

Gene Namkoong
North Carolina State University

John Barton
International Technology Development

Barbara Lausche
World Wildlife Fund/Conservation Foundation
Barton/Lausche

Grenville Lucas and S. Oldfield
Kew Gardens

Frank T. Bonner
US Forest Service

Norman Myers
Consultant

GRASSROOTS

Role of Grassroots Activities in the Maintenance
of Biological Diversity: Living Plants Collection
of North American Genetic Resources

Report on Grass Roots Genetic Conservation
Efforts

An Assessment of the Conservation of Animal
Genetic Diversity at the Grassroots level

Grassroots Groups Concerned with *In-Situ*
Preservation of Biological Diversity in the U.S.

Gary Nabhan and Kevin Dahl
Native Seeds Search

Cary Fowler
Rural Advancement Fund

Elizabeth Henson
American Minor Breeds Conservancy

Elliott A. Norse
Ecological Society of America