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ABSTRACT

Following the EuroMAB meeting in Strasbourg, France (September 1991) and on an initiative of the Man and the Biosphere National Committee of the United States, a decision was made to create a research network from information available in biosphere reserves in 30 European countries, Canada and the United States. This Directory of EuroMAB Biosphere Reserves summarizes information on 175 biosphere reserves in these 32 counties. Its purpose is to direct the reader to sources of data and other information on the ongoing scientific activities in these biosphere reserves. The text of the directory is organized alphabetically by country and provides information on national contacts for biosphere reserves, names of the biosphere reserves, administrative units, administering entities, locations in latitude and longitude coordinates, area in hectares of the administrative units, biome and biogeographical provinces, years designated as a biosphere reserve, administrative officers and telephone numbers, and principal monitoring and research themes. A large tabular summary of the scientific databases, research topics, and available site support for research in EuroMAB biosphere reserves follows the directory text. For each country, a biosphere location map indicates the general location of the biosphere reserve. (LZ)



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A Directory of Contacts, Environmental Data Bases, and Scientific Infrastructure on 175 Biosphere Reserves in 32 Countries

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Uzbekistan

Yugoslavia*

A Directory of Contacts, Environmental Data Bases, and Scientific Infrastructure on 175 Biosphere Reserves in 32 Countries



INTRODUCTION

Les preoccupations recentes en matiere d'observation de l'evolution des ecosystemes, des changements de differentes nature, de la biodiversité, font ressortir avec force la necessite de disposer d'outils de recherches appropries.

A la suite de la reunion EuroMAB tenue a Strasbourg en Septembre 1991 et a l'initiative du conseil national des USA il a ete decide de creer un reseau d'observation de BRIM (Biosphere Reserve Integrated Monitoring program). Il est certain que les 175 reserves reparties entre 32 pays constituent des renseignement comparatifs, measurables, et utiles. Ce sont des lieux de concentration de recherches et d'observation presentant en outre l'avantage d'etre concus pour le long terme. D'autre part la coexistence de ce reseau d'observation et d'experimentations dans le domaine de developpment durable ne peut qu'etre profitable.

Encore faut'il savoir qui fait quoi, comment et ou sont stockees des donnees et comment elles peuvent etre traitees?

L'outil qui doit permettre d'utiliser les outils est donc en train d'etre fabrique sans doute pour le profit de la gestion des reserves de la biosphere mais aussi pour celle d'une grand partie de notre planete.

Jacques Lecomte Chair, France MAB Chair, EuroMAB 1991-1993

Recent concerns resulting from observed changes in ecosystems, other types of changes in nature, and changes in biodiversity sharply underscore the need for appropriate research tools.

Following the EuroMAB meeting in Strasbourg in September 1991 and on an initiative of the Man and the Biosphere National Committee of the United States of America, a decision was made to create a research network from information available in biosphere reserves in 30 European countries and in Canada and the United States of America, the Biosphere Reserve Integrated Monitoring (BRIM) program. It is clear that the 175 biosphere reserves located in these 32 countries contain useful, measurable, comparative information. They have been identified as the areas where research and observation will be concentrated, and, in addition, have the advantage of having been designed for the long term. Also, the coexistence of this observation network and experimentation in the areas of sustainable development can only be beneficial.

There is still, though, a need to know: what, how, and where these data are being stored and how they will be processed.

This volume, the tool that should make it possible to use the available information, is therefore being created, undoubtedly, to utilize the tools available to benefit the management of biosphere reserves and, also, to benefit the management of a large part of our planet.

Jacques Lecomte Chair, France MAB Chair, EuroMAB 1991-1993



USE OF THIS DIRECTORY

This Directory of EuroMAB Biosphere Reserves summarizes information on biosphere reserves in 32 countries in Europe, Canada, and the United States. Its purpose is to direct the reader to sources of data and other information on the scientific activities currently ongoing in these biosphere reserves. It is the intent of the creators of this directory to encourage and facilitate communication and cooperation involving biosphere reserves in order to address environmental problems and to demonstrate the role of biosphere reserves in conservation and the sustainable use of ecosystems.

This directory provides a common information base for use by policy makers, planners, scientists, and resource managers in government agencies and nongovernmental organizations, as well as for private individuals interested in biosphere reserves. It will provide a basic reference for use in developing the scientific and educational functions of the EuroMAB biosphere reserve network, which, as of early 1993, includes 175 biosphere reserves in 32 countries.

The text of the directory is organized alphabetically by country, and within each country, alphabetically according to the name of the biosphere reserve. A large tabular summary follows the directory text. The tabular summary provides information on the scientific databases, research topics, and available site support for research in EuroMAB biosphere reserves.

The directory was compiled from information provided by the UNESCO MAB Secretariat, National MAB Committees, and biosphere reserve administrators. Specific information sources included published UNESCO compilations of information on biosphere reserves, biosphere reserve nomination applications prepared by National MAB Committees, and a 1987 UNESCO survey of biosphere reserves. A computer database, developed from the 1987 survey by Yale University, provided the initial basis for preparing the tabular summary at the end of the directory. The United States MAB Secretariat, in cooperation with other EuroMAB representatives, updated and expanded the database, and circulated the entire directory for review and verification by National MAB Committees participating in EuroMAB.

The following explanations are provided to assist users in interpretating the information in the directory:

National Contact for Biosphere Reserves.

The first page of each country's biosphere reserve directory lists the name, address, telephone number, and, where applicable, the facsimile transmission (FAX) number for the individual designated by the country's National Committee for Man and the Biosphere as the national contact for biosphere reserves. Users of the directory should direct general inquiries on national policies, programs, and activities relating to biosphere reserves to the national contact. A few recently established EuroMAB countries do not have a national MAB committee or a national contact for biosphere reserves. In these cases, users should direct general inquiries to the administrative officer or site manager of one of the country's biosphere reserves.



Telephone Numbers and FAX Numbers.

The directory lists these numbers according to a standard protocol to facilitate international dialing. The first number, listed in brackets, is the country code. The number contains from one to three digits. The second number, listed in parentheses, is the city or area code. The number, when required, contains from one to five digits. A "+" follows this number in the directory to separate country and city or area codes from the local telephone number. The local telephone number normally contains from three to eight digits.

Local telephone numbers of 5 digits or fewer are listed as unbroken numbers; larger numbers are broken into groups of three and four digits. Thus, a complete listing for a telephone number in the United States, for example, would be [1](202) + 555-5555. The need for operator assistance is indicated when required to complete a local call. Some countries require unique access codes for dialing within the country, and these requirements may differ from those for international dialing. The directory does not list these in-country requirements. Directory users should become familiar with any local requirements when making calls within the country.

The Biosphere Reserve Location Map

This directory contains a country map indicating the general location of the biosphere reserves for each EuroMAB participating country. The map shows the country boundary, adjacent states, and the names and locations of each of the country's biosphere reserves.

Biosphere Reserve Information Sheets

This directory includes a one page information sheet for each EuroMAB biosphere reserve. The <u>name of the biosphere reserve</u> is based on the January 1993 UNESCO listing. <u>Administrative units</u>, such as "national park" or "protected landscape area," are not included in the name, but are listed under Administrative Unit. Many biosphere reserves include multiple administrative units. For reserves containing two administrative units, both units are listed. For biosphere reserves containing three or more administrative units, the directory usually indicates "multiple units." Under <u>Administering Entity</u>, the directory lists the government agency, organization, or other entity (entities) primarily responsible for administering or coordinating the biosphere reserve. A few biosphere reserves contain an administrative unit in two countries. Each country's unit is administered autonomously in accordance with its applicable laws and regulations. In these cases, a separate one-page information sheet is provided for the unit in each country. The information sheets are cross-referenced.

The <u>Location</u> of the biosphere reserve is normally reported by the latitude and longitude coordinates for the approximate geographic center of the biosphere reserve. For very large sites, a range of coordinates is reported. For biosphere reserves containing two or more units, or clusters of units, that are widely separated geographically, the coordinates of the approximate geographic centers of these units or clusters of units are reported.



The <u>Area</u> of the biosphere reserve is the area in hectares of the administrative unit or units officially designated by UNESCO as the biosphere reserve. This area normally includes the core area(s) and buffer zone(s) of the biosphere reserve, but not the surrounding transition area, or zone of cooperation, except in cases where the latter is an officially designated component of the biosphere reserve.

The directory lists UNESCO's categorization of each biosphere reserve by <u>Biome</u> and <u>Biogeographical Province</u> as an indication of each site's general ecological characteristics. The categorization uses the Udvardy system of territorial biogeographic classification, which recognizes 14 biomes and 193 biogeographical provinces (M.D.F. Udvardy. 1975. A classification of the biogeographical provinces of the world. IUCN Occasionnal Paper No.18). If a site includes coastal or marine ecosystems, the biome listing notes the presence of these components.

The <u>Year Designated as a Biosphere Reserve</u> reflects the year UNESCO recognized the biosphere reserve under its current name. A few multiple unit biosphere reserves represent consolidation of administrative units originally designated as biosphere reserves under different names. The year of the original designation for each of these administrative units is not listed.

The <u>contact</u> for the biosphere reserve is normally a single individual who is responsible for administration and coordination of programs to implement biosphere reserve objectives as well as site protection and management. In some EuroMAB biosphere reserves, different individuals are responsible for administration and site management. In these cases, the directory provides a separate listing for the <u>administrative officer</u> and <u>site manager</u>.

The <u>telephone number</u> and, where applicable, the <u>FAX number</u> for the contact(s) are listed using the standard protocol described. If the biosphere reserve contact has access to an electronic mail system, the directory identifies the name of the E-mail system and the computer address.

<u>Principal Monitoring and Research Themes</u> reflect the activities of greatest emphasis in the biosphere reserve's ongoing scientific programs. The listing is based on information in published UNESCO documentation or provided directly by national MAB organizations or individual biosphere reserves.

The EuroMAB Biosphere Reserve Survey

At the end of the directory is a matrix of biosphere reserve survey information on categories of basic resource information, research topics, and site support for 169 of the 175 EuroMAB Biosphere Reserves designated as of early 1993. No data are available for six biosphere reserves. The survey table summarizes general information on the scientific activities, infrastructure, and facilities of each biosphere reserve. This information is provided to encourage communication involving biosphere reserves. Those interested in more detailed information may obtain this information from the designated contact individual for the biosphere reserve. An "X" under a category indicates that the category of activity applies to the biosphere reserve. A number under the category indicates the approximate duration of continuous or intermittent activity in years.



The survey table summarizes the availability of <u>Basic Resource Information</u> according to the broad headings of <u>biological inventory</u> (7 categories), ecological monitoring (10), resource maps (6), and historical records (6).

Research Topics are presented for ecosystem cycles and processes (7 categories), species populations (3), pollution (4), human systems (7), and management practices (10). The table identifies the categories for which the biosphere reserve has a record of previous or ongoing scientific activity.

Under the broad heading of <u>Site Support</u>, the survey table summarizes the availability, within the biosphere reserve, of <u>scientific infrastructure</u> (6 categories), <u>monitoring and research facilities</u> (6) and <u>permanent research staff</u>. An "X" under a category indicates that the facility or component of infrastructure is currently available at the biosphere reserve. For several categories, a number is provided. Under <u>lodging for scientists</u>, the number of scientists for whom lodging can be provided is indicated. Under <u>permanent plots: lake/stream</u> and <u>permanent plots:vegetation</u>, the number of plots established for long-term observations is indicated. Under <u>watershed research site</u>, the survey table indicates the number of watersheds used for conducting interdisciplinary studies. Under <u>permanent research staff</u>, the survey table records the number of scientists and technical support staff responsible for implementing the biosphere reserve's research program. For biosphere reserves having units in two countries, the table provides data for each unit.

Following the survey table, the directory provides additional data summaries to assist users interested in identifying opportunities for cooperation involving biosphere reserves in particular biomes. The first summary lists the number of each country's biosphere reserves by biome. The second lists, for each biome, the number of EuroMAB biosphere reserves (ex 170) with affirmative responses for each of the 76 information categories in the survey. The third lists the frequency of the data bases on the EuroMAB biosphere reserves.



EUROMAB COUNTRIES WITH BIOSPHERE RESERVES

```
Austria (4)
Belarus (1)
Bulgaria (17)
Canada (6)
Croatia (1)
Czech Republic (5 -- one joint with Poland)
Denmark (1)
Estonia (1)
Finland (1)
France (8)
Germany (12)
Greece (2)
Hungary (5)
Ireland (2)
Italy (3)
Kyrgyzstan (1, joint with Uzbekistan)
Netherlands (1)
Norway (1)
Poland (7 -- 1 joint with Czech Republic, 2 joint with Slovakia)
Portugal (1)
Romania (3)
Russia(14)
Spain (11)
Slovakia (4 -- 2 joint with Poland)
Sweden (1)
Switzerland (1)
Turkmenistan (1)
Ukraine (3)
United Kingdom (13)
United States (47)
Uzbekistan (1 - joint with Kyrgyzstan)
Yugoslavia* (1)
32 countries, 175 biosphere reserves (4 have units in 2 countries)
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Note: Number of biosphere reserves in January 1993 is indicated in parentheses

ACKNOWLEDGMENTS FOR LEADERSHIP, GUIDANCE AND ASSISTANCE

This directory is the result of a process that started at the EuroMAB III Congress in September of 1991, in Strasbourg, France. EuroMAB is the cooperative framework for MAB Programs of the countries of Europe and North America and was established by UNESCO to promote intra-regional cooperation. Similar geopolitical regional cooperative MAB programs exist for Africa, Asia and Latin America.

At the EuroMAB III Congress, two scientific presentations attracted considerable attention of the delegates. The first presentation was by Dr. Caroline Bledsoe of the University of California, Davis, entitled "Networking the Networks." Drawing upon her experience as the coordinator of the Long Term Ecological Research Sites (LTERS) of the National Science Foundation, she pointed out that while many specialized scientific research sites and networks exist throughout the world, most were uniquely specialized and had little communication with other sites or networks. Yet, many sites in different networks do carry out apparently complementary research activities. She noted that the sharing of this information should be promoted to the wider scientific community beyond the narrowly specialized disciplines for which the specific network was initially established.

Dr. Bledsoe --with support from U.S. MAB and other funding sources --has, since 1991, organized two workshops to develop an inter-networks pilot project to determine if sites from various networks could indeed carry out, on a pilot basis, coordinated ecological research and monitoring programs. Copies of the workshops report, Ecological Network of Networks: Creating A Network to Study Ecological Effects of Global Climate Change, (eds. Caroline S. Bledsoe and Mary C. Barber) are available from the U.S. MAB Secretariat in Washington, D.C.

A second significant stimulus to this directory which was also presented at the EuroMAB III Congress was provided by Dr. Michael Ruggiero, Chief of the Wildlife and Vegetation Division of the National Park Service. He showed how standardized biological inventory measures can monitor biological diversity within protected areas, and serve as tools for management and budget decision making. Such standardized inventories if broadly based across biogeographical regions or biomes, could also be useful to policy makers for monitoring indicators of global change.

To Dr. Bledsoe and Dr. Ruggiero whose presentations stimulated the production of this directory, we acknowledge with gratitude their scientific leadership.

Following discussion of these presentations, Dr. Jaques Lecomte, Chairman of the Congress, appointed a small working group to further pursue the concepts as they related to activities which could be promoted among the biosphere reserves of Europe and North America. Consequently, Minister Counselor Wilfried Goerke and Mr. Juergen Nauber of Germany, Dr. Francisco Garcia Novo of Spain, Dr. Valerie Neronov of Russia, Dr. Michael Morris of the United Kingdom, along with Dr. Ruggiero met to further advance the concepts of inter-biosphere working relationships. This working group recognized that while much valuable ecological work was being accomplished on biosphere reserves --some of it strikingly similar in essence -- little interchange had occurred except through some specialized bilateral research programs among individual scientists or publications in journals of the various specialized disciplines. What was needed, they determined, was a



mechanism to open up the scientific resources of the biosphere reserves not only to those working on other biosphere reserves, but to the wider scientific community as well.

The group thought that EuroMAB's strength and relative advantage lay in its potential ability to integrate the multiple scientific data bases being compiled on biosphere reserves for purposes such as monitoring global change and changes in global/intraregional biological diversity. Hence the project's acronym was created to reflect this "Biosphere Reserve Integrated Monitoring (BRIM)" project which would build upon the existing strengths of the reserves and not require a costly new initiative of the cooperating MAB programs.

Therefore, the group recommended that the EuroMAB III Congress commission a special study and work group to develop international linkages between the biosphere reserves in the EuroMAB region. The EuroMAB Congress accepted this recommendation.

To help implement this process, U.S. MAB offered to first carry out a survey of the existing Biosphere Reserves in the EuroMAB region to identify key scientific research and monitoring strengths of the reserves and to host a workshop within 6 months to further elaborate a program to promote inter-biosphere reserve communications.

A U.S. MAB interagency working group consisting of Dr. Paul Dunn, USDA Forest Service, Dr. Clive Jorgensen, the Department of Energy, Dr. Joann Roskoski of the National Science Foundation, Granville Sewell of the Department of State, Drs. Ruggiero and William Gregg of the National Park Service and Dr. William Jenkins of The Nature Conservancy was then established to assist the U.S. MAB Secretariat in developing the goals and a strategy for obtaining the desired information.

At the initial meeting of this group, Dr. William Gregg presented information concerning a 1987 survey of biosphere reserves which was conducted by UNESCO. The data base of information resulting from that survey had been given by UNESCO to Yale University. Dr. Gregg obtained a copy of the original data base from Yale, and was the leader in interpreting this database. The U.S. working group reviewed the contents of the UNESCO/Yale data base and identified approximately 65 fields of scientific data, site infrastructure and other information about the biosphere reserves in the EuroMAB region they thought would be most useful to the wider scientific community. The group concluded that one of the most effective ways in which this scientific information being gathered on biosphere reserves could be shared was to produce a directory of the biosphere reserves describing the available data and other relevant information.

At this point Mr. Mark Pankin of Arlington, Virginia was contracted with by the U.S. MAB Secretariat to develop the formats which appear in this directory. The computer skills and database manipulative ability of Mr. Pankin are truly appreciated as he has taken this data and made it possible for it to be more readily accessible and to be utilized by the scientific community. Mr. Pankin's helpful suggestions on formatting information for clarity were also most constructive and appreciated.

Within 45 days of returning from the EuroMAB Congress, the U.S. MAB Secretariat sent out to all "BRIM" coordinators an initial draft format containing the preliminary information gleaned from the UNESCO/Yale data base and other sources, and requesting, with a deadline of December 31, 1991, the return of whatever updated information could be obtained to add to the accuracy and utility of this directory.



By December 31, 1991, 60 percent of the 175 biosphere reserves in the 32 countries had responded within the given time frame. By the convening of the February 1992 U.S workshop on BRIM, over 70 percent had responded with corrected and updated information.

Nine countries sent delegates to the U.S. workshop at the U.S. MAB Secretariat. The delegates worked for 4 days, reviewing the information which the biosphere reserves had provided and discussed with experts developing international scientific research and monitoring programs.

The delegates decided to pursue the creation of five BRIM products to increase the utility, the inter-communications and the accessibility of the scientific community to the information being gathered on biosphere reserves. The recommended products were:

- 1. The publishing of this directory -- U.S. MAB agreed to spearhead this effort.
- 2. Produce a similar yet more descriptive and detailed directory concerning the permanent research plots on biosphere reserves. The MAB Programs of Germany and Spain (with Denmark later joining the effort) agreed to take the initial responsibility for developing this.
- 3. Develop a series of case studies specifically concerning social and demographic elements in biosphere reserves. Canada/MAB agreed to take the leadership position on this element.
- 4. Develop a standardized reporting format for biosphere reserves to document flora, fauna and the status of biological inventories. The MAB Programs of the Czech Republic, Slovak Republic, Sweden and the U.S. agreed to collaborative leadership for this project.
- 5. Develop a global change project proposal involving north/south transects utilizing biosphere reserves to the maximum extent, as well as utilizing alpine and high altitude sites as proxy measures for latitudinal gradients. Russia/MAB volunteered to develop this project proposal.

The February 1992 workshop had also noted the relative lack of information involving management plans and social science elements in the UNESCO survey data. They recommended that the sites should be re-surveyed to obtain additional information on these elements.

Therefore, U.S. MAB again surveyed the reserves -- an exercise which also provided an excellent opportunity to show the reserves an interim product and asked them to verify the accuracy of the information that the reserves had already supplied. Eight more categories of information were therefore added to the database matrix. Country and area coordinators were also called upon to contact those biosphere reserves to which communications were more difficult. Dr. Neronov deserves special appreciation in facilitating the gathering of information from biosphere reserves in the former Soviet Union.



The U.S. MAB Secretariat obtained the computer software program "MacGlobe" and utilized the maps from that program for the country contact pages. Andrew G. Soles of Mary Washington College, Virginia, working with Mr. Pankin, initially transferred the longitude and latitude coordinates to locate the biosphere reserve sites on the maps.

The updating and entering of all of this information was carried out by Ms. Erica Serabien, of the National Park Service who, working with Dr. Gregg, was key in developing and keying in the formats containing the site specific information on each biosphere reserve. Her patience and willingness to continually update the original data and make the numerous changes is most gratefully acknowledged.

In July of 1992, a second workshop on EuroMAB Brim was held, this one hosted by France MAB in Paris. This meeting was scheduled so that some of the BRIM participants could also participate in the UNESCO/International Geosphere Biosphere Program (IGBP) workshop on Global Change in Terrestrial Ecosystems and inform them about the BRIM project. Draft pages of this directory were reviewed and modified; country leaders of the other BRIM products reported on their progress and problems encountered in the process of implementing their BRIM sub-projects noted above.

By the time the 12th International Coordinating Conference of the UNESCO Man and the Biosphere Program was held in January 1993, in Paris, France, an initial draft of this directory had been completed. It was circulated to the EuroMAB delegates and a deadline of March was set for the submission of additions or corrections by the participating countries.

In the meantime, of course, some new countries emerged, spellings changed and some new biosphere reserves were recognized by the MAB Bureau. All of these changes, as well as the needed meticulous tasks of ensuring consistencies, were ably guided by Mrs. Cecile Ledsky of the U.S. MAB Secretariat staff. Mrs. Ledsky ably took on the tremendous task of ensuring the internal consistency of this directory as new nations emerged, others declined, spelling changed and changed back again. Her dedication and high professional standards were critical in producing this directory and ensuring its accuracy.

A final note of appreciation must also go to the UNESCO MAB staff who have now adopted the formats herein and will produce a directory including the nearly equal number of biosphere reserves in Asia, Africa and Latin America. Thus, a truly global directory of biosphere reserves is to be produced by the early autumn of 1993 and UNESCO is to be congratulated.

In sum, therefore, it is a pleasure to note that this directory will soon be outmoded by one considerably more comprehensive and expansive. One of the true potentials of the international network of biosphere reserves, to link the world's most extensive network of conservation reserves and scientific research sites is about to become a reality.

To all those who labored so diligently on ACCESS, and to their supervisors and managers who encouraged their participation and collaboration with the U.S. MAB Secretariat, your significant contributions are most appreciated and congratulations are due.

Roger E. Soles, Ph.D. Executive Director U.S. MAB



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Kyrgyzstan

Netherlands

Norway

Poland

Portugal

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Slovakia

Sweden

Switzerland

Turkmenistan

Ukraine

United Kingdom

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Uzbekistan

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Data Summaries by Biome

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Country and Biosphere Reserve Information



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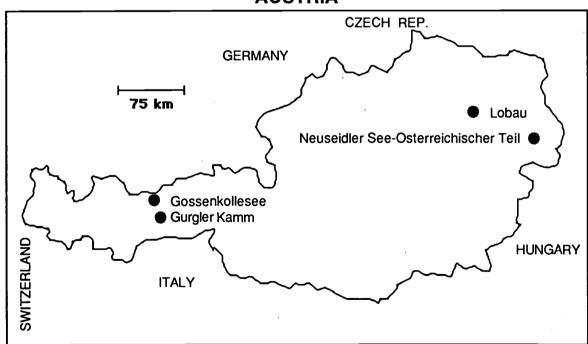
[43] (222) + 5158-1268, [43] (222) + 5158-1271

FAX:

[43](222) + 513-9541

BIOSPHERE RESERVE LOCATION MAP

AUSTRIA





Biosphere Reserve:

Gossenkollesee

Administrative Unit:

Administering Entity:

Local government

Location:

47°14'N. 1°01'E

Area (hectares):

100

Elevation Range:

2,413 (lake level) - 2,828m

Biome:

Mixed mountain systems with complex

zonation

Biogeographic Province: Central European Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Address:

Amt der Tiroler Landesregierung

Abteilung Umweltschutz

Sillgasse 8

A-6020 Innsbruck

Austria

Telephone:

[43] (512) + 576-377

FAX:

[43] (512) + 576-377-200

Principal Monitoring and Research Themes:

High mountain lake ecosystems

Quantitative autecological investigations

Environmental monitoring

Biosphere Reserve:

Gurgler Kamm

Administrative Unit:

Obergurgler Zirbenwald

Administering Entity:

Local government

Location:

46°51'N, 11°04'E

Area (hectares):

1,500

Elevation Range:

1,900 - 3,400m

Biome:

Mixed mountain systems with complex

zonation

Biogeographic Province: Central European Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Address:

Amt der Tiroler Landesregierung

Abteilung Umweltschutz

Sillgasse 8

A-6020 Innsbruck

Austria

Telephone:

[43](512) + 576-377

FAX:

[43] (512) + 576-377-200

Principal Monitoring and Research Themes:

Geology

Biological investigations

Mountain systems

Biosphere Reserve:

Lobau

Administrative Unit:

Lobau Reserve

Administering Entity:

Magistratsabteilung 22-Umweltschutz

Location:

48°10'N, 16°32'E

Area (hectares):

1,000

Elevation Range:

150 - 155m

Biome:

Mixed mountain systems with complex

zonation

Biogeographic Province: Central European Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Michael Kubik

Address:

Townhall of Vienna

Magistrats abteilung 22 Umweltschutz

Ebendorferstrasse 4

1082 Vienna

Austria

Telephone:

[43] (222) 4000 88263

FAX:

[43] (222) 4099 88211, 4099 88215

Principal Monitoring and Research Themes:

Limnological studies Vegetation mapping Botanical studies



Biosphere Reserve:

Neusiedler See-Osterreichischer Teil

Administrative Unit:

Administering Entity:

Mostly private ownerships; research

administered by Illmitz Biological Station

Location:

47°40'-56'N, 16°40'-160°52'E

Area (hectares):

25,000

Elevation Range:

114m

Biome:

Temperate broad-leaf forests

Biogeographic Province:

Pannonian

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Address:

Illmitz Biological Station

Abteilung 4 Nature und Landschaftsschutz

A-7142 Illmitz

Austria

Telephone:

[43] (2175) + 2328

FAX:

[43](2175) + 232-810

Principal Monitoring and Research Themes:

Hydrological monitoring Meteorological monitoring

Biological studies on migratory birds

Human impacts on lake biota

Eutrophication research



NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name:

Vladimir Gonchar

Address:

211188, post. Domzheritsy

Lepel District Vitebsk Region

Belarus

Telephone:

[7] (02132) + 21380, + 26342, + 26343

FAX:

[7](0172) + 200-696

BIOSPHERE RESERVE LOCATION MAP BELARUS





Biosphere Reserve:

Berezinsky

Administrative Unit:

Berezinsky Reserve

Administering Entity:

Council of Ministers

Location:

54°30'N, 28°30'E

Area (hectares):

114,000

Elevation Range:

164 - 220m

Biome:

Temperate broad-leaf forests

Biogeographic Province:

Middle European Forest

Year Designated as biosphere reserve: 1979

Administrative Officer

Contact:

Vladimir Gonchar

Address:

211188, p/o Domzheritsy

Lepel District Vitebsk Region

Belarus

Telephones:

[7] (02132) + 21380

[7] (02132) + 26342 [7] (02132) + 26343

FAX:

[7] (0172) + 200-696

Principal Monitoring and Research Themes:

Multimedia environmental monitoring (atmosphere, precipitation, soil,

vegetation, animals)

Impact of agriculture and drainage on

wetlands and woodlands



NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name:

Taniu Michev, Director

Ivan Yanchev, Technical Secretary

Address:

Institute for Ecology

2 Gargarin Str.

Bulgarian Academy of Sciences

1113 Sofia Bulgaria

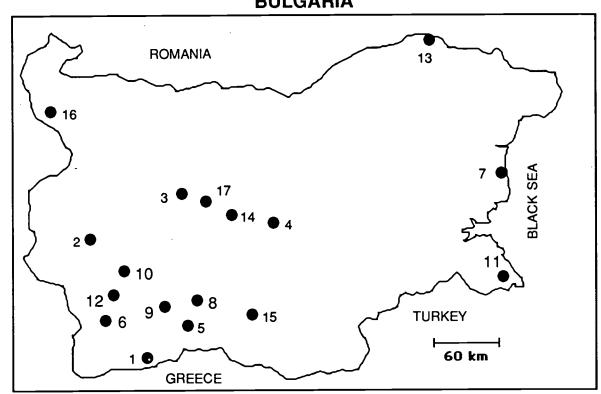
Telephone:

[359] (2) 705-498

FAX:

[359] (2) 705-498

BIOSPHERE RESERVE LOCATION MAP BULGARIA



- 1. Alibotouch
- 2. Bistrishko Branichte
- 3. Boatine
- 4. Djendema
- 5. Doupkata
- 6. Doupki-Djindjiritza

- 7. Kamchia
- 8. Koupena
- 9. Mantaritza
- 10. Marichini Ezera
- 11. Ouzounboudjak
- 12. Parangalitza

- 13. Srebarna
- 14. Steneto
- 15. Tchervenata Stena
- 16. Tchouprene
- 17. Tsaritchina



Biosphere Reserve:

Alibotouch

Administrative Unit:

Alibotouch Reserve

Administering Entity:

Department of Forestry

Location:

41°25'N, 23°32'E

Area (hectares):

1,628

Elevation Range:

1,150 - 2,200m

Biome:

Mixed mountain systems with complex

zonation

Biogeographic Province: Balkan Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Ivan Radoinova

Address:

Forestry Gotze Delchev

Sofia District

Bulgaria

Telephone:

[359](73) + --

Principal Monitoring and Research Themes:

Floristic studies Avifaunal studies

BULGARIA

Biosphere Reserve:

Bistrishko Branichte

Administrative Unit:

Bistrishko Branichte Reserve

Administering Entity:

Department of Forestry

Location:

42°35'N, 23°15'E

Area (hectares):

1,177

Elevation Range:

1,450 - 2,280m

Biome:

Mixed mountain systems with complex

zonation

Biogeographic Province: Balkan Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Todor Rochkov

Address:

National Park Vitosha

Sofia District

Bulgaria

Telephone:

[359] + 870-052

Biosphere Reserve:

Boatine

Administrative Unit:

Boatine Reserve

Administering Entity:

Department of Forestry

Location:

42°52'N, 24°20'E

Area (hectares):

1,281

Elevation Range:

750 - 1,900m

Biome:

Mixed mountain systems with complex

zonation

Biogeographic Province: Balkan Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Borislay Bechsey

Address:

Forestry Cherni Vit

Cherni Vit

Lovetch District

Bulgaria

Telephone:

[359] 227

EuroMAB DIRECTORY

BULGARIA

Biosphere Reserve: Djendema

Administrative Unit: Djendema Reserve

Administering Entity: Department of Forestry

Location: 42°47′N, 24°45′E

Area (hectares): 1,775

Elevation Range: 600 - 2,376m

Biome: Mixed mountain systems with complex

zonation

Biogeographic Province: Balkan Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact: Georgi Bankov

Address: Plovdiv District

Bulgaria

Telephone: [359] (335) + 26500

Biosphere Reserve: Doupkata

Administrative Unit: Doupkata Reserve

Administering Entity: Department of Forestry, Pazardhik Region

Location: 41°50'N, 24°15'E

Area (hectares): 1,867

Elevation Range: 1,000 - 1,645m

Biome: Mixed mountain systems with complex

zonation

Biogeographic Province: Balkan Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact: Georgi Kunev

Address: Forestry Borovo

Plovdiv District

Bulgaria

Telephone: [359] 381

Biosphere Reserve:

Doupki-Djindjiritza

Administrative Unit:

Baiuva Doupki and Malka Djindjiritza

Reserves

Administering Entity:

Department of Forestry

Location:

44°48'N, 23°25'E

Area (hectares):

2,873

Elevation Range:

1,200 - 2,884m

Biome:

Mixed mountain systems with complex

zonation

Biogeographic Province:

Balkan Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

K. Ikonomov

Address:

NP Pirin, Banksko

Bulgaria

Telephone:

[359] (73) + 1287 or 2313

Principal Monitoring and Research Themes:

Floristic studies

Ecological studies of chamois

EuroMAB DIRECTORY

Biosphere Reserve:

Kamchia

Administrative Unit:

Kamchia Reserve

Administering Entity:

Department of Forestry

Location:

43°02'N, 27°50'E

Area (hectares):

1,445

Elevation Range:

0 - 4m

Biome:

Temperate broad-leaf forests

(includes costal/marine component)

Biogeographic Province: Balkan Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Ivan Dimitrov

Address:

Forestry Staro Oriahovo

Varna District

Bulgaria

Telephones:

[359] (5141) + 2310, [359] (52) + 449-686



BULGARIA

Biosphere Reserve:

Koupena

Administrative Unit:

Koupena Reserve

Administering Entity:

Department of Forestry

Location:

42°05'N, 24°20'E

Area (hectares):

2,800

Elevation Range:

650 - 1,410m

Biome:

Mixed mountain systems with complex

zonation

Biogeographic Province:

Balkan Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Vasil Iordanov

Address:

Forestry Peshtera,

Plovdiv District

Bulgaria

Telephone:

[359](350) + 3885

EuroMAB DIRECTORY

Biosphere Reserve:

Mantaritza

Administrative Unit:

Mantaritza Reserve

Administering Entity:

Department of Forestry

Location:

41°58'N, 24°02'E

Area (hectares):

1,082

Elevation Range:

1,400 - 1,900m

Biome:

Mixed mountain systems with complex

zonation

Biogeographic Province:

Balkan Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Svetoslav Meganov

Address:

Forestry Rakitovo

Plovdiv District

Bulgaria

Telephone:

[359] (3512) + 2155

Principal Monitoring and Research Themes:

Silvicultural studies

Biosphere Reserve:

Marichini Ezera

Administrative Unit:

Marichini Ezera Reserve

Administering Entity:

Department of Forestry

Location:

42°14'N, 23°35'E

Area (hectares):

2,500

Elevation Range:

1,800 - 2,925m

Biome:

Mixed mountain systems with complex

zonation

Biogeographic Province: Balkan Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Georgi Vulkov

Address:

Forestry Borovetz

Sofia District

Bulgaria

Telephone:

[359](2) + 870-052

Biosphere Reserve:

Ouzounboudjak

Administrative Unit:

Ouzounboudjak Reserve

Administering Entity:

Department of Forestry

Location:

42°00'N, 27°45'E

Area (hectares):

2,575

Elevation Range:

150 - 200m

Biome:

Mixed mountain systems with complex

zonation

Biogeographic Province: Balkan Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Dimo Kunev

Address:

Forestry Kosti

Bourgaso District

Bulgaria

Telephone:

[359](56) + 442-984

EuroMAB DIRECTORY

BULGARIA

Biosphere Reserve: Parangalitza

Administrative Unit: Parangalitza Reserve

Administering Entity: Department of Forestry

Location: 42°15′N, 23°15′E

Area (hectares): 2,767

Elevation Range: 1,400 - 2,485m

Biome: Mixed mountain systems with complex

zonation

Biogeographic Province: Balkan Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact: Georgi Kalasbakov

Address: Forestry Blagoevgrad

Sofia District Bulgaria

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Telephone:

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Principal Monitoring and Research Themes:

D. 1

Research on game animals
Research on flora and vegetation

Silvicultural studies

[359](73) + 23896

Biosphere Reserve:

Srebarna

Administrative Unit:

Srebarna Nature Reserve

Administering Entity:

Research and Coordination Center for the

Protection and Restoration of the

Environment

Location:

44°05'N, 27°07'E

Area (hectares):

1,143

Elevation Range:

100m

Biome:

Temperate broad-leaf forests

Biogeographic Province:

Middle European Forest

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Ivan Dimitrov

Address:

Forestry Silistra

Bulgaria

Telephone:

[359] (86)

Principal Monitoring and Research Themes:

Species population (long-term)

Ecological requirements for species

conservation



Biosphere Reserve: Steneto

Administrative Unit: Steneto National Park

Administering Entity: Department of Forestry

Location: 42°48'N, 24°40'E

Area (hectares): 6,101

Elevation Range: 650 - 2,166m

Biome: Mixed mountain systems with complex

zonation

Biogeographic Province: Balkan Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact: Kotcho Kochev

Address: Forestry Cherni Osam

Lovetch District

Bulgaria

Telephone: [359] (377) + 6702

Principal Monitoring and Research Themes:

Forest vegetation studies

Faunal studies Cave studies

Biosphere Reserve:

Tchervenata Stena

Administrative Unit:

Tchervenata Stena Reserve

Administering Entity:

Department of Forestry

Location:

41°52'N, 24°45'E

Area (hectares):

812

Elevation Range:

400 - 1,500m

Biome:

Mixed mountain systems with complex

zonation

Biogeographic Province:

Balkan Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Dimitar Djambazov

Address:

Forestry Asenovgrad

Plovdiv District

Bulgaria

Telephone:

[359](331) + 23040

Principal Monitoring and Research Themes:

Floristic studies (relict forests)

Biosphere Reserve: Tchouprene

· Administrative Unit: Tchouprene Reserve

Administering Entity: Department of Forestry

Location: 43°43'N, 22°30'E

Area (hectares): 1,982

Elevation Range: 1,300 - 2,000m

Biome: Mixed mountain systems with complex

zonation

Biogeographic Province: Balkan Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact: Blagoi Georgiev

Address: Forestry Mihailovgrad

Department of Vidine

Bulgaria

Telephone: [359] (96) + 23541

Principal Monitoring and Research Themes:

Biosphere Reserve:

Tsaritchina

Administrative Unit:

Tsaritchina Reserve

Administering Entity:

Department of Forestry

Location:

42°50'N, 24°30'E

Area (hectares):

3,359

Elevation Range:

400 - 1,500m

Biome:

Mixed mountain systems with complex

zonation

Biogeographic Province:

Balkan Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Liubomir Ivanov

Address:

Lovetch District

Bulgaria

Telephone:

[359](32) + 682-7960

Principal Monitoring and Research Themes:

Silvicultural research

Ornithological observations



NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name:

Mr. Bruce Amos

Address:

Chairman

Working Group on Biosphere Reserves

Canada/MAB

Canadian Commission for UNESCO

99 Metcalfe 54, C.P. 1047 Ottawa, Ontario K1P 5V8

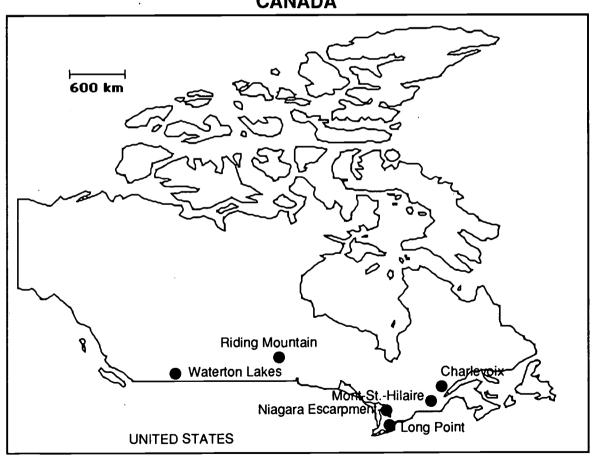
Canada

Telephone:

[1] (613) + 598-4330 [1] (613) + 598-4405

FAX:

BIOSPHERE RESERVE LOCATION MAP CANADA





Biosphere Reserve:

Charlevoix

Administrative Unit:

Multiple units

Administering Entity:

Corporation de la reserve mondiale de la

biosphere de Charlevoix

Location:

47°15'-48°05'N, 69°55'-71°10'W

Area (hectares):

448,000

Elevation Range:

0 - 3,800m

Biome:

Temperate needle-leaf forests

(includes costal/marine component)

Biogeographic Province:

Canadian Taiga

Year Designated as Biosphere Reserve: 1988

Administrative Officer

Contact:

Charles Roberge

Address:

4, Place de l'Eglise

Baie-Saint-Paul, Quebec GOA IBO

Canada

Telephone:

[1](418) + 665-4454

FAX:

[1](418) + 665-3811

Principal Monitoring and Research Themes:

Aquatic ecosystems (integrated)

Atmospheric pollution Avian and mammalian

population dynamics

Biological inventory

(fish, mammals, invertebrates,

vascular plants)

Ethnobiology

Geology and geomorphology

Long-term ecological monitoring

Multidisciplinary ecosystem

characterization

Silvicultural/forest management

Soil utilization

CANADA

Biosphere Reserve:

Long Point

Administrative Unit:

Multiple units (4)

Administering Entity:

Long Point Biosphere Reserve Executive

Committee

Location:

43°35'N, 80°20'W

Area (hectares):

27,000

Elevation Range:

175 - 188m

Biome:

Lake systems

(includes costal/marine component)

Biogeographic Province:

Great Lakes

Year Designated as Biosphere Reserve: 1986

Administrative Officer

Contact:

David Reid, Chairman

Arthur Langford, Secretary

Address:

Biosphere Reserve Executive Committee

General Delivery

Port Rowan, Ontario NOE 1MO

Canada

Telephone:

[1] (519) + 586-7122 (Secretary)

Principal Monitoring and Research Themes:

Long-term avian observations, including

annual waterfowl census

Wildlife management research

Fisheries research Recreation studies

Effects of industrial development



Mont-Saint-Hilaire

Administrative Unit:

Centre de conservation de la nature du

Mont-Saint-Hilaire

Administering Entity:

McGill University

Location:

45°33'N, 75°10'W

Area (hectares):

5,550

Elevation Range:

106 - 416m

Biome:

Temperate broad-leaf forests

Biogeographic Province:

Eastern forest

Year Designated as Biosphere Reserve: 1978

Administrative Officer

Contact:

Michel Drew

Address:

422, rue des Moulins

Mont-Saint-Hilaire, Quebec J3G 4S6

Canada

Telephone:

[1](514) + 467-1755

FAX:

[1](514) + 467-4074

Principal Monitoring and Research Themes:

Zoological studies

Geological and pedological studies

Meteorology

Applied geophysics



Biosphere Reserve: Niagara Escarpment

Administrative Units: Multiple units (includes more than 100

protected areas), many ownerships

Administering Entity: Niagara Escarpment Commission and

Canadian Parks Service

43°10'-45°15N, 79°03'-81°40'W Location:

Area (hectares): 207,240

Elevation Range: 90 - 560m

Biome: Temperate broad-leaf forests

Biogeographic Province: Eastern Forest

Year Designated as Biosphere Reserve: 1990

Administrative Officer Site Manager

Contacts: Richard Murzin Robert Day

MAB Liaison Officer Superintendent

Nars Borodczak Bruce Peninsula National Park

Director

Niagara Escarpment Commission

Addresses: 232 Guelph Street P.O. Box 189

> Georgetown, Ontario Tobermory, Ontario N0H 2R0

L7G 4B1 Canada

Canada

Telephone: [1] (416) + 877-5191 [1](519) + 596-2233[1](416) + 873-7452FAX: [1](519) + 596-2298

Principal Monitoring and Research Themes:

Acidic deposition Biological surveys of flora and fauna Human systems Ecosystem studies/succession/fire effects

Cultural anthropology Mining reclamation

Resource mapping Fish/wildlife population dynamics

Ecosystem restoration Great Lakes level changes Anthropogenic pollutants Recreation/tourism impacts

Biosphere Reserve:

Riding Mountain

Administrative Unit:

Multiple units (3)

Administering Entity:

Riding Mountain Biosphere Reserve

Location:

50°30'-51°01'N, 99°31'-101°05'W

Area (hectares):

297,591

Elevation Range:

318 - 755m

Biome:

Temperate needle-leaf forests and

Temperate grasslands

Biogeographic Province:

Canadian Taiga and Grasslands

Year Designated as Biosphere Reserve: 1986

Administrative Officer

Site Manager

Contact:

Ray Armbruster

Mac Estabrook

Address:

P.O. Box 428

Riding Mountain National Park

Rossburn, Manitoba ROJ 1VO

Wasagaming,

Canada

Manitoba ROJ 2HO

Canada

Telephones:[1] (204) + 859-2088

[1] (204) 848-2811

FAX:

[1](204) + 848-2596

[1] (204) 848-2596

E-Mail:

Principal Monitoring and Research Themes:

Ecology/population dynamics of mammals

Grassland ecology

Small watershed ecosystems (long-term)



Waterton Lakes

Administrative Unit:

Waterton Lakes National Park

Administering Entity:

Waterton Biosphere Association

Location:

49°00'-49°12'N, 113°39'-114°10'W

Area (hectares):

52,597

Elevation Range:

1,274 - 2,918m

Biome:

Mixed mountain systems with complex

zonation

Biogeographic Province: Rocky Mountains

Year Designated as Biosphere Reserve: 1979

Administrative Officer Site Manager

Contact: Larry Frith

Merv Syroteuk

Address:

Twin Butte.

Alberta T0K 2J0

Canada

Waterton Lakes National Park

Waterton, Alberta T0K 2M0

Canada

Telephone: [1] (403) + 627-2065

[1](403) + 859-2262

FAX:

[1](403) + 859-2650

[1](403) + 859-2650

Principal Monitoring and Research Themes:

Limnology

Wildlife population dynamics

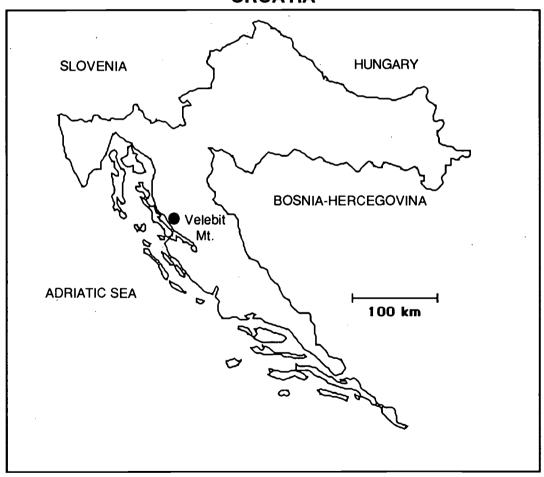
Ecology Pedology Archaeology



No Named Contact for Biosphere Reserves

See Biosphere Reserve Manager

BIOSPHERE RESERVE LOCATION MAP CROATIA





Biosphere Reserve:

Velebit Mountain

Administrative Unit:

Velebit Nature Park

Administering Entity:

State government of Croatia

Location:

44°15'-45'N, 15°00'-45'E

Area (hectares):

150,000

Elevation Range:

200 - 1,757m

Biome:

Evergreen sclerophyllous woodlands

Biogeographic Province:

Mediterranean Sclerophyll

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Address:

National Park Paklenica

Zadar Croatia

Telephone:

[38](57) +

Principal Monitoring and Research Themes:

Geomorphology

Cave studies

Research on plant communities

NATIONAL CONTACT FOR BIOSPHERE RESERVES

Prof. Jan Jenik, Chairman Name:

Dr. Vera Hruskova

Secretary, MAB National Committee

Academy of Sciences of the Czech Republic Address:

Narodni tr. 3 Prague 1

Czech Republic 17000

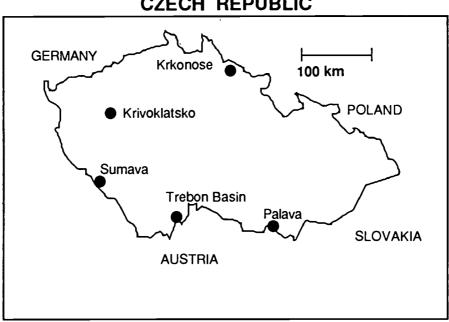
[42] (2) + 235-8065, ext. 420, Telephone:

[42] (2) + 297-941, ext. 3302

[42](2) + 265-671FAX:

BIOSPHERE RESERVE LOCATION MAP

CZECH REPUBLIC





Biosphere Reserve: Krivoklatsko

Administrative Unit: Krivoklatsko Protected Landscape Area

and Biosphere Reserve

Administering Entity: Krivoklatsko Administration/Sprava chranene

krajinne oblasti Krivoklatsko

Location: 50°00'N, 13°52'E

Area (hectares): 62,792

Elevation Range: 223 - 616m

Biome: Mixed mountain systems with complex

zonation

Biogeographic Province: Central European Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact: Petr Stepanek

Address: Zbecno 5 270 24

Czech Republic

Telephone: [42](313) + 98834

Principal Monitoring and Research Themes:

Biogeochemical cycling and energy transfer

in small watersheds

Abiotic, biotic and human environment Structure/function of forest ecosystems

Threatened and rare plants

Biogenetic studies Zoology/malacology

Geology



CZECH REPUBLIC

Biosphere Reserve:

Krkonose

(see also Karkonosze Poland)

Administrative Unit:

Krkonose National Park

Administering Entity:

Biosphere Reserve Administration.

Czech Ministry of the Environment

Location:

50 35'-49'N, 15 23'-53E

Area (hectares):

54,787

Elevation Range:

480 - 1,602m

Biome:

Mixed mountain systems with complex

zonation

Biogeographic Province: Central European Highlands

Year Designated as Biosphere Reserve: 1992

Administrative Officer

Contact:

Jan Stursa

Jiri Flousek

Address:

Vrchlabi - Zamek

543 11

Czech Republic

Telephone:

[42](438) + 21011

FAX:

[42] (438) + 23095

Principal Monitoring and Research Themes:

Impact of air pollution on montane, subalpine and alpine ecosystem: air and water quality, pedology, pedobiology, hydrobiology, forestry, botany, entomology, vertebratology. Forest and agricultural management in the mountain areas



Biosphere Reserve:

Palava

Administrative Unit:

Palava Protected Landscape Area

and Biosphere Reserve

Administering Entity:

Palava Administration/Sprava chranene

krajinne oblasti Palava

Location:

48°50'N, 16°40'E

Area (hectares):

8,017

Elevation Range:

163 - 550m

Biome:

Temperate broad-leaf forests

Biogeographic Province:

Middle European Forest

Year Designated as Biosphere Reserve: 1988

Administrative Officer

Contact:

Jiri Matuska

Address:

Namesti 32 Mikulov

692 01

Czech Republic

Telephone:

[42](625) + 2585

Principal Monitoring and Research Themes:

Climate

Vegetation

Soils hydrology

Landscape dynamics

Plant populations monitoring Animal populations monitoring

Ecology of riverine forests (long-term)

REPUBLIC CZECH

EUROMAB DIRECTORY

Biosphere Reserve:

Sumava

Administrative Unit:

Sumava National Park and Biosphere

Reserve

Administering Entity:

Sumava Administration/Sprava narodniho

parku a chranene krajinne oblasti Sumava

Location:

49°01'N, 13°34'E

Area (hectares):

167,117

Elevation Range:

470 - 1,378m

Biome:

Mixed mountain systems with complex

zonation

Biogeographic Province: Central European Highlands

Year Designated as Biosphere Reserve: 1990

Administrative Officer

Contact:

Jiri Kec

Address:

Vimperk-Zamek

385 01

Czech Republic

Telephone:

[42](339) + 21335

FAX:

[42](339) + 22947

Principal Monitoring and Research Themes:

Multidisciplinary basic and applied research

program

Air pollutant/acidic deposition Climatological monitoring

Boreo-alpine insects of north and central

European peatlands Ecological monitoring

Hydrobiology of lake systems

CZECH REPUBLIC

EUROMAB DIRECTORY

Biosphere Reserve:

Trebon Basin

Administrative Unit:

Trebon Basin Protected Landscape

Area/Biosphere Reserve

Administering Entity:

Trebonsko Administration/Sprava chranene

krajinne oblasti Trebonsko

Location:

49°00'N. 14°50'E

Area (hectares):

70,000

Elevation Range:

407 - 613m

Biome:

Temperate broad-leaf forests

Biogeographic Province: Middle European Forests

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Jiri Janda

Address:

Valy 121 Trebon

379 01

Czech Republic

Telephone:

[42](333) + 3097

Principal Monitoring and Research Themes:

Abiotic, biotic, and human environment

Structure/function of ecosystems Interrelationships of natural and

agricultural ecosystems

Algal ecology Plant communities

Wetlands



NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name:

Henning Thing

Address:

Danish Polar Center Strandgadge 100H DK-1401 Copenhagen

Denmark

Telephone:

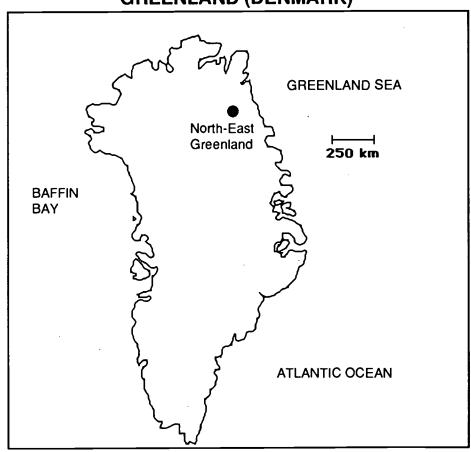
[45] (32) + 880-100

FAX:

[45](32) + 880-101

BIOSPHERE RESERVE LOCATION MAP

GREENLAND (DENMARK)





North-East Greenland

Administrative Unit:

North-East Greenland National Park

Administering Entity:

National Park Administration

Location:

71-83°N, 11°39'-63'E

Area (hectares):

97,000,000

Elevation Range:

0 - 3,000m

Biome:

Tundra

(includes costal/marine component)

Biogeographic Province: Arctic desert and icecap

Year Designated as Biosphere Reserve: 1977

Administrative Officer Site Manager

Contact: Peter Nielsen

Henning Thing

Address: c/o Directorate for Health

and Environment P.O. Box 1170 **DK-3900** Nuuk

Danish Polar Center Strandgadke 100H DK-1401 Copenhagen

Denmark

Greenland

Telephone: [299] + 23000 FAX:

[299] + 24693

[45](32) + 880-100[45](32) + 880-101

E-Mail:

OMNET H. Thing/Omnet

Principal Monitoring and Research Themes:

Littoral, limnetic, and terrestrial ecosystems

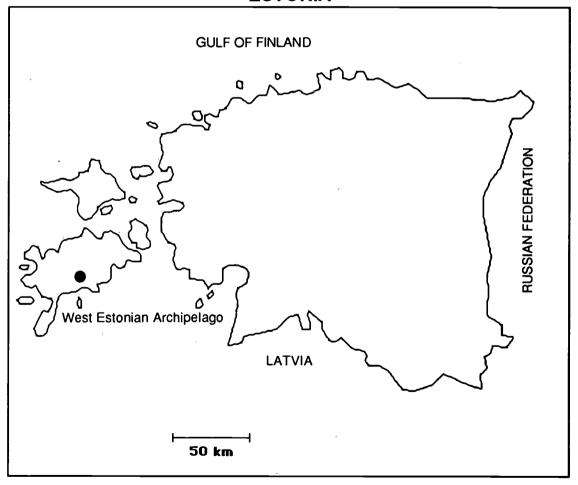
Glaciology

No Named Contact for Biosphere Reserves

See Biosphere Reserve Manager

BIOSPHERE RESERVE LOCATION MAP

ESTONIA





West Estonian Archipelago

Administrative Unit:

Multiple Units

Administering Entity:

State Biosphere Reserve Board (proposed)

Location:

58°30'N, 22°50'E

Area (hectares):

1,559,866

(403,778 terrestrial, 1,156,078 marine)

Elevation Range:

0 - 63m

Biome:

Temperate broad-leaf forests

(includes costal/marine component)

Biogeographic Province:

Boreonemoral

Year Designated as Biosphere Reserve: 1990

Administrative Officer

Contact:

Address:

West Estonian Archipelago Biosphere

P.O. Box 209

Kuressaare 203 300

Estonia

Telephone:

[7](0142) + 2455-7975

Principal Monitoring and Research Themes:

Biological inventory

Land use and management Natural and human systems

NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name:

M.Sc. Irma Peltola, Secretary

Finnish National MAB Committee

Address:

The Academy of Finland

P.O. Box 57

SF 00551 Helsinki

Finland

Telephone:

[358](0) + 775-81

FAX:

[358](0) + 775-8299

BIOSPHERE RESERVE LOCATION MAP FINLAND



Northern Karelian

Administrative Unit:

Patvinsuo and Petkeljarvi National Parks,

Koivusuo Strict Nature Reserve, and

Kesonsuo Nature Reserve

Administering Entity:

National Board of Forestry and private

administration

Location:

63°N, 31°E

Area (hectares):

350,000

Elevation Range:

115 - 288m

Biome:

Temperate needle-leaf forests or woodlands

Biogeographical Province: West Eurasian Taiga

Year Designated as Biosphere Reserve: 1992

Site Manager

Contact:

Timo J. Hokkanen

Address:

University of Joensuu

Mekrijarvi Research Station

SF-82900 Ilomantsi

Finland

Telephone:

[358](974) + 46151

FAX:

[358](974) + 48188

Principal Monitoring and Research Themes:

NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name: Dr. Jacques Lecomte, Chairman

Dr. Catherine Cibien, Scientific Secretary

Address: Ministere de l'Environnement

14, Bd du General Leclerc

92524 Neuilly-sur-Seine Cedex

Paris France

Telephone:

[33](61) + 285-338

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BIOSPHERE RESERVE LOCATION MAP

FRANCE BELGIUM 150 km Vosges du Nord SWITZERLAND Camargue Vallee du Fango CORSICA

Atoll de Taiaro

Administrative Unit:

Reserve Integrale W. A. Robinson

and private lands

Administering Entity:

Commission on Natural Monuments

and Sites

Location:

15°44'S, 144°38'W

Area (hectares):

2,000

Elevation Range:

0 - 5m

Biome:

Mixed island systems

(includes costal/marine component)

Biogeographic Province:

Southeastern Polynesian

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Conservator

Address:

Management Committee Secretariat

Commission on Monuments and Sites

BP 866

Papeete, Tahiti

Telephone:

Principal Monitoring and Research Themes:

Biological inventory of atoll and lagoon

Atoll and lagoon ecosystems

EuroMAB DIRECTORY

Biosphere Reserve: Camargue

Administrative Unit: Reserve national du Camargue

Administering Entity: Reserve national du Camargue

(national government)

Location: 43°30'N, 4°30'E

Area (hectares): 13,117

Elevation Range: 0 - 4m

Biome: Evergreen sclerophyllous woodlands

(includes costal/marine component)

Biogeographic Province: Mediterranean Sclerophyll

Year Designated as Biosphere Reserve: 1992

Administrative Officer

Contact: C. Coulet

Address: Domaine de la Capeliere

Route des Salins de Giraud

13200 Arles

France

Telephone: [33] (90) + 970-097

FAX: [33] (90) + 970-097

Principal Monitoring and Research Themes:

Wetlands

Bird populations

Cevennes

Administrative Unit:

Parc national des Cevennes

Administering Entity:

Parc national des Cevennes

(multiple ownerships)

Location:

49°20'N, 1°40'E

Area (hectares):

323,000

Elevation Range:

Maximum 1,700m

Biome:

Temperate broad-leaf forests

Biogeographic Province:

Atlantic

Year Designated as Biosphere Reserve: 1984

Administrative Officer

Contact:

Monsieur Benoit

Directeur du Parc national

Address:

Parc national des Cevennes,

Chateau de Florac

B.P. 15

P-48400 Florac

France

Telephone:

[33] (66) + 495-300

FAX:

[33] (66) + 495-302

Principal Monitoring and Research Themes:

Park management research to support maintaining an equilibrium between human activities and the environment Biosphere Reserve: Guadeloupe Archipelago

Administrative Unit: Guadeloupe National Park (2 units)

Administering Entity: Guadeloupe National Park administration

Location: 10 00'-27'N, 61 27'-48'W

Area (hectares): 69,000

Elevation Range: 0 - 1,467m

Biome: Mixed island systems

(includes costal/marine component)

Biogeographic Province: Lesser Antillean

Year Designated as Biosphere Reserve: 1992

Administrative Officer

Contact: Monsieur le Directeur du Parc National

Address: Parc National de la Guadeloupe

Habitation Beausoleil - Monteran

BP 13

97120 Saint-Claude

Guadeloupe

Telephone: [590] + 802-425

FAX: [590] + 800-546

Principal Monitoring and Research Themes:

Rain forest Coral reef

Iroise

Administrative Unit:

Parc Naturel Regional d'Armorique

Administering Entity:

Parc Naturel Regional d'Armorique (management board composed of representatives of municipalities,

departments, and professional organizations)

Location:

48°24'N, 4°58'W

Area (hectares):

21,400

Elevation Range:

-20m - 60m

Biome:

Temperate broad-leaf forests

(includes costal/marine component)

Biogeographic Province:

Atlantic

Year Designated as Biosphere Reserve: 1988

Administrative Officer

Contact:

L. M. Guillon

Address:

Parc Naturel Regional d'Armorique

Menez Meur

Hanvec

29224 Daoulas

France

Telephone:

[33](98) + 219-069

FAX:

[33] (98) + 219-285

Principal Monitoring and Research Themes:

Ornithological observations

Intertidal biodiversity Botanical observations Integrated cartography



Mont Ventoux

Administrative Unit:

Administering Entity:

Syndicat mixte d'amenagement et

d'equipement du Mont Ventoux

Location:

44°10'N, 5°17'E

Area (hectares):

69,956

Elevation Range:

200 - 1,909m

Biome:

Evergreen sclerophyllous woodland

(ecotonal with temperate broad-leaf

forest)

Biogeographic Province:

Mediterranean Sclerophyll

Year Designated as Biosphere Reserve: 1990

Administrative Officer

Contact:

M. le President du Syndicat mixte

d'amenagement du Ventoux

Address:

Conseil General du Vaucluse

B.P. 318

84021 Avignon

France

Telephone:

[33] (90) + 863-333

FAX:

[33](90) + 827-527

Principal Monitoring and Research Themes:

Hydrology

Biosphere Reserve:

Vallee du Fango

Administrative Unit:

Parc Naturel Regional de Corse

Administering Entity:

Parc Naturel Regional de Corse

Location:

42°23'N, 8°46'E

Area (hectares):

23,400

Elevation Range:

0 - 2,556m

Biome:

Evergreen sclerophyllous woodlands

Biogeographic Province: Mediterranean Sclerophyll

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Leenhardt

Address:

Rue Fiorella

B.P. 417

F-20184 Ajaccio Cedex

France

Telephone:

[33](95) + 507-013

FAX:

[33](95) + 218-817

Principal Monitoring and Research Themes:

Multidisciplinary ecosystem research on the maquis

Meteorological/hydrological monitoring

Sclerophyllous forest



FRANCE

Vosges du Nord Biosphere Reserve:

Administrative Unit: Parc Naturel Regional des Vosges du Nord

Administering Entity: Le Syndicat Mixte du Parc Naturel

Regional des Vosges du Nord

48°45'-49°11'N, 7°17'-7°55'E Location:

Area (hectares): 120,200

Elevation Range: 200 - 580m

Biome: Temperate broad-leaf forests

Biogeographic Province: Atlantic

Year Designated as Biosphere Reserve: 1988

Administrative Officer

Contact: B. Roch, Directeur

Address: Parc Naturel Regional des Vosges du Nord

Chateau de la Petite Pierre P-67290 La Petite Pierre

France

Telephone: [33] (88) + 704-655FAX:

[33](88) + 704-104

Principal Monitoring and Research Themes:

Peat bog/pine forests Biological inventories

Vegetation studies, including ecological succession and regeneration, role of fire

Aquatic ecosystems (long-term)

Agricultural/silviculture

Impact of tourism

NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name: Mr. Juergen Nauber

Secretary General, German MAB National Committee

Address:

c/o Bundesforschungsanstalt fur Naturschutz und

Landschaftsoekologie Konstantinstr. 110 D-53179 Bonn 2

Germany

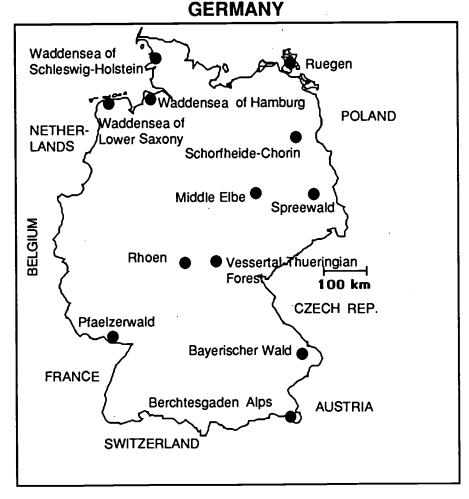
Telephone:

[49] (228) + 849-1138

FAX:

[49] (228) + 849-1200

BIOSPHERE RESERVE LOCATION MAP



Biosphere Reserve: Bayerischer Wald

Administrative Unit: Bayerischer Wald National Park

Administering Entity: Nationalparkverwaltung Bayerischer Wald

Location: 48°55'N, 13°23'E

Area (hectares): 13,300

Elevation Range: 666 - 1,453m

Biome: Mixed mountain systems with complex zonation

Biogeographic Province: Central European Highlands

Year Designated as Biosphere Reserve: 1981

Administrative Officer

Contact: Hans Bibelriether

Address: Bayerischer Wald National Park

Freyunger Str. 2 D-94487 Grafenau

Germany

Telephone: [49] (8552) + 96000

FAX: [49] (8552) + 1394

Principal Monitoring and Research Themes:

Climatology Soil studies

Landscape analysis

Effects of regional tourism

Hydrological modelling, pollutant input Ecological succession in areas of windthrow Effects of air pollutants in small watersheds Integrated environmental and ecological

monitoring

Avian and ungulate population dynamics

Berchtesgaden Alps

Administrative Units:

Berchtesgaden National Park

Administering Entity:

National Park Administration

Berchtesgaden

Location:

13°00'E, 47°36'N

Area (hectares):

16,800

Elevation Range:

471 - 2,713m

Biome:

Mixed mountain systems with complex

zonation

Biogeographic Province: Central European Highlands

Year Designated as Biosphere Reserve: 1990

Administrative Officer

Contact:

Hubert Zierl

Address:

Doktorberg 6

D-83471 Berchtesgaden

Germany

Telephone:

[49] (8652) + 61068

FAX:

[49] (8652) + 64854

Principal Monitoring and Research Themes:

Integrated ecosystem monitoring (biotic, abiotic, human systems) Biosphere Reserve: Middle Elbe River

Administrative Units: Multiple units (Steckby-Loedderitz National

Nature Reserve, Dessau-Woerlitzer Cultural

Landscape)

Administering Entity: Verwaltung

Location: 51°52'N, 12°12'E

Area (hectares): 43,000

Elevation Range: 50 - 75m

Biome: Temperate broad-leaf forest

Biogeographic Province: Middle European Forest

Year Designated as Biosphere Reserve: 1979

Administrative Officer

Contact: Peter Hentschel

Address: Verwaltung

Biosphaerenreservat Mittlere Elbe

Kapenmuehle, PSF 118

D-06813 Dessau

Germany

Telephone: [49] (340) + 214-503

FAX: [49](340) + 214-503

Principal Monitoring and Research Themes:

Inventory of fauna (emphasis on avifauna

and beavers)

Pest control research

Structure and dynamics of forest

ecosystems

Soil and vegetation mapping

Pfaelzerwald

Administrative Units:

Pfaelzerwald Nature Park

Administering Entity:

Verein Naturpark Pfaelzerwald e.v./

Bad Duerkheim

Location:

Area (hectares):

179,800

Elevation Range:

Biome:

Temperate broad-leaf forest

Biogeographic Province:

Middle European Forest

Year Designated as Biosphere Reserve: 1992

Administrative Officer

Contact:

Werner Dexheimer

Address:

Hermann Schaefer Strasse 17

D-67098 Bad Duerkheim

Germany

Telephone:

[49] (6322) + 66265

FAX:

[49] (6322) + 1214

Administrative Unit: Multiple units (3)

Administering Entity: Rhoen Biosphere Reserve Department -

Rhoen

Managed through a state treaty between

Bavaria, Hessen, and Thuringia

Location: 10°05'E, 50°35'N

Area (hectares): 130,488

Elevation Range: 300 - 950m

Biome: Temperate broad-leaf forests

(includes costal/marine component)

Biogeographic Province: Middle European Forest

Year Designated as Biosphere Reserve: 1991

	<u>Thuringia</u>	<u>Bavaria</u>	<u>Hessen</u>
Contact:	Karl Friedrich Abe	Doris Pokorny	Ewald Sauer
Address:	Mittelsdorferstrasse	Rhoenbergstr. 16	Georg-Meilinger-Str.
	D-98634 Kaltensundheim	D-97656 Oberelsbach	D36115 Ehrenberg
	Germany	Germany	Germany
Telephor FAX:	ne:[49] (36946) + 753	[49] (9774) + 1741	[49] (6683) + 302
	[49] (36946) + 753	[49] (9774) + 1742	[49] (6683) + 506

Biosphere Reserve: Ruegen

Administrative Unit: Multiple ownerships

Administering Entity: Ruegen Biosphere Reserve

Location: 54°20′N, 13°39′E

Area (hectares): 22,800

Elevation Range: -30 - 106m

Biome: Temperate broad-leaf forest

Biogeographic Province: Middle European Forest

Year Designated as a Biosphere Reserve: 1991

Administrative Officer

Contact:

Address: Biosphaerenreservat Suedost-Ruegen

Nr. 1 a

D-18586 Middelhagen

Germany

Telephone: [49] (38303) + 25068

FAX: [49] (38303) + 25068

Biosphere Reserve: Schorfheide-Chorin

Administrative Unit:

Administering Entity: Schorfheide-Chorin Biosphere Reserve

Location: 13°40′E, 53°00′N

Area (hectares): 125,891

Elevation Range: 2 - 138m

Biome: Temperate broad-leaf forest

Biogeographic Province: Middle European Forest

Year Designated as Biosphere Reserve: 1990

Administrative Officer

Contact: Eberhard Henne

Address: Verwaltung

Biosphaerenreservat Schorfheide-Chorin

Haus am Stadtsee

D-16225 Eberswalde-Finow

Germany

Telephone: [49] (3334) + 22375

FAX: [49] (3334) + 22376

Principal Monitoring and Research Themes:

Air pollutants

Anthropogenic impacts

Complex analysis of ecosystems

Selection of indicators of ecosystem change

Scientific data to support ecosystem management

Landscape models and standards for nature

protection



Spreewald

Administrative Unit:

Multiple units (2)

Administering Entity:

Verwaltung Spreewald

Location:

51°88'N, 13°81'E

Area (hectares):

48,460

Elevation Range:

44 - 144m

Biome:

Temperate broad-leaf forests

Biogeographic Province:

Middle European Forest

Year Designated as Biosphere Reserve: 1991

Administrative Officer

Contact:

Manfred Werban

Address:

Schulstrasse 9

D-03222 Luebbenau/Spreewald

Germany

Telephone:

[49](3542) + 3748

FAX:

[49](3542) + 3748

Principal Monitoring and Research Themes:

Evaluation of habitats

Environmental monitoring Water quality monitoring

Bioindicators in aquatic ecosystems Inventory/monitoring of bats, birds,

and small mammals

Vessertal-Thuringian Forest Biosphere Reserve:

Administrative Unit: Multiple units (Vessertal Nature Reserve

and multiple ownerships in Thuringian

Forest)

Administering Entity: Thuringian Environment Ministry

50°36'N, 10°48'E Location:

17,000 Area (hectares):

Elevation Range: 420 - 982m

Biome: Temperate broad-leaf forest

Middle European Forest Biogeographic Province:

Year Designated as a Biosphere Reserve: 1979

Administrative Officer

Contact: Harald Lange

Address: Verwaltung des Biosphaerenreservates

Vessertal-Thueringer Wald

An der Wilke 4

D-98553 Breitenbach/b.

Schleusingen Germany

Telephone: [49] (36841) + 8187FAX: [49](36841) + 8187

Principal Monitoring and Research Themes:

Inventory, flora Study of succession processes

Recreation and tourism Inventory, fauna; especially invertebrates Forest ecosystems

Management research on conservation of

biological diversity

Biosphere Reserve: Waddensea of Hamburg

Administrative Unit: Waddensea National Park of Hamburg

Administering Entity: Environment Ministry

Location: 53°50'49"N - 53°58'48"N, 8°17'30"E -

8°34'39"E

Area (hectares): 11,700

Elevation Range: -17.5 - 7m

Biome: Temperate needle-leaf forests

(includes costal/marine component)

Biogeographic Province: Atlantic

Year Designated as Biosphere Reserve: 1992

Administrative Officer

Contact: Klaus Janke

Address: Umweltbehoerde-Naturschutzamt

Steindamm 22

D-20099 Hamburg

Germany

Telephone: [49] (40) + 2486-3945

FAX: [49] (40) + 2486-2579

Biosphere Reserve: Waddensea of Lower Saxony

Administrative Units: Waddensea National Park of Lower Saxony

Administering Entity: National Park Administration,

Wilhelmshaven

Location: 53°37'N - 53°55'N, 6°35'E - 8°39'E

Area (hectares): 240,000

Elevation Range: -10 - 24.5m

Biome: Temperate broad-leaf forest

(includes costal/marine component)

Biogeographic Province: Atlantic

Year Designated as Biosphere Reserve: 1992

Administrative Officer

Contact: Claus D. Helbing

Address: Virchowstrasse 1

D-26382 Wilhelmshaven

Germany

Telephone: [49] (4421) + 408-270 **FAX:** [49] (4421) + 408-280

Principal Monitoring and Research Themes:

Avian studies

Biosphere Reserve: Waddensea of Schleswig-Holstein

Administrative Unit: National Park Schleswig-Holstein

Waddensea

Administering Entity: Regional Office of the National Park

Schleswig-Holstein Waddensea

Location: 53°52'-55°04'N, 08°13'-09°00'E

Area (hectares): 285,000

Elevation Range: -30 - 112m

Biome: Temperate broad-leaf forests

(includes costal/marine component)

Biogeographic Province: Atlantic

Year Designated as Biosphere Reserve: 1990

Administrative Officer

Contact: Friedrich Heddies Andresen

Address: Nationalparkamt

Schlossgarten 1 D-25832 Toenning

Germany

Telephone: [49] (4861) + 61691

FAX: [49](4861) + 459

Principal Monitoring and Research Themes:

Waddensea ecosystem and human

activities

Protection of marine and semi-terrestrial

habitats

Changes in abiotic, biotic and socio-

ecological parameters

NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name:

Mr. Konstantinos Tsamados

President, Greek National Commission for UNESCO

Address:

3, Akadimias Street

106 71 Athens

Greece

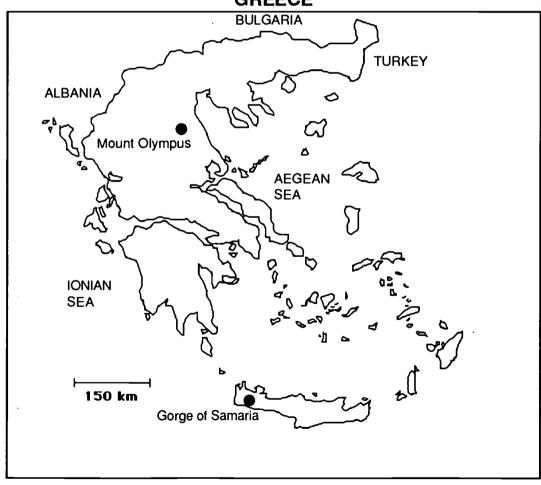
Telephone:

[30](1) + 362-0736

FAX:

[30](1) + 360-9716

BIOSPHERE RESERVE LOCATION MAP GREECE



EuroMAB DIRECTORY

Biosphere Reserve: Gorge of Samaria

Administrative Unit: Gorge of Samaria National Park

Administering Entity: Forest Directorate of Chania

Location: 35°13'-35°18'N, 23°54'-23°58'E

Area (hectares): 4,840

Elevation Range: 0 - 2,116m

Biome: Evergreen sclerophyllous woodlands

(includes costal/marine component)

Biogeographical Province: Mediterranean Sclerophyll

Year Designated as Biosphere Reserve: 1981

Administrative Officer

Contact: John Fotakis

Address: Chrisopigi

73100 Chania

Greece

Telephone: [30] (821) + 22287

FAX: [30](821) + 2195

Principal Monitoring and Research Themes:

Plant and animal populations, including wild goats

Biosphere Reserve: Mount Olympus

Administrative Unit: Mount Olympus National Park

Administering Entity: Forest Directorate of Picria

Location: 40°02'-40°07'N, 22°18'-22°26'E

Area (hectares): 4,000

Elevation Range: 400 - 2,914m

Biome: Evergreen sclerophyllous woodlands

Biogeographical Province: Mediterranean Sclerophyll

Year Designated as Biosphere Reserve: 1981

Administrative Officer

Contact: Pavlos Andredakis

Address: Terma Ipiron

60100 Katerini

Greece

Telephone: [30] (351) + 23720

FAX: [30](351) + 32111

NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name:

Dr. Arpad Berczik

Secretary, Hungarian MAB National Committee

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Puskin u. 3

H-1088 Budapest

Hungary

Telephone:

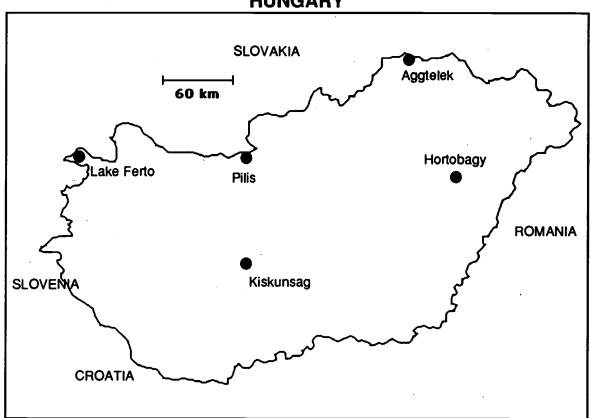
[36] (11) + 189 833, [36] (11) + 189 203

FAX:

[36](11) + 128-483

BIOSPHERE RESERVE LOCATION MAP

HUNGARY



Aggtelek

Administrative Unit:

Aggtelek National Park

Administering Entity:

Aggteleki Nemzeti Park Igazgatosaga

Location:

48°30'N, 20°36'E

Area (hectares):

19,247

Elevation Range:

150 - 600m

Biome:

Temperate broad-leaf forests

Biogeographical Province: Middle European Forest

Year Designated as Biosphere Reserve: 1979

Administrative Officer

Contact:

Address:

Aggteleki Nemzeti Park

Igazgatosaga Aggtelek 3759

Hungary

Telephone:

[36](46) +

Principal Monitoring and Research Themes:

Faunal studies

Geology

Hydrogeography (karst)



EuroMAB DIRECTORY

HUNGARY

Biosphere Reserve: Hortobagy

Administrative Unit: Hortobagy National Park

Administering Entity: National Authority for Environment

Protection and Nature Conservation

Location: 47°25'-47°15'N, 20°54'-21°21'E

Area (hectares): 52,000

Elevation Range: 86 - 98m

Biome: Temperate broad-leaf forests

Biogeographical Province: Pannonian

Year Designated as Biosphere Reserve: 1979

Administrative Officer

Contact:

Address: Management of Hortobagy

National Park

Boszormenyu ut 138

Debrecen Hungary

Telephone: [36] (52)

Principal Monitoring and Research Themes:

Synecology of flora, fauna, and soils Ecology of pools, artificial water bodies,

alkali lowlands, salt steppes

Ecology of breeding and migratory birds



Kiskunsag

Administrative Unit:

Kiskunsag National Park

Administering Entity:

National Authority for Environment Protection and Nature Conservation

Location:

47°12'-46°36'N, 19°04'-19°39'E

Area (hectares):

22,095

Elevation Range:

94 - 127m

Biome:

Temperate broad-leaf forests

Biogeographical Province: Pannonian

Year Designated as Biosphere Reserve: 1979

Administrative Officer

Contact:

Address:

Management of Kiskunsag National Park

Liszt Ferenc u 19 6001 Kecskemet

Hungary

Telephone:

[36](76) +

Principal Monitoring and Research Themes:

Air quality and climatology Nesting and migratory birds

EUROMAB DIRECTORY

Biosphere Reserve:

Lake Ferto

Administrative Unit:

Nature Park Lake Ferto

Administering Entity:

OKTH Sopron Nature Conservancy

Inspectorate

Location:

47°0'N, 16°43'E

Area (hectares):

12,542

Elevation Range:

114 - 261m

Biome:

Temperate broad-leaf forests

Biogeographical Province: Pannonian

Year Designated as Biosphere Reserve: 1979

Administrative Officer

Contact:

Address:

OKTH Sopron Nature Conservancy

Inspectorate Kofarago ter 9 9400 Sopron Hungary

Telephone:

[36](99) +

Principal Monitoring and Research Themes:

Lake conditions/human effects monitoring

(with Austria)

Climate and hydrological monitoring

Water conservation research

Management research on flora and fauna

Tourism



HUNGARY

EuroMAB DIRECTORY

Biosphere Reserve:

Pilis

Administrative Unit:

Pilis Landscape Protection Area

Administering Entity:

Directorate of State Parkforest Pilis

Location:

47°45'N. 18°49'E

Area (hectares):

23,000

Elevation Range:

106 - 757m

Biome:

Temperate broad-leaf forests

Biogeographical Province: Middle European Forest

Year Designated as Biosphere Reserve: 1980

Administrative Officer

Contact:

Address:

Directorate of State Parkforest

Pilis

Matyas Kiraly ut 4 H-2025 Visegrad

Hungary⁻

Principal Monitoring and Research Themes:

Meteorological monitoring

Impact of tourism/land uses on forests,

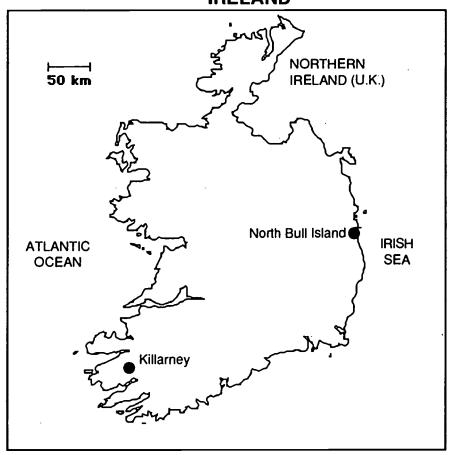
aquatic resources, and soils Environmental education



No Named National Contact for Biosphere Reserves

See Individual Biosphere Reserve Managers

BIOSPHERE RESERVE LOCATION MAP IRELAND





Killarney

Administrative Unit:

Killarney National Park

Administering Entity:

National Park and Wildlife Service, Office

of Public Works, St. Stephens Green

Location:

52°01'N, 9°35'W

Area (hectares):

8,308

Elevation Range:

22 - 842m

Biome:

Temperate broad-leaf forests

Biogeographical Province: British Islands

Year Designated as Biosphere Reserve: 1982

Administrative Officer

Contact:

Park Superintendent

Address:

Killarney National Park

Muckross, Killarney

County Kerry

Telephone:

[353](64) + 31947

FAX:

[353](64) + 33926

Principal Monitoring and Research Themes:

Limnology

Water Pollutants

Wildlife Population Dynamics Comparative Ecological Research

Fire History and Effects



EUROMAB DIRECTORY

IRELAND

Biosphere Reserve: North Bull Island

Administrative Unit: North Bull Island Nature Reserve

Administering Entity: Dublin Corporation

Location: 53°17'N, 06°05'W

Area (hectares): 500

Elevation Range: 0 - 10m

Biome: Temperate broad-leaf forests

(includes costal/marine component)

Biogeographical Province: British Islands

Year Designated as Biosphere Reserve: 1981

Administrative Officer

Contact: G. Barry

Address: Dublin Corporation

City Hall Dublin 2 Ireland

Telephone: [353] (1) + 338-341, [353] (1) + 331-941

FAX: [353] (1) + 333-926

NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name:

Dr. Enrico Ortese

Address:

EuroMAB Italy

Parco Nazionale Circeo Via Carlo Alberto 107 04016 Sabaudia (LT)

Italy

Telephones:

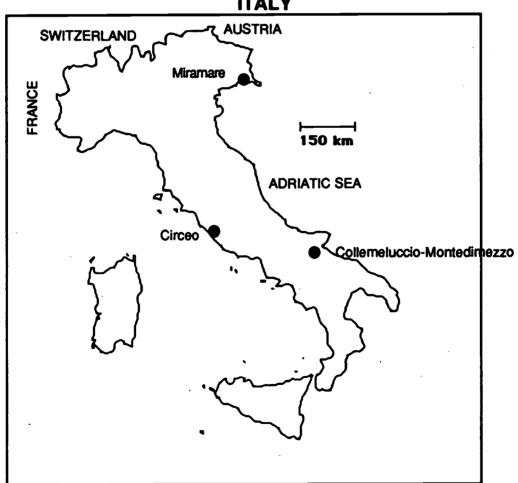
[39] (77) + 357-251, [39] (77) + 357-252

FAX:

[39](77) + 510-503

BIOSPHERE RESERVE LOCATION MAP

ITALY



Circeo

Administrative Unit:

Foresta Demaniale del Circeo (includes 4

nature reserves)

Administering Entity:

Ministero Agricoltura e Foreste, Gestione

ex A.S.F.D. Uff. Amm.ne Sabaudia

Location:

41°20'N, 13°35'E

Area (hectares):

3,260

Elevation Range:

0 - 54m

Biome:

Evergreen sclerophyllous woodlands

Biogeographical Province: Mediterranean Sclerophyll

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Enrico Ortese

Address:

Riserva MAB Foresta Demaniale del Circeo

c/o Parco Nazionale del Circeo

Via Carlo Alberto, 107

Sabaudia, LT

Italy

Telephone:

[39] (773) + 57251, [39] (773) + 57252

FAX:

[39](773) + 510-503

Biosphere Reserve: Collemeluccio-Montedimezzo

Administrative Units: Collemeluccio and Montedimezzo Nature

Reserves

Administering Entity: Ministero Agricoltura e Foreste

Location: 41°44'N, 14°15'E (Collemeluccio),

41°35'N, 14°15'E (Montedimezzo)

Area (hectares): 478

Elevation Range: 834 - 1,284m

Biome: Mixed mountain systems with complex

zonation

Biogeographical Province: Central European Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact: Luigi Pagano

Address: Riserva MAB Collemeluccio-Montedimezzo

Ufficio Amministracione Foreste

Demaniaci

Comando Stazione Montedimezzo

S. Pietro Avellana 86088 Isemia

Italy

Telephone: [39] (865) + 3935

FAX: [39] (865) + 413-491

Miramare

Administrative Unit:

Miramare Marine Park

Administering Entity:

World Wildlife Fund - Italia

Location:

45°42'N, 13°.42'E

Area (hectares):

60

Elevation Range:

-18 - 40m

Biome:

Evergreen sclerophyllous forests (includes costal/marine component)

Biogeographical Province: Mediterranean Sclerophyll

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Graziado Benedetti

Address:

Riserva Marina di Miramare

Viale Miramare 349

36016 Trieste

Italy

Telephone:

[39](40) + 224-147

FAX:

[39](40) + 224-147

Principal Monitoring and Research Themes:

Sea water chemistry

Plankton studies

Experimental fish breeding

No Named National Contact for Biosphere Reserves See Biosphere Reserve Manager

BIOSPHERE RESERVE LOCATION MAP

KAZAKHSTAN KAZAKHSTAN UZBEKISTAN Chatkal Mts. TAJIKISTAN



EUROMAB DIRECTORY

Biosphere Reserve:

Chatkal Mountains

(see also Uzbekistan)

Administrative Units:

Sary Chelekskiy Zapovednik

Administering Entities:

State government

Location:

41°47'N. 71°54'E

Area (hectares):

23,900

Elevation Range:

1,200 - 4,300m

Biome:

Mixed mountain systems with complex

zonation

Biogeographic Province: Pamir-Tian-Shan Highlands

Year Designated as Biosphere Reserve: 1978

Site Manager

Contact:

Address:

Sary-Chelek Zapovednik

P/O Arkit

Dzhangi-dzhol' District

Osh Region

Kyrgyzstan 716705

Principal Monitoring and Research Themes:

Floristic and faunal inventory Multimedia pollutant monoitoring

Reforestation research

Ecology of woody plants/commercial

species

Ecology of birds and mammals.



NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name: Dr. H.M. van Emden

Address: Royal Netherlands Academy of Sciences

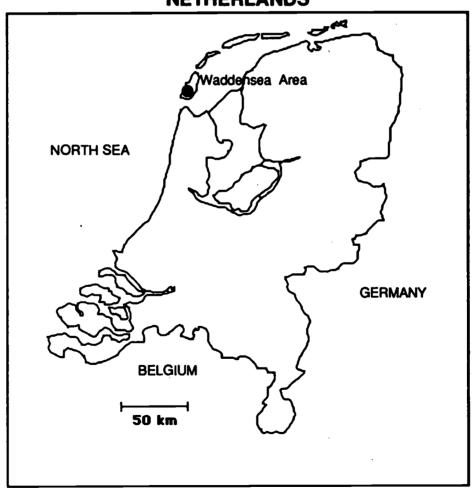
The Netherlands MAB/SCOPE/LGBP Committee

Postbox 19121 1000 gc Amsterdam The Netherlands

Telephone: [31] (20) + 551-0727 **FAX:** [31] (20) + 620-4941

E-Mail: memocom: NLX 1238

BIOSPHERE RESERVE LOCATION MAP NETHERLANDS



EuroMAB DIRECTORY

Biosphere Reserve:

Waddensea Area

Administrative Unit:

Multiple units under governmental and

private ownership.

Administering Entity:

Institute for Forestry and Nature Research,

c/o The Netherlands MAB Committee

Location:

52°52'-53°33'N, 04°45'-07°13'E

Area (hectares):

260,000

Elevation Range:

0 - 7m

Biome:

Temperate broad-leaf forests

(includes costal/marine component)

Biogeographical Province: Atlantic

Year Designated as Biosphere Reserve: 1986

Administrative Officer

Contact:

Address:

Institute for Forestry and

Nature Research.

c/o The Netherlands MAB Committee

P.O. Box 167

1790 AD Den Burg

Texel

Netherlands

Telephone:

[31](2220) + 69700

FAX:

[31](2220) + 19235

Principal Monitoring and Research Themes:

Coastal wetlands and dune systems

NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name:

Ragnhild Sandoy, MAB National Coordinator

Address:

University of Tromso

N-9037 Tromso

Norway

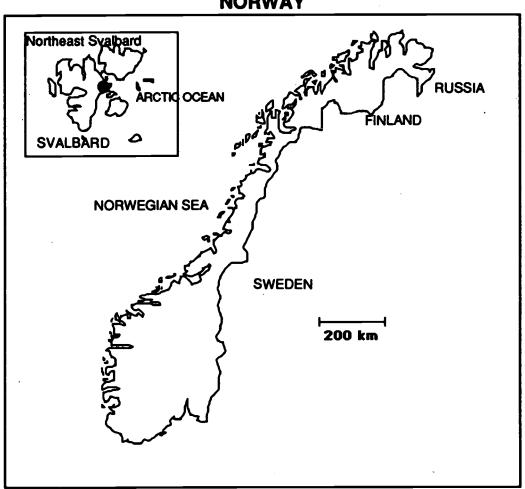
Telephone:

[47] (83) + 45528

FAX:

[47](83) + 76672

BIOSPHERE RESERVE LOCATION MAP NORWAY



Northeast Svalbard

Administrative Unit:

Northeast Svalbard Nature Reserve

Administering Entity:

Ministry of the Environment

Location:

78°40'-80°50'N, 16°35'E

Area (hectares):

1,555,000

Elevation Range:

0 - 835m

Biome:

Tundra

(includes coastal/marine component)

Biogeographical Province: Arctic Desert

Year Designated as Biosphere Reserve: 1976

Administrative Officer

Contact:

Paal Prestrud

Address:

Section for Polar Affairs

Department of International Environmental

Cooperation

Ministry of the Environment

Post Box 8013 - DEP

0030 Oslo. Norway

Telephone:

[47](22) + 345996

Principal Monitoring and Research Themes:

Air transported pollution

Climate change

Radioactive emissions monitoring

NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name:

Prof. Dr. Alicja Breymeyer

Address:

Man and Environment Committee

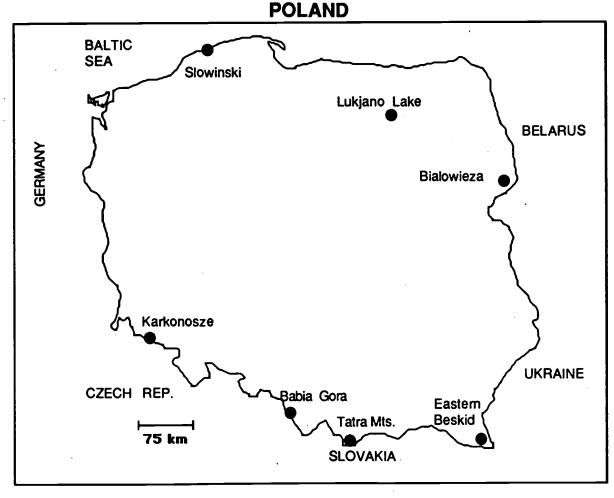
Polish Academy of Science Palace of Culture and Science

00-901 Warsaw

Poland

FAX: TELEX: [48] (2) + 226-7267 IGPAN 817835

BIOSPHERE RESERVE LOCATION MAP



EUROMAB DIRECTORY

Biosphere Reserve:

Babia Gora

Administrative Unit:

Babia Gora National Park

Administering Entity:

Ministry of Environmental Protection,

Natural Resources and Forestry

Location:

49°34'N, 19°32'E

Area (hectares):

1,741

Elevation Range:

850 - 1,725m

Biome:

Temperate broad-leaf forests

Biogeographical Province: Middle European Forest

Year Designated as Biosphere Reserve: 1976

Administrative Officer

Contact:

Jecek Wizimirski

Address:

Babia Gora National Park Siedziba Dyrekeji i muzeum

34-223 Zawoja

Poland

Telephone:

[48] + Zawoja 110

Principal Monitoring and Research Themes:

Multidisciplinary ecological monitoring in

complex mountain ecosystems

Effects of pollutants

Tourism and carrying capacity studies

Biosphere Reserve: Bialowieza

Administrative Unit: Bialowieza National Park

Administering Entity: Ministry of Environmental Protection,

Natural Resources, and Forestry

Location: 52°42'36" - 52 48'06" N,

23°48'15" - 23 55'41" E

Area (hectares): 5,348

Elevation Range: 147 - 172m

Biome: Temperate broad-leaf forests

Biogeographical Province: Boreonemoral

Year Designated as Biosphere Reserve: 1976

Administrative Officer

Contact: Czeslaw Okolow, Acting Director

Address: Bialowieza National Park

17-230 Bialowieza

Poland

Telephone: [48] + 12306, [48] + 12360

FAX: [48] + 12323 Telex 28-26-36 BPN pl

Principal Monitoring and Research Themes:

Climate Groundwaters and surface water levels

Air pollution Physiology and ecology of bison
Plant demography Phenology of plants and animals
Breeding bird census Structure/function of lowland forest

on permanent study plots including: succession, energy flow, effects

Ecology and dynamics of of human modifications

parasites in natural and Entomology/biological control of pest

modified ecosystems Entomology/biological control of pest

Forest management research/silviculture

Eastern Beskid

(see also East Carpathians, Slovakia)

Administrative Unit:

Bieszczady National Park, Cisna-Wetlina

and San Valley Landscape Parks

Administering Entity:

Ministry of Environmental Protection,

Natural Resources and Forestry

Location:

49°00'-22'N, 22°06'-53'E

Area (hectares):

108,924

Elevation Range:

420 - 1,346m

Biome:

Temperate broad-leaf forests and

woodlands, and mixed mountain systems

with complex zonation

Biogeographic Province:

Middle European Forest and Central

European Highlands

Year Designated as Biosphere Reserve: 1992

Administrative Officer

Contact:

Wojomir Wojciechowski

Address:

Bieszczcady National Park Administration

38-714 Ustrzyki Gorne

Poland

Telephone:

[48] Lutowiska 50

Principal Monitoring and Research Themes:

Dynamics of forests and alpine ecosystems



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EUROMAB DIRECTORY

POLAND

Biosphere Reserve:

Karkonosze

(see also Krkonose, Czech Republic)

Administrative Unit:

Karkonosze National Park

Administering Entity:

Karkonosze National Park Administration

Location:

50°44'-50'N, 15°27'-50'E

Area (hectares):

5,564

Elevation Range:

400 - 1,602m

Biome:

Mixed mountain systems with

complex zonation

Biogeographic Province: Central European Highlands

Year Designated as Biosphere Reserve: 1992

Administrative Officer

Contact:

Ryszard Mochola

Address:

Karkonoski Park Narodowy

Chalubinskiego 23 58-570 Jelenia Gora

Poland

Telephone:

[48] (75) + 53726

FAX:

[48](75) + 53348

Principal Monitoring and Research Themes:

Air pollution

Forests Climate Biosphere Reserve: Lukajno Lake

Administrative Unit: Lukajno Lake Reserve

Administering Entity: Urzad Wojewodzki-Suwalki

Location: 53°49'N, 21°38'E

Area (hectares): 710

Elevation Range: 115m (mean lake level)

Biome: Temperate broad-leaf forests

Biogeographical Province: Boreonemoral

Year Designated as Biosphere Reserve: 1976

Administrative Officer

Contact: Wodzimierz Jankowski,

Deputy Director, Environmental

Conservation Department

Address: Urzad Wojewodzki

16-400 Suwalki Noniewicza 10

Poland

Telephone: [48] + 62220 **FAX:** [48] + 2166

E-Mail: 16-400 Suwalki

Principal Monitoring and Research Themes:

Influence of agricultural runoff/non-point

source pollution

Ecology/population dynamics of mute swan

(Cygnus olor)



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Slowinski

Administrative Unit:

Slowinski National Park

Administering Entity:

Slowinski National Park Management

Location:

54°39'-54°43'N, 17°03'-17°31'E

Area (hectares):

18,247

Elevation Range:

0 - 55m

Biome:

Temperate broad-leaf forests

Biogeographical Province: Middle European Forest

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Kazimierz Rabski,

Director

Address:

Slowinski National Park

ul. Bohaterow Warszawy 1

76-214 Smoldzino

Poland

Telephone:

[48](59) + 116-204,

[48] (59) + 116-339,

[48](59) + 116-368

Principal Monitoring and Research Themes:

Ecology of coastal dune ecosystems Paleobotanical and geobotanical studies

Climate studies Fauna studies

Tatra Mountains

(see also Tatry, Slovakia)

Administrative Unit:

Tatra National Park

Administering Entity:

Ministry of Nature Protection, Natural

Resources and Forestry

Location:

49°15'N, 19°56'E

Area (hectares):

20,396

Elevation Range:

750 - 2,499m

Biome:

Temperate broad-leaf forests or woodlands

Biogeographic Province: Middle European Forest

Year Designated as Biosphere Reserve: 1992

Administrative Officer

Contact:

W. Gasienica Byrcyn

Address:

Tatrzanski Park Narodowy

Chatubinskiego 42A 34-500 Zakopane

Poland

Telephone:

[48] (165) + 63203

FAX:

[48](165) + 63579

Principal Monitoring and Research Themes:

Air quality monitoring

Ecological research on flora, fauna,

geology, and geomorphology

NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name:

Prof. Fernando Henriques, Chairman

MAB National Committee

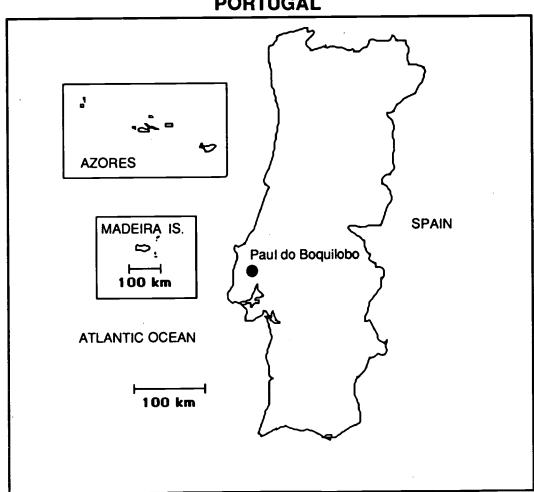
Address:

Rua do Seculo, 51-4

1200 Lisboa Portugal

BIOSPHERE RESERVE LOCATION MAP

PORTUGAL



EUROMAB DIRECTORY

Biosphere Reserve:

Paul do Boquilobo

Administrative Unit:

Paul do Boquilobo Nature Reserve

Administering Entity:

Private ownership

Location:

39°24'N, 9°28'W

Area (hectares):

395

Elevation Range:

14 - 16m

Biome:

Evergreen sclerophyllous woodlands

Biogeographical Province: Mediterranean Sclerophyll

Year Designated as Biosphere Reserve: 1981

Administrative Officer

Site Manager

Contact:

Address:

Telephone:

[351] +

Principal Monitoring and Research Themes:

Effects of agricultural uses

Studies of pollutants on lake/marsh system

Ecosystem restoration

NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name: Dr. Angheluta Vadineanu

Address: Ministry of Environment

International and Public Relations Division

12 Bd. Libertati, Tronson, 5

Bucharest Romania

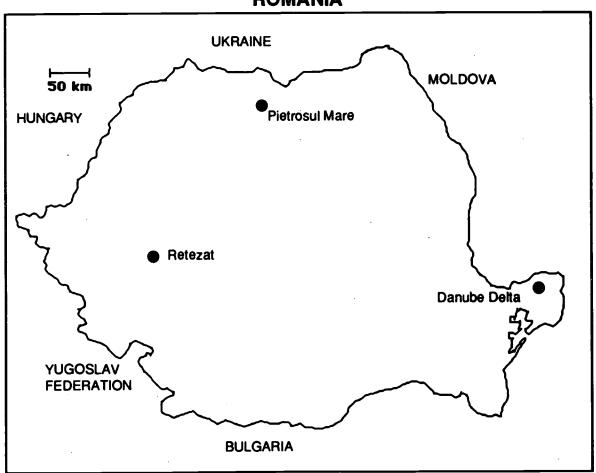
Telephone:

[40](0) + 813-488

FAX:

[40](0) + 120-403

BIOSPHERE RESERVE LOCATION MAP ROMANIA



Danube Delta

Administrative Unit:

Multiple use area; includes former Rosca-

Letea Reserve

Administering Entity:

Danube Delta Biosphere Reserve

Location:

44°20'40"-45°27'N, 28°10'40"-29°42'45"E

Area (hectares):

591,200

Elevation Range:

0.2 - 47m

Biome:

Temperate grasslands

(includes coastal/marine component)

Biogeographical Province: Pontian Steppe

Year Designated as Biosphere Reserve: 1992

Administrative Officer

Contact:

Gomoiu Marian-Traian

Address:

Administratia Rezervatiei Biosferei Delta

Dunarii

Str. Pacii, nr.20

Tulcea Ro-8800, Cas.Post.13

Romania

Telephone:

[40](915) + 15277

FAX:

[40] (915) + 24547

Principal Monitoring and Research Themes:

EUROMAB DIRECTORY

Biosphere Reserve:

Pietrosul Mare

Administrative Unit:

Pietrosul Mare Nature Reserve

Administering Entity:

Bistrita-Environmental Survey and

Protection Agency

Location:

47°40'N, 25°00'E

Area (hectares):

3,068

Elevation Range:

900 - 2,303m

Biome:

Temperate broad-leaf forests

Biogeographical Province: Middle European Forests

Year Designated as Biosphere Reserve: 1979

Administrative Officer

Contact:

Carlarig Liviu

Address:

Bistrita

Str. Avram Iancu, nr.9 Jud. Bistrita Nasaud

Romania

Telephone:

[40](990) + 16628

Principal Monitoring and Research Themes:

Geological studies

Flora and fauna surveys Peat bog pollen analysis

Ecology of beach forests and alpine

meadows

Retezat

Administrative Unit:

Retezat National Park

Administering Entity:

Deva - Environmental Survey and

Protection Agency

Location:

45°25'N, 22°45'E

Area (hectares):

20,000

Elevation Range:

890 - 2,509m

Biome:

Temperate broad-leaf forests

Biogeographical Province: Middle European Forest

Year Designated as Biosphere Reserve: 1979

Administrative Officer

Contact:

Batca Teodat

Address:

Deva

Str. Aurel Vlaicu, nr.25

Jud. Hunedoara

Romania

Telephone:

[40] (956) + 15445

Principal Monitoring and Research Themes:

Palynology

Ecology of glacial lakes, forests, mountains

NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name:

Dr. Valeri M. Neronov

Executive Director, Russian MAB National Committee

Address:

Russian MAB Secretariat

13, Fersman St., 117312 Moscow Russian Federation

Telephone:

[7](095) + 124-6000

FAX:

[7] (095) + 129-1354

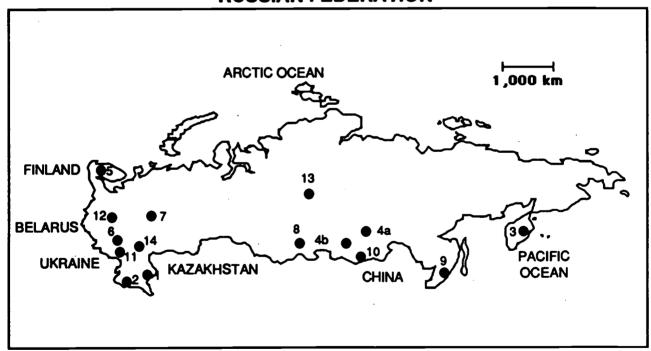
TELEX:

411682 MAB SU

E - mail:

MABSU@SOVAMSU.SOVSU.COM

BIOSPHERE RESERVE LOCATION MAP RUSSIAN FEDERATION



- 1. Astrakhanskiy
- 2. Kavkazskiy
- 3. Kronotskiy
- 4a. Lake Baikal Region Barguzinskiy
- 4b. Lake Baikal Region Baikal'skiy
- 5. Laplandskiy
- 6. Oka River Valley
- 7. Pechoro-liychskiy
- 8. Sayano-Shushenskiy
- 9. Sikhote-Alinskiy
- 10. Sokhondinskiy
- 11. Tsentralino Chemozemny.
- 12. Tsentral'no Lesnoy
- 13. Tzentralnosibirskiy
- 14. Voronezhskiy



EUROMAB DIRECTORY

Biosphere Reserve:

Astrakhanskiy

Administrative Unit:

Astrakhanskiy Zapovednik (three sections)

Administering Entity:

Government of Russian Federation

Location:

45°31'N, 47°44'E to 46°17'N, 48°57'E

Area (hectares):

63,400

Elevation Range:

28m

Biome:

Cold-winter deserts and semi-deserts (includes coastal/marine component)

Biogeographic Province:

Turanian

Year Designated as Biosphere Reserve: 1984

Administrative Officer

Contact:

Konechnyi A.G.

Director of Zapovednik

Address:

Quay of the Tsarev River, 119

Astrakhan

414021 Russian Federation

Telephone:

[7] (851) + 003-6929

Principal Monitoring and Research Themes:

Faunal inventory and monitoring

Hydrology and climatology monitoring Effects of hydrological projects on Volga

River Delta



EUROMAB DIRECTORY

Biosphere Reserve:

Kavkazskiy

Administrative Unit:

Kavkazskiy Zapovednik (two sections)

Administering Entity:

Government of Russian Federation

Location:

43°46'N, 40°21'E

Area (hectares):

266,700

Elevation Range:

0 - 3,360m

Biome:

Mixed mountain systems with complex

zonation

(includes coastal/marine component)

Biogeographic Province: Caucaso-Iranian Highlands

Year Designated as Biosphere Reserve: 1978

Administrative Officer

Contact:

Timuhin N.T.

Address:

Kavkazskiy Zapovednik

Krasnodarskiy Kray

Sochi A-341 Karl Marx St. 8

354341 Russian Federation

Telephone:

[7] (862) + 244-5136

[7](862) + 244-5073

Principal Monitoring and Research Themes:

Flora and fauna inventory Ecology of rare species

Dynamics of northwest Caucasus Mountains

Effects of fire and logging in Caucasus

Mountains



Kronotskiy

Administrative Unit:

Kronotskiy Zapovednik

Administering Entity:

Government of Russian Federation

Location:

54°09'-55°07'N, 159°38'-162°07'E

Area (hectares):

1,099,000

Elevation Range:

0 - 3,528m

Biome:

Temperate broad-leaf forests

(includes coastal/marine component)

Biogeographic Province:

Kamchatkan

Year Designated as Biosphere Reserve: 1984

Administrative Officer

Contact:

Alekseev S.A.

Director of Zapovednik

Address:

Kronotskiy Zapovednik Kamchatskaya Region Elisovo, Ryaleikova Str. 8 689010 Russian Federation

Telephone:

[7] (095) + Order via operator 8-813,

61663 or 62847

Principal Monitoring and Research Themes:

Biological inventories

Ecology of volcanic ranges of the Middle

Kamchatkan Peninsula, with emphasis on relict

fir and larch forests

Ecology of ungulates and large predators



Lake Baikal Region

Administrative Units:

Baikal'skiy Zapovednik and Barguzinskiy

Zapovednik and polygon

Administering Entity:

Government of Russian Federation

Location:

51°50'N, 105°05'E (Baikal'skiy),

54°20'N, 109°45'E (Barguzinskiy)

Area (hectares):

554,900

Elevation Range:

400 - 3,000m

Biomes:

Temperate needle-leaf forests and lake

systems

(includes coastal/marine component)

Biogeographic Provinces: East Siberian Taiga, Lake Baikal

Year Designated as Biosphere Reserve: 1986

Administrative Officers

Contact:

Prokudin A.D.

Jankus G. A.

Director.

Director,

Baikal'skiy Zapovednik

Barguzinskiy Zapovednik

Address:

Kabanskiy District

Severo-Baikalskiy District

Buryat, Tankhoi

Buryat, Davshe

671120 Russian Federation

671715 Russian Federation

Telephone:

Principal Monitoring and Research Themes:

Climate monitoring

Vegetation, and animal populations and their harvesting

Population dynamics and management of sable

Ecosystem changes

Laplandskiy

Administrative Unit:

Laplandskiy Zapovednik

Administering Entity:

Government of Russian Federation

Location:

67°10'-68°05'N, 31°45'-32°45'E

Area (hectares):

268,400

Elevation Range:

470 - 1,115m

Biome:

Temperate needle-leaf forests

Biogeographic Province: West Eurasian Taiga

Year Designated as Biosphere Reserve: 1984

Administrative Officer

Contact:

Zolotuhin V.P.

Director of Zapovednik

Address:

Laplandskiy Zapovednik

Manchegorsk Zelenyi per. 8 Murmansk Region

184280 Russian Federation

Telephone:

[7] (095) + Order via operator 8-815, 22267

Principal Monitoring and Research Themes:

Ecology of the Kola Peninsula

Ecology of reindeer and fur-bearing

mammals Ecology of fish

Ecological effects of human disturbance

Ecological role of fire

128

Oka River Valley

Administrative Unit:

Okskiy Zapovednik and polygon and

Prioksko-Terrasny State Reserve

Administering Entity:

Government of Russian Federation

Location:

54°43'N, 40°50'E (Okskiy),

54°53'N, 37°49'E (Prioksko-Terrasny)

Area (hectares):

60,600

Elevation Range:

80 - 200m

Biome:

Temperate broad-leaf forest

Biogeographic Province:

Boreonemoral

Year Designated as Biosphere Reserve: 1978

Administrative Officer

Contact:

Priklonskii S.G.

Litkens E.S.

Director,

Director.

Okskiy Zapovednik

Prioksko-Terrasny Reserve

Address:

Spasskiy District

Serpuhovskoi District

Ryazan Region

Moskovskaya Region

Lakash

Danki

391072 Russian Federation

142274 Russian Federation

Telephone: [7] (095) Order via

[7] (095) Order via operator 72274

[7] (095) + 546-7363 or

296-9063

Principal Monitoring and Research Themes:

Inventory of birds

Climate monitoring

Hydrology

Plant and animal populations, harvesting

Ecology of selected fauna

Ecosystem dynamics of mixed forests

Rare mammals population dynamics

Pechoro-Ilychskiy

Administrative Unit:

Pechoro-Ilychskiy Zapovednik

(two sections)

Administering Entity:

Government of Russian Federation

Location:

61°43'-63°15'N, 56°49'-59°38'E

Area (hectares):

721,322

Elevation Range:

150 - 1,195m

Biome:

Temperate needle-leaf forests

Biogeographic Province: West Eurasian Taiga

Year Designated as Biosphere Reserve: 1984

Administrative Officer

Contact:

Megalinskii K.O.

Director of Zapovednik

Address:

Pechoro-Ilychskiy Zapovednik

Troitsko-Pechorskiy District

Komi Republic

Yaksha

169436 Russian Federation

Telephone:

[7] (095) Order via operator, 8-813, 95699

Principal Monitoring and Research Themes:

Long-term ecological monitoring Reproductive biology of domestic elk Population studies of fish, birds, and

mammals



Sikhote-Alinskiy

Administrative Unit:

Sikhote-Alinskiy Zapovednik

Administering Entity:

Government of Russian Federation

Location:

44°46'-45°45'N, 135°48'-136°35'E

Area (hectares):

349,900

Elevation Range:

0 - 1,600m

Biome:

Temperate broad-leaf forests

(includes coastal/marine component)

Biogeographic Province:

Manchurian-Japanese Mixed Forest

Year Designated as Biosphere Reserve: 1978

Administrative Officer

Contact:

Astafev A.A.

Director of Zapovednik

Address:

Sikhote-Alinskiy Zapovednik

Terneyskiy District Primorskiy Kray

Terney

692150 Russian Federation

Telephone:

[7] (095) Order via operator, 8-813, 91559

Principal Monitoring and Research Themes:

Flora and fauna inventories

Ecology of rare and commercially

important species

Ecosystem studies: (vegetation distribution,

succession, productivity)



Sokhondinskiy

Administrative Unit:

Sokhondinskiy Zapovednik

Administering Entity:

Government of Russian Federation

Location:

49°29'-50°0'N, 110°33'-111°22'E

Area (hectares):

211,000

Elevation Range:

700 - 2,508m

Biome:

Temperate grasslands

Biogeographic Province:

Mongolian-Manchurian Steppe

Year Designated as Biosphere Reserve: 1984

Administrative Officer

Contact:

Yashnov V.I.

Director of Zapovednik

Address:

Sokhondinskiy Zapovednik

Chitinskaya Region Kyra, Gorky Str. 48

674250 Russian Federation

Telephone:

[7] (095) Order via operator, 8-813, 91424

Principal Monitoring and Research Themes:

Long-term ecological monitoring

Inventory of mosses, lichens, birds and

mammals

Tsentral'no Chernozemny

Administrative Unit:

Tsentral'no-Chernozemny Zapovednik

(five sections)

Administering Entity:

Government of Russian Federation

Location:

51°00'N, 36°40'E

Area (hectares):

4,795

Elevation Range:

230 - 263m

Biome:

Temperate broad-leaf forests, temperate

grasslands

Biogeographic Province: Middle European Forest/Pontian Steppe

Year Designated as Biosphere Reserve: 1978

Administrative Officer

Contact:

Maleshin N.A.

Director of Zapovednik

Address:

Tsentral'no-Chernozemny Zapovednik

Kursk /

Zapovednoe -

307028 Russian Federation

Telephone:

[7](095) + 807100 - 71016

Principal Monitoring and Research Themes:

Forest-steppe ecosystems: soil formation,

moisture and temperature,

vegetation dynamics

Long-term monitoring of birds

Ecotonal studies



Tsentral'no-Lesnoy

Administrative Unit:

Tsentral'no-Lesnoy Zapovednik

Administering Entity:

Government of Russian Federation

Location:

56°30'N, 32°52'E

Area (hectares):

21,348

Elevation Range:

200 - 289m

Biome:

Temperate broad-leaf forests

Biogeographic Province: Boreonemoral

Year Designated as Biosphere Reserve: 1985

Administrative Officer

Contact:

Jeltuhin A.S.

Director of Zapovednik

Address:

Tsentral'no-Lesnoy Zapovednik

Nelidovskiy District Tverskaya Region

172513 Russian Federation

Telephone:

[7](095) + 808266-22220

Principal Monitoring and Research Themes:

Meteorological observations

Annual censuses of animal populations Ecological research of primary and

secondary forests

Inventory and ecological monitoring

of spruce ecosystems

Wildlife population dynamics

Human modification of adjacent landscapes

Tzentral'nosibirskiy

Administrative Unit:

Tzentralnosibirskiy Zapovednik and

polygon

Administering Entity:

Government of Russian Federation

Location:

60°55'-63°15'N, 84°15'-92°30'E

Area (hectares):

5,000,000

Elevation Range:

80 - 500m

Biome:

Temperate needle-leaf forests

Biogeographic Province: West Eurasian Taiga, East Siberian Taiga

Year Designated as Biosphere Reserve: 1986

Administrative Officer

Contact:

Rassolov A.G.

Director of Zapovednik

Address:

Tsentral'nosibirskiy Zapovednik

Turukhanskiy District Krasnoyarskiy Kray

Bor

663196 Russian Federation

Telephone:

[7](095) Order via operator, 8-813, 7625

Principal Monitoring and Research Themes:

Inventory and ecology of soil, vegetation,

and animal populations

Voronezhskiy

Administrative Unit:

Voronezhskiy Zapovednik

Administering Entity:

Government of Russian Federation

Location:

52°0'N, 39°41'E

Area (hectares):

31,100

Elevation Range:

90 - 170m

Biome:

Temperate broad-leaf forests

Biogeographic Province: Middle European Forest

Year Designated as Biosphere Reserve: 1984

Administrative Officer

Contact:

Semyonov V.A.

Director of Zapovednik

Address:

Voronezhskiy Zapovednik

Voronezh

Grafskaya Station

394047 Russian Federation

Telephone:

[7](095) + 80732-269542

Principal Monitoring and Research Themes:

Soil fauna: plant growth/ development

relationships

Avian and mammalian parasitology

Insect ecology

Mammalian reproductive biology

Forest succession studies Ecology of bryophytes

NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name:

Dr. Juraj Holcik

Address:

Institute of Zoology and Ecosozology

Slovak Academy of Sciences

Manesovo 2 851 01 Bratislava Slovak Republic

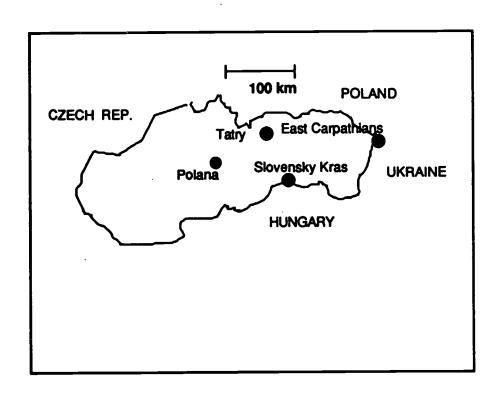
Telephone:

[42](7) + 846-701

FAX:

[42](7) + 840-363

BIOSPHERE RESERVE LOCATION MAP SLOVAKIA



East Carpathians

(see also Eastern Beskid, Poland)

Administrative Unit:

East Carpathian Protected Landscape Area

Administering Entity:

Administration of the East Carpathian

Protected Landscape Area Ministry of Environment

Location:

48°56'N - 49°11'N, 22°09'-34'E

Area (hectares):

40,601

Elevation Range:

210 - 1208m

Biome:

Temperate broad-leaf forests and

woodlands

Biogeographic Province: Middle European Forest

Year Designated as Biosphere Reserve: 1992

Administrative Officer

Contact:

Jan Terray

Address:

Lipova 19

066 01 Humenne Slovak Republic

Telephone:

[42] (933) + 3632

Principal Monitoring and Research Themes:

Biodiversity in forests Aquatic ecosystems Biotopes mapping Agricultural research

Vegetation monitoring - forest ecosystems,

meadow ecosystems

Inventory of flora and fauna Wildlife population dynamics

Traditional cultivars of fruit trees

Polana

Administrative Unit:

Polana Protected Landscape Area/

Biosphere Reserve

Administering Entity:

Polana Administration

(Ministry of Environment)

Location:

48°39'N, 19°29'E

Area (hectares):

20,079

Elevation Range:

460 - 1458m

Biome:

Temperate broad-leaf forests

Biogeographic Province:

Middle European Forest

Year Designated as Biosphere Reserve: 1990

Administrative Officer

Contact:

Dusan Slavik

Address:

J.M. Hurbana 20 960-01 Zvolen

Slovak Republic

Telephone:

[42] (855) + 23657

Principal Monitoring and Research Themes:

Inventory of flora and fauna

Agricultural research

Appropriate rural technology

Aquatic ecosystems

Biogeochemical cycling

Climatological monitoring

Ecosystems (succession, modeling,

comparative studies)

Vegetation monitoring

Wildlife population dynamics

Research on rare species Geomorphology, pedology

Water pollutants

Atmospheric pollutants Ecosystem restoration

Slovensky Kras

Administrative Unit:

Slovak Karst Protected Landscape Area/

Biosphere Reserve

Administrative Entity:

Slovak Karst Administration

(Ministry of Environment)

Location:

48°35'N, 20°40'E

Area (hectares):

36,165

Elevation Range:

200 - 925m

Biome:

Temperate broad-leaf forests

Biogeographic Province:

Middle European Forest

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Mikulas Rozloznik

Address:

Brzotin 188

049 51

Slovak Republic

Telephone:

[42] (942) + 82198

Principal Monitoring and Research Themes:

Inventory of flora Vegetation mapping

Abiotic, biotic, and human environments Geology, geomorphology, and speleology

Monitoring of flora and fauna

Research on rare species Atmospheric pollutants

Hydrography regime change

Tatry

(see also Tatra Mountains, Poland)

Administrative Unit:

Tatra National Park

Administering Entity:

Administration of the Tatra National

Park (Ministry of Agriculture)

Location:

49°10'N, 19°57'E

Area (hectares):

105,660

Elevation Range:

? - 2655m

Biome:

Temperate broad-leaf forests or woodlands

Biogeographic Province:

Middle European Forest

Year Designated as Biosphere Reserve: 1992

Administrative Officer

Contact:

Ivan Voloscuk

Address:

Tatra National Park Administration

(TANAP)

Tatranska Lomnica

059 60

Slovak Republic

Telephone:

[42] (969) + 967-9518

FAX:

[42] (969) + 967-959

Principal Monitoring and Research Themes:

NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name:

D. Ignaci Castello i Vidal

Address:

Servicio de Parques Naturales

Deputacion de Barcelona Conde de Urgell, 187

08036 Barcelona

Spain

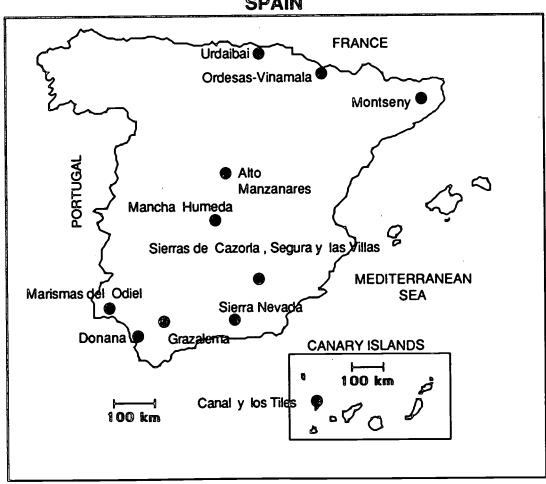
Telephone:

[34](3) + 302-0778

FAX:

[34](3) + 402-2494

BIOSPHERE RESERVE LOCATION MAP SPAIN



Alto Manzanares

Administrative Unit:

Parque Regional de la Cuenca Alta del

Manzanares

Administering Entity:

Agencia de Medio Ambiente -

Comunidad de Madrid

Location:

40°30'-49'N, 03°33'-04°00'W

Area (hectares):

46,323

Elevation Range:

615 - 2,383m

Biome:

Mixed mountain and highland systems with

complex zonation

Biogeographical Province: Mediterranean Sclerophyll

Year Designated as Biosphere Reserve: 1992

Administrative Officer

Contact:

Jose Manuel Nicolas

Director - Conservador

Parque Regional de la Cuenca Alta del

Manzanares

Address:

Agencia de Medio Ambiente de la

Comunidad de Madrid

Princesa 3 28003 Madrid

Spain

Telephone:

[34](1) + 580-3900

Principal Monitoring and Research Themes:

Ecological cartography

Agroecosystems

Ecosystems/wetlands

Landscape conservation and recreation



El Canal y los Tiles

Administrative Unit:

Administering Entity:

Vice-Consejeria del Medio Ambiente

Location:

28°40'N, 17°40'W

Area (hectares):

511

Elevation Range:

250 - 1,400m

Biome:

Mixed island systems

Biogeographical Province: Macaronesian Islands

Year Designated as Biosphere Reserve: 1983

Administrative Officer

Contact:

Jefe Unidad Insular

Address:

Avenida Anaga, 35-7.

38001 Santa Cruz de Tenerife

Islas Canarias

Spain

Telephone:

[34](22) + 291-732

FAX:

[34](22) + 291-622

Principal Monitoring and Research Themes:

Canary Islands/relict laurisilva ecosystems

EUROMAB DIRECTORY

Biosphere Reserve:

Donana

Administrative Unit:

Donana National Park

Administering Entity:

Instituto para la Conservacion de la

Naturaleza (government)

Location:

37°00'N, 06°30'W

Area (hectares):

50,720

Elevation Range:

0 - 32m

Biome:

Evergreen sclerophyllous woodlands

(includes coastal/marine component)

Biogeographical Province: Mediterranean Sclerophyll

Year Designated as Biosphere Reserve: 1981

Administrative Officer

Contact:

Address:

Telephone:

[34](55) +

FAX:

[34](55) +

Principal Monitoring and Research Themes:

Endangered species Ecological interaction

Population dynamics

Hydrology Water quality **Biodiversity** Climate

Fires

Socioanthropology

Biosphere Reserve: Grazalema

Administrative Unit: Parque Natural Sierra de Grazelema

Administering Entity: Agencia de Medio Ambiente de la Junta de

Andalucia

Location: 36°15′-36°54′N, 05°20′-05°32′W

Area (hectares): 32,210

Elevation Range: 250 - 1,654m

Biome: Mixed mountain and highland systems with

complex zonation

Biogeographical Province: Mediterranean Sclerophyll

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact: Juan Carlos Neva

Address: Avenida Diputacion s/n

El Bosque 11670 Cadiz

Spain

Telephone: [34] (56) + 716-063

[34](56) + 716-236

FAX: [34] (56) + 716-339

Principal Monitoring and Research Themes:

Survey of vascular plants

Vegetation mapping

Structure/ function of fir, hardwood,

maquis communities Biological evolution

Biosphere Reserve:

La Mancha Humeda

Administrative Units:

Multiple units. The biosphere reserve includes La Mancha Humeda National

Park and other protected areas

Administering Entity:

Parque Nacional "Las Tablas de

Damiel" Instituto para la Conservacion

de la Naturaleza (ICONA)

Location:

39°16'N, 03°24'E

Area (hectares):

25,000

Elevation Range:

600 - 700m

Biome:

Evergreen sclerophyllous woodlands

Biogeographical Province: Mediterranean Sclerophyll

Year Designated as Biosphere Reserve: 1980

Administrative Officer

Contact:

Address:

Telephone:

[34](26) +

FAX:

[34](26) +

Principal Monitoring and Research Themes:

Meteorology Bird populations Water quality

Las Marismas del Odiel

Administrative Unit:

Biosphere reserve

Administering Entity:

Agencia de Medio Ambiente de la Junta

de Andalucia

Location:

At mouth of Odiel River

Area (hectares):

8,758

Elevation Range:

0 - 10m

Biome:

Evergreen sclerophyllous woodlands

(includes coastal/marine component)

Biogeographical Province: Mediterranean sclerophyll

Year Designated as Biosphere Reserve: 1983

Administrative Officer

Contact:

Juan Carlos Rubio Garcia

Address:

Avenida de Sanlucar de Barrameda, 3-20

21001 Huelva

Spain

Telephone:

[34](55) + 210-321

FAX:

[34](55) + 210-322

Principal Monitoring and Research Themes:

Marshland ecosystems

Ornithology Archeology

Biosphere Reserve:

Montseny

Administrative Unit:

Parque Natural del Montseny

Administering Entity:

Servei de Parques Naturales, Diputacio de

Barcelona

Location:

41°47'N, 06°03'E

Area (hectares):

17,372

Elevation Range:

270 - 1,707m

Biome:

Mixed mountain and highland systems with

complex zonation

Biogeographical Province: Iberian highlands

Year Designated as Biosphere Reserve: 1978

Administrative Officer

Contact:

Eduard Botey

Address:

Oficina del Parc Natural del Montseny

Fontmartina

08470 Fogars de Montclus (Barcelona)

Spain

Telephone:

[34](3) + 847-5102

FAX:

[34](3) + 847-5102

Principal Monitoring and Research Themes:

Anthropology

Landscape structure and dynamics Geological structure and dynamics

Limnology

Biosphere Reserve: Ordesa-Vinamala

Administrative Unit: Vinamala Reserve, including Ordesa

National Park

Administering Entity: Instituto para la Conservacion de la

Naturaleza (government)

Location: 42°30′-42°43′N, 0°07′-0°12′E

Area (hectares): 51,396

Elevation Range: 875 - 3,941m

Biome: Mixed mountain and highland systems with

complex zonation

Biogeographical Province: Iberian Highlands

Year Designated as Biosphere Reserve: 1977

Administrative Officer

Contact:

Address:

Telephone: [34] (74) + **FAX:** [34] (74) +

Principal Monitoring and Research Themes:

Inventory of flora and fauna Vegetation management Wildlife management

Ecological effects of public use

Las Sierras de Cazorla, Segura y Las Biosphere Reserve:

Villas

Administrative Unit:

Las Sierras de Cazorla y Segura

Resource and Hunting Reserve

Administering Entity:

Agencia de Medio Ambiente de la Junta de

Andalucia

Location:

East Jaen Province, Andalucia

Area (hectares):

190,000

Elevation Range:

600 - 2,100m

Biome:

Mixed mountain and highland systems with

mixed zonation

Biogeographical Province: Mediterranean Sclerophyll

Year Designated as Biosphere Reserve: 1983

Administrative Officer

Contact:

Emilio Gonzalez, Director-Conservador

P.N. Sierras de Cazorla, Segura y Las Villas

Address:

Avenida de Andalucia, 79 pral.

23071 Jaen

Spain

Telephone:

[34](53) + 223-150

FAX:

[34](53) + 251-039

Principal Monitoring and Research Themes:

Ecological plant-animal interactions

Sierra Nevada

Administrative Unit:

Reserva Nacional de Caza de Sierra Nevada

Administering Entity:

Agencia de Medio Ambiente de la Junta de

Andalucia

Location:

36°56'-37°14'N. 2°45'-3°32'W

Area (hectares):

190,000

Elevation Range:

400 - 3,482m

Biome:

Mixed mountain and highland systems with

complex zonation

Biogeographical Province: Mediterranean Sclerophyll

Year Designated as Biosphere Reserve: 1986

Administrative Officer

Contact:

Juan Rodriguez de Velasco y Vega

Address:

Gran Via de Colon, 48-3.

18010 Granada

Spain

Telephone:

[34](58) + 290-062

FAX:

[34](58) + 277-600

Principal Monitoring and Research Themes:

Monitoring of Capsa pyrenaica hispanica

population, diseases

Protection and reproduction monitoring of endangered high mountain flora species

Ski station effects on rivers

Urdaibai

Administrative Unit:

Biosphere reserve containing multiple

ownerships

Administering Entity:

Departamento de Urbanismo, Vivienda y

Medio Ambiente, Vice-consejeria de

Medio Ambiente

Location:

43°20'N, 2°41'W

Area (hectares):

22,500

Elevation Range:

0 - 804m

Biome:

Evergreen sclerophyllous woodlands

Biogeographical Province: Iberian Highlands

Year Designated as Biosphere Reserve: 1984

Administrative Officer

Contact:

Anton Uranburu Albizuri

Address:

Calle Samaniego, 2 01008 Vitoria-Gastiez

Spain

Telephone:

[34](45) + 135-209

[34](45) + 189-567

FAX:

[34](45) + 135-095

Principal Monitoring and Research Themes:

Environmental education

Industrial wastes

Heavy metals pollutants Biological research

NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name:

Dr. Uno Svedin

Head of Divison, Executive Secretary

Swedish MAB Committee

Address:

Swedish Council for Planning and Coordination of

Research (FRN) P.O. Box 6710

S-113 85 Stockholm

Sweden

Telephone:

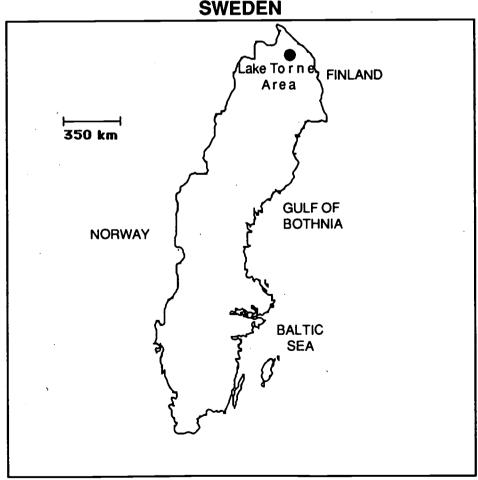
[46](8) + 610-0600

FAX:

[46](8) + 610-0633

BIOSPHERE RESERVE LOCATION MAP

SWEDEN





Biosphere Reserve: Lake Torne Area

Administering Entity: Swedish Environmental Protection Board

and Royal Swedish Academy of Sciences

Location: 68°25'N, 19°00'E

Area (hectares): 96,500

Elevation Range: 340 - 1,610m

Biome: Tundra

Biogeographical Province: Subarctic Birchwoods

(Forest Tundra and mountain tundra)

Year Designated as Biosphere Reserve: 1986

Administrative Officer Site Manager

Contact: Jan From Mats Sonesson

Address: Swedish Environmental Royal Swedish Academy

Protection Board of Sciences

Mountain Unit Abisko Research Station

Asgatan 20 S-980 24 Abisko

S-960 40 Jokkmokk Sweden

Sweden

Telephone: [46] (971) + 12330 [46] (980) + 40039 **FAX:** [46] (980) + 40171

Principal Monitoring and Research Themes:

Meteorological observations Ground water monitoring Atmospheric deposition Geophysical monitoring

Comparative ecological research

Comparative geomorphological research

NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name:

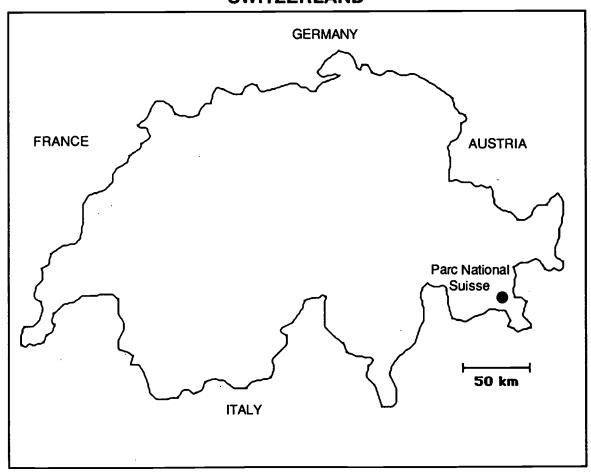
Dr. Jurg Zihler Swiss National Committee for MAB

Address:

Bundesamt fur Umwelt, Wald und Landschaft

CH-3003 Bern Switzerland

BIOSPHERE RESERVE LOCATION MAP SWITZERLAND





Biosphere Reserve:

Suisse

Administrative Unit:

Parc national Suisse

Administering Entity:

Federal Office of Environment, Forests and

Landscape, Main Division Conservation

Nature and Landscape

Location:

46°35'-46°45'N, 10°00'-10°20'E

Area (hectares):

16,870

Elevation Range:

1,500 - 3,174m

Biome:

Mixed mountain systems with complex

zonation

Biogeographical Province: Central European Highlands

Year Designated as Biosphere Reserve: 1979

Administrative Officer

Contact:

Klaus Rubin

Director, Swiss National Park

Address:

National Park House 7530 Zemez (GR)

Switzerland

Telephone:

[41](82) + 813-78

FAX:

[41](31) + 619-981

E-Mail:

RP Lebeau 31 618064

Principal Monitoring and Research Themes:

Ecology of forest and alpine systems

NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name:

Babaev, A.G.

Address:

15 Golgol St.

744000 Ashgabat

Turkmenistan

Telephone:

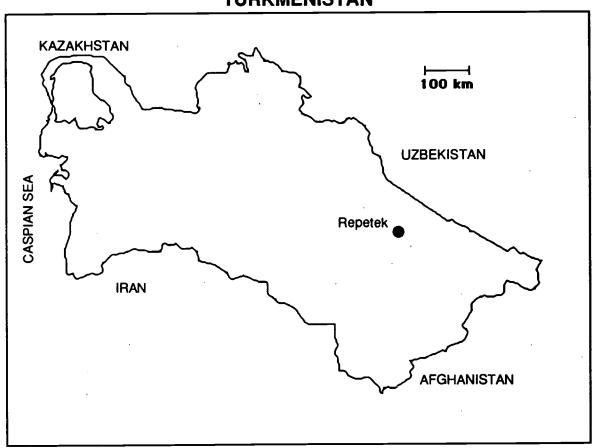
[7](3632) + 253-716

FAX:

[7](3632) + 253-716

BIOSPHERE RESERVE LOCATION MAP

TURKMENISTAN





TURKMENISTAN

EUROMAB DIRECTORY

Biosphere Reserve:

Repetek

Administrative Unit:

Repetek Zapovednik

Administering Entity:

The Desert Institute of the Academy of

Science of Turkmenistan

Location:

38°16'N, 63°13'E

Area (hectares):

34,600

Elevation Range:

180 - 220m

Biome:

Warm-moderate desert

Biogeographic Province:

Turanian

Year Designated as Biosphere Reserve: 1979

Administrative Officer

Contact:

Address:

Repetek Sand-Desert Station

Chardzhou Region, Repetek

746000 Turkmenistan

Telephone:

[7](37822) + 24470

FAX:

[7](3632) + 253-716

Principal Monitoring and Research Themes:

Forest management research Plant and animal genetics Use of plant resources

Dynamics of sand-desert ecosystems: shifting sand, underground water, soil moisture, phenology, productivity, succession, faunal composition, and

distribution

NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name:

Valery P. Kukhar

Address:

Ukrainian National MAB Committee

54 Vladimirskaya St.

Kiev 30 252601

Ukraine

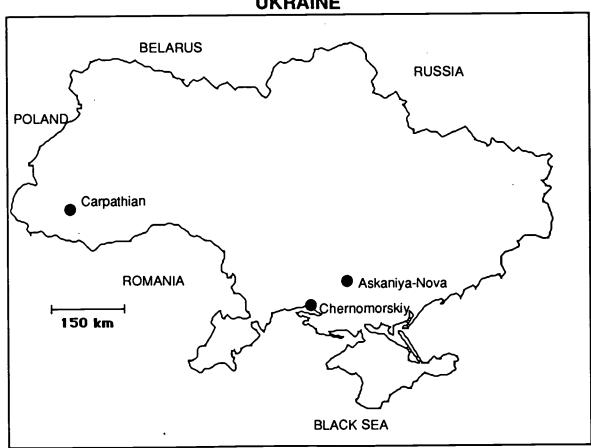
Telephone:

[7] (44) + 221-6769, [7] (44) + 225-0134

FAX:

[7](44) + 224-3243

BIOSPHERE RESERVE LOCATION MAP UKRAINE



Askaniya-Nova

Administrative Unit:

Biosphere reserve includes Askaniya-

Nova Zapovednik and surrounding

multiple use area

Administering Entity:

State government

Location:

46°28'N, 33°55'E

Area (hectares):

33,307

Elevation Range:

8 - 30m

Biome:

Temperate grasslands

Biogeographical Province: Pontian Steppe

Year Designated as Biosphere Reserve: 1984

Administrative Officer

Contact:

Hawrylenko Victor Semenowytch

Director, Askaniya-Nova Zapovednik

Address:

Chaplynsky district

Kherson region Ukraine 326332

Telephone:

[7](05538) + 61147

Principal Monitoring and Research Themes:

Ecology of grazed steppe, effect of human

activities

Wildlife population dynamics



Carpathian

Administrative Unit:

Carpathian State Reserve, Republican

Reservation "Stuzhitsa"

Administering Entity:

State government

Location:

Area (hectares):

38,930

Elevation Range:

200 - 2,061m

Biome:

Mixed mountain and highland systems with

complex zonation

Biogeographical Province: Central European Highlands

Year Designated as Biosphere Reserve: 1992

Administrative Officer

Contact:

Address:

Carpathian State Biosphere Reserve

Krasnoye Plesso, 77

Rakhov 295800

Ukraine

Telephone:

[7](03132) + 22659

Principal Monitoring and Research Themes:

Biosphere Reserve:

Chernomorskiy

Administrative Unit:

Chernomorskiy Zapovednik

Administering Entity:

State government

Location:

46°12'N, 32°00'E

Area (hectares):

87,348

Elevation Range:

0 - 100m

Biome:

Temperate grasslands

(includes coastal/marine component)

Biogeographical Province: Pontian Steppe

Year Designated as Biosphere Reserve: 1984

Administrative Officer

Contact:

Mayatsky Georgi Borysowytch

Director

Address:

Lermontov St.1

Gola Prystan Kherson region Ukraine 326240

Telephone:

[7](05539) + 2675

Principal Monitoring and Research Themes:

Study of sandy steppes, woodlands, fresh

and brackish waters and

steppe-sea ecotone

Monitoring of breeding and

migratory birds



NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name:

Prof. Michael G. Morris

Secretary, MAB National Committee

Address:

United Kingdom MAB National Committee

Institute of Terrestrial Ecology Furzebrook Research Station Wareham, Dorset BH20 5AS

United Kingdom

Telephone:

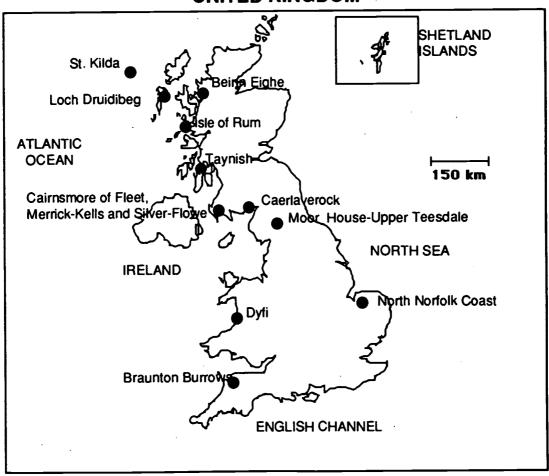
[44] (929) + 551-518

FAX:

[44](929) + 551-087

BIOSPHERE RESERVE LOCATION MAP

UNITED KINGDOM





Biosphere Reserve:

Beinn Eighe

Administrative Unit:

Beinn Eighe National Nature Reserve

Administering Entity:

Scottish Natural Heritage

Location:

57°30'-57°39'N, 5°18'-5°30'W

Area (hectares):

4.800

Elevation Range:

0 - 1,053m

Biome:

Mixed mountain systems with complex

zonation

(includes coastal/marine component)

Biogeographic Province:

Scottish Highlands:

Year Designated as Biosphere Reserve: 1976

Administrative Officer

Site Manager

Contact: P.J. Tilbrook

T. Clifford

Address:

Scottish Natural Heritage

Ialtag

North-west Region Fraser Darling House 9 Culduthel Road

Anancaun Field Station Kinlochewe, Ross-shire

Inverness IV2 4AG

Scotland

United Kingdom

Scotland

United Kingdom

Telephone: [44] (463) + 239-431

[44](44584) + 244

FAX:

[44](463) + 710-713

Principal Monitoring and Research Themes:

Ecosystem restoration of lowland woodlands Ungulate ecology and management (deer)

Research on montane ecosystems



UNITED KINGDOM

Biosphere Reserve: Braunton Burrows

Administrative Unit: Braunton Burrows National Nature Reserve

Administering Entity: English Nature (South-west Region)

Location: 51°06'N, 04°12'W

Area (hectares): 596

Elevation Range: 0 - 30m

Biome: Temperate broad-leaf forests

(includes coastal/marine component)

Biogeographic Province: British Islands

Year Designated as Biosphere Reserve: 1976

Administrative Officer Site Manager

Contact: M. Hudson John Breeds

Address: English Nature

South-west Region Broadeford Farm,

Roughmoor, Bishop's Hull Heddon Mill

Taunton, Somerset TA1 5AA Braunton, North Devon

England EX33 2NQ United Kingdom England

United Kingdom

Telephone: [44] (823) + 283-211 [44] (271) + 812-552

FAX: [44](823) + 272-97

Principal Monitoring and Research Themes:

Biological inventory

Ecosystem restoration (dune systems)

Coastal geomorphology

Effects of natural and human influences

on biota



UNITED KINGDOM

EUROMAB DIRECTORY

Biosphere Reserve: Caerlaverock

Administrative Unit: Caerlaverock National Nature Reserve

Administering Entity: Scottish Natural Heritage

Location: 54°52'N, 3°30'W

Area (hectares): 5,501

Elevation Range: 0 - 10m

Biome: Temperate broad-leaf forests

(includes coastal/marine component)

Biogeographic Province: British Islands

Year Designated as Biosphere Reserve: 1976

Administrative Officer Site Manager

Contact: Christopher H.C. Fox Marion Hughes

Address: Scottish Natural Heritage 106 High Street

South-west Region Dalbcattic

Caspian House Kirkcudbrightshire

2 mariner Court DG5 4HB
Clydebank Business Park Scotland

Clydebank, G81 2NR United Kingdom

Scotland

United Kingdom

Telephone: [44] (41) + 951-4488 [44] (556) + 610-086 **FAX:** [44] (41) + 951-4510 [44] (556) + 611-924

Principal Monitoring and Research Themes:

Ecosystem dynamics of tidal marshes

Wildlife management research

(barnacle geese)
Faunal populations

(emphasis on birds and herpetofauna)



UNITED KINGDOM

Biosphere Reserve: Cairnsmore of Fleet, Merrick-Kells and

Silver-Flowe

Administrative Unit: Cairnsmore of Fleet National Nature Reserve

Administering Entity: Scottish Natural Heritage

Location: 54°58'N, 4°17'W

Area (hectares): 1,922

Elevation Range: 200 - 710m

Biome: Temperate broad-leaf forests

Biogeographic Province: British Islands

Year Designated as Biosphere Reserve: 1976

Administrative Officer Site Manager

Contact: Christopher H.C. Fox Marion Hughes

Address: Scottish Natural Heritage 106 High Street

South-west Region Dalbeattie

Caspian House Kirkcudbrightshire

2 Mariner Court DG5 4HB Clydebank Business Park Scotland

Clydebank, G81 2NR United Kingdom

Scotland

United Kingdom

Telephone [44] (41) + 951-4488 [44] (556) + 610-086 **FAX:** [44] (41) + 951-4510 [44] (556) + 611-924

Principal Monitoring and Research Themes:

Floristic and faunal studies Studies of land use history



Biosphere Reserve:

Claish Moss

Administrative Unit:

Claish Moss National Nature Reserve

Administering Entity:

Scottish Natural Heritage

Location:

56°00'N, 05°45'W

Area (hectares):

480

Elevation Range:

0 - 20m

Biome:

Mixed mountain systems with complex

zonation

(includes coastal/marine component)

Biogeographic Province:

Scottish Highlands

Year Designated as Biosphere Reserve: 1977

Site Manager Administrative Officer

Contact:

P.J. Tilbrook

Stewart Angus

Manager, Western Isles

Address:

Scottish Natural Heritage

North-west Region Fraser Darling House 9 Culduthel Road

Inverness IV2 4AG

Scotland

17 Francis Street

Stornoway Isle of Lewis **PA87 2NB** Scotland

United Kingdom

United Kingdom

[44](463) + 239-431Telephone:

[44] (0851) + 705-258

[44](463) + 710-713

[44](0851) + 704-900

Principal Monitoring and Research Themes:



Dyfi

Administrative Unit:

Dyfi National Nature Reserve

Administering Entity:

Countryside Council for Wales

Location:

52°32'N, 4°00'W

Area (hectares):

1,598

Elevation Range:

0 - 15m

Biome:

Temperate broad-leaf forest

(includes coastal/marine component)

Biogeographic Province: British Islands

Year Designated as Biosphere Reserve: 1976

Administrative Officer

Site Manager

Contact:

Chris Fuller

Mike Daly

Address:

Countryside Council for Wales:

Aberystwyth Office Plas Gogerddan

Aberystwyth, Dyfed SY23 3EE

Wales

United Kingdom

Warden's Office

Tal y Bont Aberystwyth, Dyfed SY24 5EO

Wales

United Kingdom

Telephone: [44] (970) + 828-551

[44](970) + 828-314FAX:

[44] (970) + 86485

Principal Monitoring and Research Themes:

Biosphere Reserve:

Isle of Rum

Administrative Unit:

Isle of Rum National Nature Reserve

Administering Entity:

Scottish Natural Heritage

Location:

57°00'N, 06°30'W

Area (hectares):

10,560

Elevation Range:

0 - 812m

Biome:

Mixed mountain systems with complex

zonation

(includes coastal/marine component)

Biogeographic Province: Scottish Highlands

Year Designated as Biosphere Reserve: 1976

Administ	trative	<u>Officer</u>

Site Manager

Contact: P.J. Tilbrook

Martin Curry

Address:

Scottish Natural Heritage

White House Isle of Rum North-west Region Fraser Darling House Scotland United Kingdom

9 Culduthel Road Inverness, IV2 4AG

Scotland

United Kingdom

Telephone: [44] (463) + 239-431

[44](687) + 2026

FAX:

[44](463) + 710-713

Principal Monitoring and Research Themes:

Monitoring of flora and fauna

Geological studies



UNITED KINGDOM

Biosphere Reserve: Loch Druidibeg

Administrative Unit: Loch Druidibeg National Nature Reserve

Administering Entity: Scottish Natural Heritage

Location: 57°20′N, 7°15′W

Area (hectares): 1,658

Elevation Range: 0 - 30m

Biome: Mixed mountain systems with complex

zonation

(includes coastal/marine component)

Biogeographic Province: Scottish Highlands

Year Designated as Biosphere Reserve: 1976

Administrative Officer Site Manager

Contact: P.J. Tilbrook Stewart Angus

Manager, Western Isles

Address: Scottish Natural Heritage 17 Francis Street

North-west Region Stornoway
Fraser Darling House Isle of Lewis
9 Culduthel Road PA87 2NB
Inverness IV2 4AG Scotland

Scotland United Kingdom

United Kingdom

Telephone: [44] (463) + 239-431 [44] (0851) + 705-258 **FAX:** [44] (463) + 710-713 [44] (0851) + 704-900

Principal Monitoring and Research Themes:



Biosphere Reserve: Moor House-Upper Teesdale

Administrative Units: Moor House and Upper Teesdale National

Nature Reserves

Administering Entity: English Nature

(North-west Region)

Location: 54°65'N, 2°45'W, 54°36'N, 3°12'W

Area (hectares): 7,399

Elevation Range: 305 - 850m

Biome: Temperate broad-leaf forests

Biogeographic Province: British Islands

Year Designated as Biosphere Reserve: 1976

Administative Officer Site Manager

Contact: William Williams Terry Wells

Address: Blackwall Appleby Business Center

Bowness-on-Windermere 3 Bridge Street Cumbria LA23 3JR Appleby, Cumbria

England CA16 6QH United Kingdom England

United Kingdom

Telephone: [44] (5394) + 45286 [44] (7683) + 52347

FAX: [44] (5394) + 88432 [44] (7683) + 52546

Principal Monitoring and Research Themes:

Structure and function of bog ecosystems

Monitoring of biotic and abiotic environment

Dynamics of plant-animal relationships Effects of natural and human influences

on biota



North Norfolk Coast

Administrative Units:

Multiple units (Scolt Head and Holkham National Nature Reserves; Blakeney Point, and Cley and Salthouse Marshes Sites of Special Scientific Interest)

Administering Entities:

English Nature, National Trust (East Anglia Regional Agent), and Norfolk Naturalists' Trust

Location:

52°56'-52°57'N, 0°43'-1°00'E

Area (hectares):

5,497

Elevation Range:

0 - 20m

Biome:

Temperate broad-leaf forests

(includes coastal/marine component)

Biogeographic Province:

British Islands

Year Designated as Biosphere Reserve: 1976

Administrative Officer

Contact:

Senior Officer, English Nature

(Norfolk)

Address:

60 Bracondale

Norwich NR1 2BE England

United Kingdom

Telephone:

[44] (603) + 620-558

FAX:

Principal Monitoring and Research Themes:

Ecology of salt marshes and dune systems

EuroMAB DIRECTORY

Biosphere Reserve:

St. Kilda

Administrative Unit:

St. Kilda National Nature Reserve

Administering Entity:

Scottish Natural Heritage

Location:

57°49'N, 8°34'W

Area (hectares):

842

Elevation Range:

0 - 430 m

Biome:

Mixed mountain systems with complex

zonation

(includes coastal/marine component)

Biogeographic Province: British Islands

Year Designated as Biosphere Reserve: 1976

Administrative Officer Site Manager

Contact:

P.J. Tilbrook

Stewart Angus

Manager, Western Isles

Address:

Scottish Natural Heritage North-west Region Fraser Darling House 9 Culduthel Road Inverness IV2 4AG

17 Francis Street

Stornoway Isle of Lewis **PA87 2NB** Scotland

Scotland

United Kingdom

United Kingdom

Telephone: [44] (463) + 239-431 [44](463) + 710-713FAX:

[44](0851) + 705-258[44](0851) + 704-900

Principal Monitoring and Research Themes:

Monitoring of flora and fauna (emphasis on

sea birds)

Population dynamics of Soay sheep



Taynish

Administrative Unit:

Taynish National Nature Reserve

Administering Entity:

Scottish Natural Heritage

Location:

56°00'N, 5°38'W

Area (hectares):

326

Elevation Range:

0 - 100m

Biome:

Temperate broad-leaf forests

(includes coastal/marine component)

Biogeographic Province:

British Islands

Year Designated as Biosphere Reserve: 1977

Administrative Officer Site Manager

Contact:

Christopher H.C. Fox

Carmen Placido

Address:

Scottish Natural Heritage

1 Kilmory Industrial Estate

South-west Region

Kilmory Lochgilphead

Caspian House

Argyll

2 Mariner Court Clydebank Business Park Clydebank, G81 2NR

PA31 8RR Scotland

United Kingdom

Scotland

United Kingdom

Telephone:[44] (41) + 951-4488

[44](546) + 603-611

[44](41) + 951-4510

[44](546) + 602-298

Principal Monitoring and Research Themes:

NATIONAL CONTACT FOR BIOSPHERE RESERVES

Name:

Dr. Roger E. Soles

Executive Director, U.S. MAB Secretariat

Address:

OES/EGC/MAB Room 608 SA 37 Department of State

Washington, D.C. 20522-3707

U.S.A.

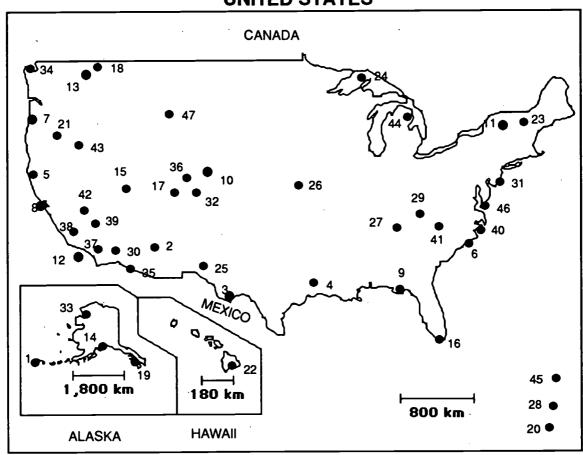
Telephone:

[1] (703) + 235-2946

FAX:

[1] (703) + 235-3002

BIOSPHERE RESERVE LOCATION MAP UNITED STATES



SEE NEXT PAGE FOR LIST OF NAMES OF BIOSPHERE RESERVES



1. Aleutian Islands	17. Fraser	
2. Beaver Creek	18. Glacier	33. Noatak
3. Big Bend	19. Glacier Bay-Admiralty Island	34. Olympic
4. Big Thicket	20. Guanica	35. Organ Pipe Cactus
5. California Coast Ranges	21. H.J. Andrews	36. Rocky Mountain
6. Carolinian-South Atlantic	22. Hawaiian Islands	37. San Dimas
7. Cascade Head	23. Hubbard Brook	38. San Joaquin
8. Central California Coast	24. Isle Royale	39. Sequoia-Kings Canyon
9. Central Gulf Coastal Plain	25. Jornada	40. South Atlantic Coastal Plain
10. Central Plains	26. Konza Prairie	41. Southern Appalachian
11. Champlain-Adirondack	27. Land Between the Lakes	42. Stanislaus-Tuolumne
12. Channel Islands	28. Luquillo	43. Three Sisters
13. Coram	29. Mammoth Cave Area	44. University of Michigan
14. Denali	30. Mojave and Colorado Deserts	45. Virgin Islands
15. Desert	31. New Jersey Pinelands	46. Virginia Coast
16. Everglades	32. Niwot Ridge	47. Yellowstone



Biosphere Reserve:

Aleutian Islands

Administrative Unit:

Alaska Maritime National Wildlife Refuge

Administrative Entity:

U.S. Department of the Interior, U.S. Fish and Wildlife Service

Location:

54°51'-52°55'N, 163°22'-172°24'W

Area (hectares):

1,100,943

Elevation Range:

0 - 3,041m

Biome:

Tundra

(includes coastal/marine component)

Biogeographic Province:

Aleutian Islands

Year Designated as Biosphere Reserve: 1976

Site Manager

Contact:

Daniel L. Boone

Address:

U.S. Fish and Wildlife Service

Aleutian Islands Unit, AMNW

PSC 486 Box 5251 FPO AP 96506-5251

U.S.A.

Telephone:

[1](907) + 592-2406

FAX:

[1] (907) + 592-3473

Principal Monitoring and Research Themes:

Marine bird populations and productivity

Aleutian Canada goose restoration Eradication of introduced arctic foxes Winter waterfowl populations monitoring

Marine mammals (Steller's sea lion)

EuroMAB DIRECTORY

UNITED STATES

Biosphere Reserve: Beaver Creek

Administrative Unit: Beaver Creek Experimental Watershed

Administering Entity: U.S. Department of Agriculture,

Forest Service

Location: 34°32'N, 111°65'W

Area (hectares): 111,300

Elevation Range: 900 - 2,400m

Biome: Warm deserts and semideserts

Biogeographic Province: Sonoran

Year Designated as Biosphere Reserve: 1979

Administrative Officer

Contact: Bruce Greco

Address: Beaver Creek Experimental

Watershed

2323 West Greenlaw Lane Flagstaff, Arizona 86004

U.S.A.

Telephone: [1] (602) + 556-7374

FAX: [1] (602) + 556-7371

E-Mail: USFS(DG):R03F04A

Principal Monitoring and Research Themes:

Surface hydrology

Climate

Old-growth timber/forest research



Biosphere Reserve:

Big Bend

Administrative Unit:

Big Bend National Park

Administering Entity:

U.S. Department of the Interior,

National Park Service

Location:

29°30'N, 102°103'E

Area (hectares):

283,247

Elevation Range:

533 - 2,388m

Biome:

Warm deserts and semideserts

Biogeographic Province: Chihuahuan

Year Designated as a Biosphere Reserve: 1976

Site Manager

Contact:

Superintendent

Address:

Big Bend National Park

Texas 79834

U.S.A.

Telephone:

[1] (915) + 477-2251

FAX:

[1](915) + 477-2247

Principal Monitoring and Research Themes:

Inventory of resources

River use along Rio Grande

Hydrological cycle

Reptiles

Geomorphology

Water quality and flow

Paleontology



UNITED STATES

Biosphere Reserve:

Big Thicket

Administrative Unit:

Big Thicket National Preserve

Administering Entity:

U.S. Department of the Interior

National Park Service

Location:

30°31'N, 94°19'W

Area (hectares):

34,217

Elevation Range:

0 - 8m

Biome:

Temperate broad-leaf forests

(includes coastal/marine component)

Biogeographic Province:

Austroriparian

Year Designated as Biosphere Reserve: 1981

Site Manager

Contact:

Ronald Switzer,

Superintendent

Address:

Big Thicket National Preserve

3785 Milam

Beaumont, Texas 77701

U.S.A.

Telephone:

[1](409) + 839-2691

FAX:

[1] (409) + 839-2599

Principal Monitoring and Research Themes:

Fire influences on plant communities
Tree demography, seedling mortality
Soil nutrient limitations on tree seedling

establishment

Intensive monitoring and modeling of

pollutants in airshed River management study



Biosphere Reserve:

California Coast Ranges

Administrative Unit:

Multiple Units

Administering Entities:

California Department of Forests; University of California; The Nature

Conservancy; U.S. Department of the Interior, Bureau of Land Management and National Park Service; U.S. Department of Agriculture, Forest Service; California

Department of Parks and Recreation

Location:

39°45'N, 123°58'W; 41°30'N, 124°00'W; 36°N, 121°31'W; 36°N, 121°37'W

Area (hectares):

62,098

Elevation Range:

0 - 1,572m

Biome:

Temperate rain forests

(includes coastal/marine component)

Biogeographic Province:

Oregonian

Year Designated as Biosphere Reserve: 1983

Administrative Officer

Contact:

Debra Elliott-Fisk, Director

Address:

Natural Reserve System, University of California

300 Lakeside Drive, 6th floor Oakland, California 94612-3560

Telephone:

[1] (510) 987-0150

FAX:

[1] (510) 763-2971

(information continued on next page)

Information continued:

Biosphere Reserve:

California Coast Ranges

Site Managers

Peter Steel

John Smiley

Address:

Northern California Coast

Landels-Hill Big Creek

Range Preserve

Reserve

42101 Wilderness Road

Coast Route

Branscomb, California 95417

Big Sur, California 93920

Telephone: [1] (707) 984-6653

[1] (408) 667--2543

Principal Monitoring and Research Themes:

Archeology

Biological surveys

and collections

Comparative ecology

Downcutting response

Ecosystem restoration

Ethnobiology

Exotic species

Integrated food chains
Invertebrate biodiversity

Leaf packs

Redwood biogeography

Sedimentation

Succession

Wildlife

population

dynamics

Biosphere Reserve: Carolinian-South Atlantic

Administrative Units: Multiple Units

Administering Entities: U.S. Department of the Interior, Fish and

Wildlife Service, National Park Service; South Carolina Department of Wildlife and Marine Resources; U.S. Department of

Commerce, National Oceanic and

Atmospheric Administration; University of South Carolina; Little St. Simons Island Foundation; Clemson University; and The

Nature Conservancy

Location: 30°50′-35°00′N, 76°00′-81°35′W

Area (hectares): 157,105

Elevation Range: 0 - 20m

Biome: Temperate broad-leaf forests

(includes coastal/marine component)

Biogeographic Province: Eastern Forest

Year Designated as Biosphere Reserve: 1986

Contacts: Dennis M. Allen Sally Hopkins-Murphy

Address: Baruch Marine Laboratory Non-Game and Heritage Trust

Section
University of South Carolina South Carolina Wildlife and Marine

P.O. Box 1630 Resources Department

Georgetown, P.O. Box 12559

South Carolina 29442 Charleston, South Carolina 29412

U.S.A. U.S.A.

Telephone:[1] (803) + 546-3623 [1] (803) + 795-6350 **FAX:** [1] (803) + 546-1632 [1] (803) + 762-5007

Principal Monitoring and Research Themes:

Wildlife population dynamics
Rare and endangered species
Fire history and effects
Recreation and tourism

Ecology (long-term)
Geomorphology
Inventory/birds
Exotic species
Sea level changes



UNITED STATES

Biosphere Reserve:

Cascade Head

Administrative Unit:

Cascade Head Experimental Forest and

Scenic-Research Area

Administering Entity:

U.S. Department of Agriculture,

Forest Service

Location:

45°02'N, 123°59'W

Area (hectares):

7,051

Elevation Range:

0 - 525m

Biome:

Temperate rain forests

(includes coastal/marine component)

Biogeographic Province: Oregonian

Year Designated as Biosphere Reserve: 1976

Administrative Officer

Contact:

Sarah Greene

Address:

Forestry Sciences Laboratory

3200 Jefferson Way

Corvallis, Oregon 97331

U.S.A.

Telephone:

[1](503) + 750-7360

FAX:

[1](503) + 750-7329

Principal Monitoring and Research Themes:

Growth and mortality patterns of 130 year-

old stands of Sitka spruce, western

hemlock, and Douglas fir

Air temperature and precipitation data (56 years) Monitoring of salt marsh restoration (since 1981)



Biosphere Reserve:

Central California Coast

Administrative Units:

Multiple Units

Administering Entities:

U.S. Department of the Interior, U.S. Fish and Wildlife Service and National Park Service; U.S. Department of Commerce,

National Oceanic and Atmospheric

Administration; Audubon Canyon Ranch; Marin County; Municipal Water District;

California Department of Parks and Recreation; University of California; Stanford University; and City of San

Francisco

Location:

37°38°N, 122°W

Area (hectares):

857,103

Elevation Range:

-2,300 - 730m

Biome:

Evergreen sclerophyllous woodland (includes coastal/marine component)

Biogeographic Province:

Californian

Year Designated as Biosphere Reserve: 1988

Contact:

Sally Fairfax

Address:

College of Natural Resources

University of California, Berkeley

145 Mulford Hall

Berkeley, California 94720

U.S.A.

Telephone:

[1](510) + 642-7627

FAX:

[1] (415) + 664-1660

(Information continued on next page)

Information continued:

Biosphere Reserve:

Central California Coast

Contacts (continued):

Ed Veber Gulf of the Farallons and Cordell Bank National Marine Sanctuaries, NOAA

Fort Mason Building 204 San Francisco, California 94123

U.S.A.

Nona Chiariello Jasper Ridge Biological Preserve Stanford University Stanford, CA 94305

U.S.A

Telephone:[1] (415) + 556-3509

FAX:

[1](415) + 664-1419

[1](415) + 949-5711

Principal Monitoring and Research Themes:

Biological survey and collections Ecosystem restoration

Marine/terrestrial interactions

Rare/endangered species Traditional land use systems Wildlife population dynamics



Biosphere Reserve:

Central Gulf Coastal Plain

Administrative Unit:

Apalachicola National Estuarine Research

Reserve

Administering Entities:

Florida Department of Natural

Resources and U.S. Department of Commerce, National Oceanographic and Atmospheric Administration

Location:

29°44'N, 84°58'W

Area (hectares):

78,414

Elevation Range:

0.1 - 5m

Biome:

Temperate broad-leaf forests

(includes coastal/marine component)

Biogeographic Province:

Austroriparian

Year Designated as Biosphere Reserve: 1983

Site Manager

Contact:

Woodard W. Miley,II

Address:

Apalachicola National Estuarine Research

Reserve

261 Seventh Street

Apalachicola, Florida 32320

U.S.A.

Telephone:

[1](904) + 653-8063

FAX:

[1] (904) + 653-2297

Principal Monitoring and Research Themes:

Long-term monitoring of physical, chemical and biological parameters Threatened and endangered species Environmental education activities Management-oriented research

UNITED STATES

Biosphere Reserve: Central Plains

Administrative Unit: Central Plains Experimental Range

Administering Entity: U.S. Department of Agriculture,

Agricultural Research Service

Location: 40°50'N, 104°45'W

Area (hectares): 6,210

Elevation Range: 1,600 - 1,690m

Biome: Temperate grasslands

Biogeographic Province: Grasslands.

Year Designated as Biosphere Reserve: 1976

Administrative Officer Site Manager

Contact: Gary W. Frasier Mary Ashby

Address: Agricultural Research Service Central Plains

Rangeland Resources Research Unit Experimental Range

1701 Center Avenue

Ft. Collins, Colorado 80526

U.S.A.

Telephone: [1] (303) + 498-4230 [1] (303) + 897-2226

FAX: [1] (303) + 482-2909

Principal Monitoring and Research Themes:

Vegetation data Land use history

Inventory-vascular plants

Climate

Rangeland management

Biosphere Reserve: Champlain-Adirondack

Administrative Units: Adirondack Park, Green Mountain National

Forest, Mount Mansfield State Natural Area, Camel's Hump State Natural Area

Administering Entities: Adirondack Park Agency (New York

State); U.S. Department of Agriculture, Forest Service; Vermont Agency of Natural Resources; New York State

Department of Environmental

Conservation; University of Vermont

Location: 43°00′-45°00′N, 73°15′-73°30′W

Area (hectares): 3,990,000

Elevation Range: 29 - 1,629m

Biome: Temperate broad-leaf forests

Biogeographic Province: Lake Forest

Year Designated as Biosphere Reserve: 1989

New York Area <u>Vermont Area</u>

Contact: Edward J. Hood Rose Paul

Address: Adirondack Park Agency Agency of Natural Resources

P.O. Box 99 103 South Main Street

Ray Brook, New York 12977 Center Building

U.S.A. Waterbury, Vermont 05676

U.S.A.

Telephone: [1] (518) + 891-4050 [1] (802) + 244-1137

FAX: [1] (518) + 891-3938 [1] (802) + 244-1102

Principal Monitoring and Research Themes:

Atmospheric pollutants Geographic information

Water quality systems

Comparative ecology

Forest research/silviculture
Watershed management

Biosphere Reserve: Channel Islands

Administrative Units: Channel Islands National Marine Sanctuary

and Channel Islands National Park

Administrative Entities: U.S. Department of Commerce,

National Oceanic and Atmospheric Administration; and U.S. Department of

the Interior, National Park Service

Location: 33°27'-34°04'N, 119°01'-120°26'W

Area (hectares): 479,625

Elevation Range: 0 - 741m

Biome: Evergreen sclerophyllous woodlands

(includes coastal/marine component)

Biogeographic Province: Californian

Year Designated as a Biosphere Reserve: 1976

Marine Sanctuary National Park

Contact: Stephen C. Jameson, Manager Kate Faulkner

Address: Channel Islands National Channel Islands

Marine Sanctuary
National Park
735 State Street
1901 Spinnaker Drive

735 State Street 1901 Spinnaker Drive Santa Barbara, California 93101 Ventura, Calif. 93001

U.S.A. U.S.A.

Telephone: [1] (805) + 966-7107 [1] (805) + 658-5700 **FAX:** [1] (805) + 568-1582 [1] (805) + 658-5799

Principal Monitoring and Research Themes:

Water pollutants
Pests and diseases
Restoration ecology
Cultural anthropology
Rare/endangered species

Biological survey and collections

Ecology of marine and island communities



UNITED STATES

Biosphere Reserve:

Coram

Administrative Unit:

Coram Experimental Forest

Administering Entity:

U.S. Department of Agriculture, Forest Service

Location:

48°22'-26'N, 113°58'-114°00'W

Area (hectares):

3,010

Elevation Range:

1067 - 1920m

Biome:

Mixed mountain systems with complex zonation

Biogeographic Province:

Rocky Mountains

Year Designated as Biosphere Reserve: 1976

Administrative Officer

Site Manager

Contact:

Raymond Shearer

Jack A. Schmidt

Address:

USDA Forest Service

Intermountain Research Station Forestry Sciences Laboratory

800 East Beckwith P.O. Box 8089

Missoula, Montana 59807

U.S.A.

Telephone:

[1] (406) + 721-5694, ext. 138

FAX:

[1](406) + 543-2663

E-Mail:

USFS(DG): R.Shearer:S22L01A USFS(DG): J.Schmidt:S22L01A

Principal Monitoring and Research Themes:

Plant and animal succession

Ecology and management of <u>Larix</u> Influence of harvest on succession

Climatic factors, soil water, and streamflow Influence of site treatments on succession Influence of thinning and cultural treatments

on development of plant species



Biosphere Reserve: Denali

Administrative Unit: Denali National Park and Preserve

Administering Entity: U.S. Department of the Interior,

National Park Service

Location: 63°20'N, 150°30'W

Area (hectares): 2,441,295

Elevation Range: 122 - 6,194m

Biome: Temperate needle-leaf forests

Biogeographic Province: Yukon Taiga

Year Designated as Biosphere Reserve: 1974

Administrative Officer Site Manager

Contact: Gordon Olson Russell W. Berry, Jr.

Address: Denali National Park Denali National Park

and Preserve and Preserve

Denali Park, Alaska 99755 U.S.A. Denali Park, Alaska 99755 U.S.A.

Telephone: [1] (907) + 683-2294 [1] (907) + 683-2294

FAX: [1] (907) + 683-2720 [1] (907) + 683-2720

Principal Monitoring and Research Themes:

Large mammal ecology

Vegetation ecology

Air quality
Water quality
Geology and soils
Archaeology

Subsistence use

EUROMAB DIRECTORY

Biosphere Reserve:

Desert

Administrative Unit:

Desert Experimental Range

Administering Entity:

U.S. Department of Agriculture,

Forest Service, Intermountain Research Station

Location:

38°40'N, 113°45'W

Area (hectares):

22,513

Elevation Range:

1,547 - 2,565

Biome:

Cold-winter desert

Biogeographic Province:

Great Basin

Year Designated as Biosphere Reserve: 1976

Administrative Officer

Contact:

E. Durant McArthur

Address:

U.S. Forest Service

Shrub Sciences Laboratory

735 N. 500 E.

Provo, Utah 84606

U.S.A.

Telephone:

[1](801) + 377-5717

FAX:

[1](801) + 375-6968

Principal Monitoring and Research Themes:

Vascular plant inventory

Vegetation data Vegetation map

Ecological succession Ecosystem modeling



Biosphere Reserve:

Everglades

Administrative Units:

Everglades National Park and

Fort Jefferson National Monument

Administering Entity:

U.S. Department of the Interior,

National Park Service

Location:

24°50'-25°55'N, 80°20'-81°30'W

Area (hectares):

592,313

Elevation Range:

0 - 2m

Biome:

Tropical monsoon forests

(includes coastal/marine component)

Biogeographic Province: Everglades

Year Designated as Biosphere Reserve: 1976

Administrative Officer

Site Manager

Contact:

Michael Soukup

Richard Ring, Superintendent

Address:

Everglades National Park

P.O. Box 279

Homestead, Florida 33030

U.S.A.

Telephone:

[1](305) + 247-6211

FAX:

[1](305) + 247-6211, ext. 204

Principal Monitoring and Research Themes:

Surface hydrology

Water quality

Marine ecosystems Vertebrate ecology Ecosystem restoration



EuroMAB DIRECTORY

Biosphere Reserve: Fraser

Administrative Unit: Fraser Experimental Forest

Administering Entity: U.S. Department of Agriculture

Location: 39°54'N, 105°53'W

Area (hectares): 9,328

Elevation Range: 2,660 - 3,904m

Biome: Mixed mountain systems with complex zonation

Biogeographic Province: Rocky Mountains

Year Designated as Biosphere Reserve: 1976

Site Manager

Contact: Charles Troendle

Address: Fraser Experimental Forest

Rocky Mountain Forest and Range

Experiment Station 240 West Prospect St.

Fort Collins, Colorado 80521

U.S.A.

Telephone: [1] (303) + 726-5220

FAX: [1](303) + 498-1010

Principal Monitoring and Research Themes:

Water quality Nutrient cycling Animal habitat



EUROMAB DIRECTORY

Biosphere Reserve:

Glacier

Administrative Unit:

Glacier National Park

Administering Entity:

U.S. Department of the Interior,

National Park Service

Location:

48°15'-49°00'N, 113°15'-114°30'W

Area (hectares):

410,202

Elevation Range:

972 - 3,185m

Biome:

Mixed mountain systems with complex zonation

Biogeographic Province: Rocky Mountains

Year Designated as Biosphere Reserve: 1976

Administrative Officer

Site Manager

Contact:

Brace Hayden

H. Gilbert Lusk,

Superintendent

Address:

Glacier National Park

West Glacier, Montana 59936

U.S.A.

Telephone:

[1](406) + 888-5441

FAX:

[1](406) + 888-5581

Principal Monitoring and Research Themes:

Global climate change Ecosystem modeling Rare/endangered species Fire history and effects Limnology/hydrobiology



Biosphere Reserve: Glacier Bay-Admiralty Island

Administrative Units: Glacier Bay National Park and

Admiralty Island National Monument

Administering Entities: U.S. Department of the Interior,

National Park Service; and U.S. Department of Agriculture, Forest

Service

Location: 57°02'-58°11'N, 132°25'W, 58°10'-59°15'N,

135°15'-138°40'W

Area (hectares): 1,714,851

Elevation Range: 0 - 4,666m

Biome: Temperate needle-leaf forests

(includes coastal/marine component)

Biogeographic Province: Sitkan

Year Designated as Biosphere Reserve: 1986

National Park National Monument

Contact: Marvin Jensen Vivian Hoffman

Address: Glacier Bay National Park Admiralty Island

Gustavus, Alaska 99826 National Monument U.S.A. 8465 Old Dairy Rd.

8465 Old Dairy Rd. Juneau, Alaska 99801

U.S.A.

Telephone:[1] (907) + 697-2232 [1] (907) + 586-8790 **FAX:** [1] (907) + 697-2410 [1] (907) + 586-8795

Principal Monitoring and Research Themes:

Glacial geology Ecological succession



EUROMAB DIRECTORY

Biosphere Reserve:

Guanica

Administrative Unit:

Guanica Commonwealth Forest Reserve

Administering Entity:

Puerto Rico Department of Natural Resources

Location:

17°55'N, 67°05'W

Area (hectares):

4,006

Elevation Range:

0 - 228m

Biome:

Mixed island systems

(includes coastal/marine component)

Biogeographic Province: Greater Antillean

Year Designated as Biosphere Reserve: 1981

Site Manager

Contact:

Miguel Canals Mora

Address:

Department of Natural Resources

Forest Service Area

P.O. Box 5887-Puerta de Tierra San Juan, Puerto Rico 00906

U.S.A.

Telephone:

[1](809) + 384-7049

Principal Monitoring and Research Themes:

Forest succession

UNITED STATES

Biosphere Reserve:

H.J. Andrews

Administrative Unit:

H.J. Andrews Experimental Forest

Administering Entity:

U.S. Department of Agriculture,

Forest Service

Location:

44°15′N, 122°10′W

Area (hectares):

6,100

Elevation Range:

435 - 1,631

Biome:

Mixed mountain systems with complex zonation

Biogeographic Province:

Sierra-Cascade

Year Designated as Biosphere Reserve: 1976

Site Manager

Contact:

Arthur McKee

Address:

H.J. Andrews Experimental Forest

P.O. Box 300

Blue River, Oregon 97413

U.S.A.

Telephone:

[1](503) + 822-3914

FAX:

[1](502) + 750-7329

Principal Monitoring and Research Themes:

Water quality Stream ecology

Ecological succession

Biosphere Reserve:

Hawaiian Islands

Administrative Units:

Haleakala National Park and

Hawaii Volcanoes National Park

Administering Entity:

U.S. Department of the Interior,

National Park Service

Location:

19°11'-19°33'N, 155°01'-155°39'W; 20°39'-

20°47'N, 156°02'-156°16'W

Area (hectares):

99,545

Elevation Range:

0 - 4,170m

Biome:

Mixed island systems

(includes coastal/marine component)

Biogeographic Province:

Hawaiian

Year Designated as Biosphere Reserve: 1980

	Administrative Officer	Site Manager
Contact:	Lloyd Loope	Hugo H. Huntzinger, Superintendent
Address:	Haleakala National Park P.O. Box 369 Makawao, Hawaii 96768 U.S.A.	Hawaii Volcanoes National Park P.O. Box 52 Hawaii Volcanoes, Hawaii 96718-0052 U.S.A.
Telephone: [1] (808) + 572-1983 FAX: [1] (808) + 572-1304		[1] (808) + 967-7311 [1] (808) + 967-8186

Principal Monitoring and Research Themes:

Exotic species

Ecosystem restoration Rare/endangered species Permanent plots, vegetation Inventory - invertebrates



Biosphere Reserve:

Hubbard Brook

Administrative Unit:

Hubbard Brook Experimental Forest

Administering Entity:

U.S. Department of Agriculture,

Forest Service

Location:

43°56'N, 71°45'W

Area (hectares):

3,176

Elevation Range:

222 - 1,015m

Biome:

Temperate broad-leaf forests

Biogeographic Province:

Lake Forest

Year Designated as a Biosphere Reserve: 1976

	Administrative Officer	Site Manager
Contact:	Christopher Eagar	C. Wayne Martin
Address:	USDA Forest Service P.O. Box 640 Durham, New Hampshire 03824 U.S.A.	Hubbard Brook Experimental Forest RFD #1 Box 779 Campton, New Hampshire 03223 U.S.A.
	:[1] (603) + 868-5576 [1] (603) + 868-1538 BITNET:cfederer@umdars	[1] (603) + 726-8902 [1] (603) + 868-1538 BITNET:cfederer@umdars

Principal Monitoring and Research Themes:

Hydrometeorological monitoring

Precipitation and streamwater chemistry

Forest succession

Biogeochemical cycling





UNITED STATES

Biosphere Reserve:

Isle Royale

Administrative Unit:

Isle Royale National Park

Administering Entity:

U.S. Department of the Interior,

National Park Service

Location:

47°48'-48°16'N, 88°15'-89°20'W

Area (hectares):

215,740

Elevation Range:

184 - 425m

Biome:

Lake systems

(includes coastal/marine component)

Biogeographic Province:

Great Lakes

Year Designated as Biosphere Reserve: 1980

Site Manager

Contact:

Linda Witkowski

Address:

Isle Royale National Park

87 North Ripley St.

Houghton, Michigan 49931

U.S.A.

Telephone:

[1] (906) + 482-0986

[1](906) + 337-4991

FAX:

[1] (906) + 482-8753

[1](906) + 337-4984

Principal Monitoring and Research Themes:

Large mammal research

Vegetation studies Acid precipitation



EUROMAB DIRECTORY

Biosphere Reserve:

Jornada

Administrative Unit:

Jornada Experimental Range

Administering Entity:

U.S. Department of Agriculture, Agricultural Research Service

Location:

32°37'N, 106°45'W

Area (hectares):

78,297

Elevation Range:

1,260 - 2,830m

Biome:

Warm deserts and semideserts

Biogeographic Province: Chihuahuan

Year Designated as Biosphere Reserve: 1976

Administrative Officer

Contact:

Kris Havstad

Address:

P.O. Box 30003

New Mexico State University

Las Cruces, New Mexico 88003-0003

U.S.A.

Telephone:

[1](505) + 646-4842

FAX:

[1](505) + 646-5889

Principal Monitoring and Research Themes:

Agricultural research Rangeland management Ecosystem restoration Ecological succession Ecological monitoring

UNITED STATES

Biosphere Reserve:

Konza Prairie

Administrative Unit:

Konza Prairie Research Natural Area

Administering Entity:

The Nature Conservancy

Location:

39°03'-39°08'N, 96°31'-96°37'W

Area (hectares):

3,487

Elevation Range:

320 - 444m

Biome:

Temperate grasslands

Biogeographic Province:

Grasslands

Year Designated as Biosphere Reserve: 1979

Administrative Officer

Contact:

Christopher Smith

Address:

Kansas State University

Division of Biology,

Ackert Hall

Manhattan, Kansas 66506

U.S.A.

Telephone:

[1](913) + 532-6656

FAX:

[1](913) + 532-6653

Principal Monitoring and Research Themes:

Restoration ecology Ecological succession

EuroMAB DIRECTORY

Biosphere Reserve:

Land Between The Lakes

Administrative Unit:

Land Between The Lakes

Administering Entity:

Tennessee Valley Authority

Location:

36°47'N, 88°03'W

Area (hectares):

1,560,000

Elevation Range:

108 - 201m

Biome:

Temperate broad-leaf forests

Biogeographic Province:

Eastern Forest

Year Designated as Biosphere Reserve: 1991

Administrative Officer

Site Manager

Contact:

Thomas D. Forsythe

Ann W. Wright, Superintendent

Address:

Land Between The Lakes 100 Van Morgan Drive

Golden Pond, Kentucky 42211

U.S.A.

Telephone:

[1](502) + 924-5602

FAX:

[1](502) + 924-1399

Principal Monitoring and Research Themes:

Wildlife population dynamics Biological survey and collections

Limnology, hydrobiology Forest research/silviculture Atmospheric pollutants

UNITED STATES

Biosphere Reserve:

Luquillo

Administrative Unit:

Luquillo Experimental Service

Administering Entity:

U.S. Department of Agriculture.

Forest Service

Location:

18°21'N, 65°45'W

Area (hectares):

11,340

Elevation Range:

150 - 1,080m

Biome:

Mixed island systems

Biogeographic Province: Greater Antillean

Year Designated as Biosphere Reserve: 1976

Administrative Officer

Contact:

Ariel Lugo

Address:

Institute of Tropical Forestry

USDA Forest Service

RWU 1152, Call Box 25000

Rio Piedras, Puerto Rico 00928-2500

U.S.A.

Telephone:

[1](809) + 766-5335

FAX:

[1](809) + 766-6302

E-Mail:

BITNET: a_gillespie@uprenet

Principal Monitoring and Research Themes:

Ecosystem dynamics

Forest recreation Watershed management

Wildlife management

Tree production



EUROMAB DIRECTORY

Biosphere Reserve: Mammoth Cave Area

Administrative Unit: Mammoth Cave National Park

Administering Entity: U.S. Department of the Interior,

National Park Service

Location: 37007'-37017'N, 86000'-86017'W

Area (hectares): 83,377

Elevation Range: 180 - 231m

Biome: Temperate broad-leaf forest

Biogeographic Province: Eastern Forest

Year Designated as Biosphere Reserve: 1990

Administrative Officer Site Manager

Contact: Jeff Bradybaugh David Mihalic, Superintendent

Address: Mammoth Cave National Park

Mammoth Cave, Kentucky 42259

U.S.A.

Telephone: [1] (502) + 758-2238 [1] (502) + 758-2251 **FAX:** [1] (502) + 758-2349 [1] (502) + 758-2349

Principal Monitoring and Research Themes:

Groundwater hydrology

Water quality

Agricultural effects of adjacent land use

Freshwater ecosystems Atmospheric pollutants

Sustainable economic development



UNITED STATES

Biosphere Reserve: Mojav

Mojave and Colorado Deserts

Administrative Units: Multiple units

Administering Entities: California Department of Parks and Recreation;

U.S. Department of the Interior,

National Park Service and Bureau of Land Management; U.S. Department of Agriculture, Forest Service; and the University of California

Location: 33°10′N, 116°20′W; 35°39′-37°05′N, 116°22′-

117°37'W; 34°N, 115°45'W; 33°30'N, 116°24'W

Area (hectares): 1,297,264

Elevation Range: -86 - 3,368m

Biome: Warm deserts and semideserts

Biogeographic Province: Sonoran

Year Designated as Biosphere Reserve: 1984

Administrative Officer Site Manager

Contact: David H. Van Cleve Edwin Rothfuss

Address: Anza-Borrego District Death Valley National

Box 299 Monument

Borrego Springs, California 92004 Death Valley, California 92328

U.S.A. U.S.A.

Telephone:[1] (619) + 767-5311 [1] (619) + 786-2331 **FAX:** [1] (619) + 767-3427 [1] (619) + 786-2344

Principal Monitoring and Research Themes:

Inventory-mammals Desert tortoise biology

Vegetation mapping Wilderness area establishment Air quality Wildlife population dynamics

Exotic species Rare/endangered species

Cultural anthropology Mining and minerals management

Biosphere Reserve:

New Jersey Pinelands

Administrative Unit:

Pinelands National Reserve

Administering Entity:

Pinelands Commission (complex ownership)

Location:

39°45'N, 74°45'W

Area (hectares):

445,300

Elevation Range:

0 - 63m

Biome:

Temperate broad-leaf forests

(includes coastal/marine component)

Biogeographic Province:

Eastern Forest

Year Designated as Biosphere Reserve: 1988

Administrative Officer

Contact:

Terrence D. Moore

Address:

Pinelands Commission

Pinelands National Reserve

P.O. Box 7

New Lisbon, New Jersey 08064

U.S.A.

Telephone:

[1](609) + 894-9342

FAX:

[1](609) + 894-0026

Principal Monitoring and Research Themes:

Water quality

Landscape integrity

Wildlife and vegetation management

Data management



UNITED STATES

Biosphere Reserve:

Niwot Ridge

Administrative Unit:

Niwot Ridge

Administering Entity:

University of Colorado

Location:

40°00'N, 105°30'W

Area (hectares):

1,200

Elevation Range:

2,866 - 3,780m

Biome:

Mixed mountain systems with complex zonation

Biogeographic Province: Rocky Mountains

Year Designated as Biosphere Reserve: 1979

Administrative Officer

Contact:

William Bowman

Address:

University of Colorado 1560 Thirtieth Street

Campus Box 450

Boulder, Colorado 80309-0450

U.S.A.

Telephone:

[1](303) + 492-8841

FAX:

[1](303) + 492-8699

Principal Monitoring and Research Themes:

Long term alpine tundra ecological processes

Global climate change effects on alpine ecosystems

Geomorphology



EuroMAB DIRECTORY

Biosphere Reserve:

Noatak

Administrative Units:

Gates of the Arctic National Park

and Noatak National Preserve

Administering Entity:

U.S. Department of the Interior,

National Park Service

Location:

68°N, 160°W

Area (hectares):

3,035,200

Elevation Range:

30 - 1,679m

Biome:

Tundra

Biogeographic Province: Alaska Tundra

Year Designated as Biosphere Reserve: 1976

Administrative Officer

Contact:

Bob Gerhard

Address:

National Park Service

Box 1029

Kotzebue, Alaska 99752

U.S.A.

Telephone:

[1] (907) + 442-3890

FAX:

[1] (907) + 442-3482

Principal Monitoring and Research Themes:

Wildlife population dynamics

Cultural anthropology

Biological surveys and collections



UNITED STATES

Biosphere Reserve:

Olympic

Administrative Unit:

Olympic National Park

Administering Entity:

U.S. Department of the Interior,

National Park Service

Location:

47°29'-48°11'N, 123°07'-124°42'W

Area (hectares):

363,379

Elevation Range:

0 - 2,428m

Biome:

Temperate rain forests

(includes coastal/marine component)

Biogeographic Province:

Oregonian

Year Designated as Biosphere Reserve: 1976

Administrative Officer

Site Manager

Contact:

John Aho

Maureen Finnerty,

Superintendent

Address:

Olympic National Park

600 East Park Avenue

Port Angeles, Washington 98362-6798

U.S.A.

Telephone: [1] (206) + 452-4501, ext.245

[1](206) + 452-4501

FAX:

[1](206) + 452-0335

[1](206) + 452-0335

Principal Monitoring and Research Themes:

Biogeochemical cycles Ecological succession

Acid deposition

Atmospheric pollutants

Wildlife population dynamics

Visitor use

Global climate change

Threatened/endangered species

Biosphere Reserve:

Organ Pipe Cactus

Administrative Unit:

Organ Pipe Cactus National Monument

Administering Entity:

U.S. Department of the Interior,

National Park Service

Location:

32°00'N, 112°50'W

Area (hectares):

133,278

Elevation Range:

335 - 1,472m

Biome:

Warm deserts and semideserts

Biogeographic Province:

Sonoran

Year Designated as Biosphere Reserve: 1976

Administrative Officer

Site Manager

Contact:

James J. Barnett

Harold J. Smith, Superintendent

Address:

Organ Pipe Cactus

Route 1, Box 100 Aio, Arizona 85321

U.S.A.

Telephone:

[1](602) + 387-6849

FAX:

[1](602) + 387-7662

Principal Monitoring and Research Themes:

Comparative ecology Rare/endangered species

Risk assessment

Ecosystem restoration Watershed management



UNITED STATES

Biosphere Reserve:

Rocky Mountain

Administrative Unit:

Rocky Mountain National Park

Administering Entity:

U.S. Department of the Interior,

National Park Service

Location:

40°10'-40°33'N, 105°29'-105°55'W

Area (hectares):

106,710

Elevation Range:

2,328 - 4,345m

Biome:

Mixed mountain systems with complex zonation

Biogeographic Province: Rocky Mountains

Year Designated as Biosphere Reserve: 1976

Site Manager

Contact:

Homer L. Rouse

Superintendent

Address:

Rocky Mountain National Park

Estes Park, Colorado 80517

U.S.A.

Telephone:

[1](303) + 586-2371

FAX:

[1](303) + 586-4702

Principal Monitoring and Research Themes:

Ungulate ecology and management

High altitude revegetation

Global change

Acid precipitation effects

Aquatic ecology and management



Biosphere Reserve:

San Dimas

Administrative Unit:

San Dimas Experimental Forest

Administering Entity:

U. S. Department of Agriculture,

Forest Service

Location:

34°12'N, 117°46'W

Area (hectares):

6,947

Elevation Range:

381 - 1,615m

Biome:

Evergreen sclerophyllous woodland

Biogeographic Province: Californian

Year Designated as Biosphere Reserve: 1976

Site Manager

Contact:

Sue Connard

Address:

Forest Fire Laboratory 4955 Canyon Crest Drive Riverside, California 92507

U.S.A.

Telephone:

[1](714) + 276-6570

FAX:

[1](714) + 276-6426

Principal Monitoring and Research Themes:

Watershed processes

Fire effects on ecosystems

Evolution research Global climate change

Long term monitoring of hydrology,

stream chemistry and climate parameters



Biosphere Reserve:

San Joaquin

Administrative Unit:

San Joaquin Experimental Range

Administrative Entity:

U.S. Department of Agriculture,

Agricultural Research Service

Location:

37°05'N, 119°43'W

Area (hectares):

1,832

Elevation Range:

213 - 518m

Biome:

Evergreen sclerophyllous woodland

Biogeographic Province:

Californian

Year Designated as a Biosphere Reserve: 1976

Site Manager

Contact:

Gary Ritinhower

Address:

San Joaquin

California State University

24075 Highway 41

Coarsegold, California 93614

U.S.A.

Telephone:

[1](209) + 278-2011

FAX:

[1](209) + 278-6998

Principal Monitoring and Research Themes:

UNITED STATES

EuroMAB DIRECTORY

Biosphere Reserve:

Sequoia and Kings Canyon

Administrative Units:

Sequoia and Kings Canyon National Parks

Administering Entity:

U.S. Department of the Interior,

National Park Service

Location:

36°45′N, 118°30′W

Area (hectares):

343,000

Elevation Range:

336 - 4,418m

Biome:

Mixed mountain systems with complex zonation

Biogeographic Province:

Sierra-Cascade

Year Designated as Biosphere Reserve: 1976

Administrative Officer

Site Manager

Contact:

Jeff Manley

J. Thomas Ritter Superintendent

Address:

Sequoia and Kings Canyon National Parks

Three Rivers, California 93271

U.S.A.

Telephone:

[1](209) + 565-3125

[1](209) + 565-3341

FAX:

[1](209) + 565-3497

[1](209) + 565-3497

Principal Monitoring and Research Themes:

Acidic deposition/atmospheric pollutants

Biological survey and collections Comparative ecological research

Fire history and effects Global change research



EuroMAB DIRECTORY

UNITED STATES

Biosphere Reserve: South Atlantic Coastal Plain

Administrative Unit: Congaree Swamp National Monument

Administering Entity: U.S. Department of the Interior,

National Park Service

Location: 33°45'N; 80°47'W, 39°45'N; 45'W

Area (hectares): 8,984

Elevation Range: 0 - 100m

Biome: Temperate broad-leaf forests

Biogeographic Province: Eastern Forest and Austroriparian

Year Designated as Biosphere Reserve: 1983

Administrative Officer Site Manager

Contact: Rick Clark Robert S. McDaniel,

Resource Management Specialist Superintendent

Address: Congaree Swamp National Monument

200 Caroline Sims Road

Hopkins, South Carolina 29061

U.S.A.

Telephone: [1] (803) + 776-4396

FAX: [1](803) + 783-4241

Principal Monitoring and Research Themes:

Forest dynamics - regeneration, recruitment,

and succession

Hydrology - influences on vegetation distribution

Atmospheric pollutants and acid deposition

Nutrient cycles-carbon and nitrogen

Global environmental change



UNITED STATES

EUROMAB DIRECTORY

Biosphere Reserve: Southern Appalachian

Administrative Units: Multiple units

Administering Entities: U.S. Department of Agriculture, Forest Service;

U.S. Department of the Interior, National Park Service; U.S. Department of Energy (contractor:

Martin Marietta, Inc.); North Carolina

Department of Natural Resources; Grandfather

Mountain, Inc.

Location: 35°36°N, 83°84°W

Area (hectares): 247,028

Elevation Range: 226 - 2,025m

Biome: Temperate broad-leaf forests

Biogeographic Province: Eastern Forest

Year Designated as Biosphere Reserve: 1988

Contact: Hubert Hinote

Address: Southern Appalachian MAB Cooperative

1314 Cherokee Orchard Road

Great Smoky Mountain National Park Gatlinburg, Tennessee 37738 U.S.A.

Telephone: [1] (615) + 436-7120 **FAX:** [1] (615) + 436-5598

Principal Monitoring and Research Themes:

Air quality Threatened/endangered species Exotic species Long-term ecosystem processes

Human resources Landscape studies

Geosciences Environmental biotechnology

Global environment Environmental assessment and education

Forest health Geographic information systems
Biodiversity Sustainable development issues

Fresh water initiatives Resource management



UNITED STATES

Biosphere Reserve: Stanislaus-Tuolumne

Administrative Unit: Stanislaus-Tuolumne Experimental Forest

Administering Entity: U.S. Department of Agriculture,

Forest Service

Location: 38°03'N, 119°57'W

Area (hectares): 607

Elevation Range: 1,585 - 1,951m

Biome: Mixed mountain systems with complex zonation

Biogeographic Province: Sierra-Cascade

Year Designated as Biosphere Reserve: 1976

Site Manager

Contact: Janet Wold

Address: Stanislaus National Forest

19777 Greenley Road Sonora, California 95370

U.S.A.

Telephone: [1] (209) + 532-3671

FAX: [1] (209) + 533-1890

E-Mail: USFS(DG): R05F16A

Principal Monitoring and Research Themes:

Climate Insects

EuroMAB DIRECTORY

Biosphere Reserve:

Three Sisters

Administrative Unit:

Three Sisters Wilderness

Administering Entity:

U.S. Department of Agriculture,

Forest Service

Location:

44°N, 121°50'W

Area (hectares):

80,900

Elevation Range:

600 - 3,407m

Biome:

Mixed mountain systems with complex zonation

Biogeographic Province:

Sierra-Cascade

Year Designated as Biosphere Reserve: 1976

Site Manager

Contact:

Darrel Kenops

Address:

Willamette National Forest

P.O. Box 10607

Eugene, Oregon 97440-2607

U.Š.A.

Telephone:

[1](503) + 465-6533

FAX:

[1](503) + 465-6717

E-Mail:

USFS(DG): R06F18A

Principal Monitoring and Research Themes:

Vegetation Geology



UNITED STATES

Biosphere Reserve:

University of Michigan

Administrative Unit:

University of Michigan Biological Station

Administering Entity:

University of Michigan

Location:

45°34'N, 84°40'W

Area (hectares):

4,048

Elevation Range:

183 - 280m

Biome:

Temperate broad-leaf forests

Biogeographic Province:

Lake Forest

Year Designated as Biosphere Reserve: 1979

Site Manager

Contact:

James A. Teeri,

Director

Address:

University of Michigan Biological Station

111 Natural Science Building

Ann Arbor, Michigan 48109-1048

U.S.A.

Telephone:

[1](313) + 763-4461

FAX:

[1](313) + 747-1952

Principal Monitoring and Research Themes:

Ecological succession

Limnology, hydrobiology

Biological survey and collections Comparative ecological research

Rare/endangered species



UNITED STATES

Biosphere Reserve:

Virgin Islands

Administrative Unit:

Virgin Islands National Park

Administering Entity:

U.S. Department of the Interior,

National Park Service

Location:

18°21'N. 64°44'W

Area (hectares):

6,127

Elevation Range:

0 - 389m

Biome:

Mixed island systems

(includes coastal/marine component)

Biogeographic Province:

Lesser Antillean

Year Designated as Biosphere Reserve: 1976

Administrative Officer Site Manager

Contact:

Caroline A. Rogers

Mark A. Koenings

Superintendent

Address:

Virgin Islands National

Virgin Islands National Park

Park

6010 Estate Nazareth, #10

P.O. Box 710 St. John, United States St. Thomas, United States Virgin Islands 00802-3406 U.S.A.

Virgin Islands 00830 U.S.A.

Telephone:

[1] (809) + 776-4704

FAX:

[1](809) + 776-4714

Principal Monitoring and Research Themes:

Marine ecosystems

Watershed management

UNITED STATES

Biosphere Reserve:

Virginia Coast

Administrative Unit:

Virginia Coast Reserve

Administering Entity:

The Nature Conservancy

Location:

37°05'-37°34'N, 75°56'-75°37'W

Area (hectares):

13,511

Elevation Range:

0 - 10m

Biome:

Temperate broad-leaf forests

(includes coastal/marine component)

Biogeographic Province: Eastern Forest

Year Designated as Biosphere Reserve: 1979.

Administrative Officer

Site Manager

Contact:

John M. Hall

Barry R. Truitt

Address:

The Nature Conservancy

Brownsville

Nassawadox, Virginia 23413

U.S.A.

Telephone:

[1](804) + 442-3049

FAX:

[1](804) + 442-5418

Principal Monitoring and Research Themes:

Biogeochemical cycles Effects of sea level rise Geomorphological research

Ecological succession Ecosystem modeling



UNITED STATES

EuroMAB DIRECTORY

Biosphere Reserve:

Yellowstone

Administrative Unit:

Yellowstone National Park

Administering Entity:

U.S. Department of the Interior,

National Park Service

Location:

44°08'-45°07'N, 109°10'-111°10'W

Area (hectares):

898,349

Elevation Range:

1,710 - 3,463m

Biome:

Mixed mountain systems with complex zonation

Biogeographic Province:

Rocky Mountains

Year Designated as Biosphere Reserve: 1976

Site Manager

Contact:

Robert Barbee, Superintendent

Address:

P.O. Box 168

Yellowstone National Park,

Wyoming 82190

U.S.A.

Telephone:

[1](307) + 344-2002

FAX:

[1](307) + 344-2323

Principal Monitoring and Research Themes:

Wildlife/rangeland ecology

Geothermal, earthquake, volcanic systems

Endangered species restoration Greater Yellowstone ecosystem

Fire ecology

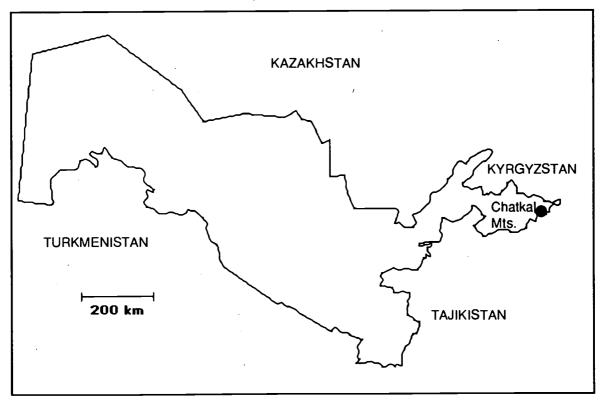


No Named National Contact for Biosphere Reserves

See Biosphere Reserve Manager

BIOSPHERE RESERVE LOCATION MAP

UZBEKISTAN





Biosphere Reserve:

Chatkal Mountains

(see also Kyrgyzstan)

Administrative Units:

Chatkal'skiy Zapovednik

Administering Entities:

State government

Location:

41°08'N, 69°59'E

Area (hectares):

47,500

Elevation Range:

1,110 - 4,000m

Biome:

Mixed mountain systems with complex

zonation

Biogeographic Province: Pamir-Tian-Shan Highlands

Year Designated as Biosphere Reserve: 1978

Administrative Officer

Contact:

Address:

Chatkal'skiy Zapovednik

Tashkent Region

Verkhnechirchiskiy District

Parkent Village Uzbekistan

Principal Monitoring and Research Themes:

Floristic and faunal inventory

Reforestation research

Ecology of woody plants/commercial

species

Rare fauna ecology



No National Contact Named for Biosphere Reserves.

See Biosphere Reserve Manager

BIOSPHERE RESERVE LOCATION MAP



^{*} The United States does not recognize Serbia/Montenegro, nor does it accept Serbia/Montenegro (which calls itself the "Federal Republic of Yugoslavia") as the sole successor of the Socialist Federal Republic of Yugoslavia



Biosphere Reserve:

Tara River Basin

Administrative Units:

Multiple Units in the Tara River Basin Ecological Reserve (includes two national parks and two virgin forest reserves)

Administering Entity:

Institute for the Protection of Nature (State government of Montenegro)

Location:

42°32'N, 18°50'-19°45'E

Area (hectares):

200,000

Elevation Range:

433.- 2.522m

Biome:

Mixed mountain systems with complex

zonation

Biogeographic Province: Balkan Highlands

Year Designated as Biosphere Reserve: 1976

Administrative Officer

Contact:

Address:

Institute for the Protection of

Nature P.O. Box 2 Titograd 81001 Montenegro Yugoslavia*

Telephone:

[38](81) +

Principal Monitoring and Research Themes:

* The United States does not recognize Serbia/Montenegro, nor does it accept Serbia/Montenegro (which calls itself the "Federal Republic of Yugoslavia") as the sole successor of the Socialist Federal Republic of Yugoslavia



EuroMAB Biosphere Reserve Data Bases

Basic Resource Information

Biological Inventory (7)
Ecological Monitoring (10)
Resource Maps (6)
Historical Records (6)

Research Topics

Ecosystems Cycles and Processes (7)
Species Populations (3)
Pollution (3)
Human Systems (7)
Management Practices (10)

Site Support

Scientific Infrastructure (6)
Monitoring and Research Facilities (6)
Permanent Research Staff



FRIC

VEGETATION **JIHAARDO9OT** RESOURCE MAPS SOIFS REGIONAL LAND TENURE **TAND USE** GEOLOGICAL YTIJAUQ RETAW **ATAC MOITATEDEV** SURFACE HYDROLOGY # = PRIORITY AREA PRECIPITATION CHEMISTRY **PALEOECOLOGY ECOLOGICAL MONITORING** MARINE ECOSYSTEMS X = EXISTING PROGRAM # = NUMBER OF YEARS OF RECORDS GROUNDWATER HYDROLOGY FRESHWATER ECOSYSTEMS **CLIMATE** YTIJAUQ RIA COLLECTIONS BIOLOGICAL SURVEY AND SJAMMAM **NAHT REHTO SETARBETHEN BIOLOGICAL INVENTORY** VASCULAR PLANTS NONVASCULAR PLANTS BIRDS **SJAMMAM CETARBETRES** INVERTES

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BASIC RESOURCE INFORMATION

RESEARCH TOPICS

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MARITCHINI EZERA

MANTARITZA

KOUPENA KAMCHIA

X = EXISTING PROGRAM # = PRIORITY AREA # = NUMBER OF STATIONS, SCIENTISTS, PLOTS, ETC. SITE SUPPORT

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Ę	VEGETATION
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N N	PERMANENT PLOTS:
TOR	HYDROLOGICAL STATION
MONITORING AND RESEARCH FACILITIES	NOITATS NOITUJJO9 AIA
	ROAD ACCESS
	LODGING FOR SCIENTISTS
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UCTL	YAOTAROBAL
NFRASTRUCTURE	CURATORIAL FACILITY
NFR	CONFERENCE FACILITIES

NUMBER OF TYPES OF FACILITIES (MAXIMUM = 71)

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X = EXISTING PROGRAM # = NUMBER OF YEARS OF RECORDS # = PRIORITY AREA

VEGETATION TOPOGRAPHIC RESOURCE MAPS SOIFS REGIONAL LAND TENURE **TAND USE GEOLOGICAL** YTIJAUQ RƏTAW **VEGETATION DATA** SURFACE HYDROLOGY PRECIPITATION CHEMISTRY **PALEOECOLOGY ECOLOGICAL MONITORING** MARINE ECOSYSTEMS FRESHWATER ECOSYSTEMS **CLIMATE** YTIJAUQ AIA COLLECTIONS BIOLOGICAL SURVEY AND SJAMMAM *VERTEBRATES* OTHER THAN **BIOLOGICAL INVENTORY** VASCULAR PLANTS NONVASCULAR PLANTS BIRDS SJAMMAM **S**BTARBETRBVNI

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RESEARCH TOPICS

BASIC RESOURCE INFORMATION

PESTICIDES POLLUTION **STNATULIOS PHERIC POLLUTANTS ACIDIC DEPOSITION DYNAMICS POPULATIONS WILDLIFE POPULATION** RARE/ENDANGERED SPECIES SPECIES PESTS AND DISEASES **SEDIMENTATION** # = PRIORITY AREA HYDROLOGICAL CYCLE FIRE HISTORY/EFFECTS **ECOSYSTEM CYCLES** ECOSYSTEM MODELING AND PROCESSES # = NUMBER OF YEARS OF RECORDS **ECOLOGICAL SUCCESSION RESEARCH** COMPARATIVE ECOLOGICAL BIOGEOCHEMICAL CYCLES HISTORY OF SCIENTIFIC STUDY **SYSTEM** GEOGRAPHIC INFORMATION **BEVISION** X = EXISTING PROGRAM BIBLIOGRAPHY - YEAR OF LAST **BEFERENCES** BIBLIOGRAPHY - NUMBER OF **HISTORICAL** RECORDS **BIBLIOGRAPHY SHAARDOTOH9 JAIREA**

WATER POLLUTANTS

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STENETO		×					·····	ļ			×		×			×		
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CHARLEVOIX

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	тизмараиам озневатам
	SOIL CONSERVATION
	TECHNOLOGIES RESOURCE PRODUCTION
	MECREATION/TOURISM
S	TNAMGELAND MANAGEMENT
TICE	MINING RECLAMATION
PRAC	GENETIC RESOURCE MANAGEMENT
EN T	ECOSYSTEM RESTORATION
MANAGEMENT PRACTICES	APPROPRIATE RURAL TECHNOLOGY
	АВПСИГТИВАГ
	TRADITIONAL LAND USE SMETSYS
	BESONDE ECONOMICS
	LAND TENURE\ TNEMBOANAM\ESU
<u>S</u>	ETHNOBIOLOGY
HUMAN SYSTEMS	DEMOGRAPHY/SETTLEMENT PATTERNS
NN S)	CULTURAL ANTHROPOLOGY
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X	OUZOUNBOUDJAK											
X	PARANGALITZA			×				<u>.</u>	<u></u>			×
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SITE SUPPORT X = EXISTING PROGRAM # = PRIORITY AREA

= NUMBER OF STATIONS, SCIENTISTS, PLOTS, ETC.

	РЕВМАИЕИТ ВЕЅЕАВСН ЅТАГГ
	NOITATS ABHTABW
S	WATERSHED RESEARCH SITE
MONITORING AND RESEARCH FACILITIES	PERMANENT PLOTS: VEGETATION
IG AI FAC	LAKE/STREAM PERMANENT PLOTS:
쓸 꾼	-STO IG TIVAIMOTG
TOI	HYDROLOGICAL STATION
MONITORING AND RESEARCH FACIL	NOITATS NOITUJJO9 AIA
	ROAD ACCESS
	LODGING FOR SCIENTISTS
æ	ГІВРАRY
UCTL	YAOTAAO8AJ
NFRASTRUCTURE	VILIDA L FACILITY
A-R	CONFERENCE FACILITIES

NUMBER OF TYPES OF FACILITIES (MAXIMUM = 71)

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JAK									••••		·				14
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OUZOUNBOUD **BULGARIA** (

PARANGALITZ

TCHERVENAT/ TCHOUPRENE **TSARITCHINA**

SREBARNA STENETO

CANADA														
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RIDING MOUNTAIN	×			×		×		×			×	×		
WATERTON LAKES	×	×	•••••	×	4	×	•••••	×	••••	 ×	••••	×		

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LONG POINT				×	ည	×	×							.:	37	
MONT-STHILAIRE	×	×	×	×	20	×									37	
NIAGARA ESCARPMENT	×			×	×	×		×	×	9		×	×		45	
RIDING MOUNTAIN	×			×		×		×			×				35	
WATERTON LAKES	×	×		×	4	×		×		×					2	
CROATIA														i		
VELEBIT MOUNTAIN	×	×			10	×	×					×	2	 -i	32	

BASIC RESOURCE INFORMATION

VEGETATION **JIHAARDOGOT** RESOURCE MAPS SOIFS REGIONAL LAND TENURE **TAND USE GEOLOGICAL** YTIJAUQ RƏTAW **VEGETATION DATA** SURFACE HYDROLOGY # - PRIORITY AREA PRECIPITATION CHEMISTRY **PALEOECOLOGY ECOLOGICAL MONITORING** MARINE ECOSYSTEMS X = EXISTING PROGRAM # = NUMBER OF YEARS OF RECORDS GROUNDWATER HYDROLOGY FRESHWATER ECOSYSTEMS **STAMIJO** YTIJAUQ AIA COLLECTIONS BIOLOGICAL SURVEY AND SJAMMAM **ИАНТ ЯЭНТО СЭТАЯВЭТЯЗУ BIOLOGICAL INVENTORY STNAJ9 RAJUDSAV** NONVASCULAR PLANTS BIRDS SJAMMAM **SETARBETTES**

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KRKONOSE	×	×	×	×	ļ	ļ	<u>: </u>	ļ	ļ	×			×	×	×	×	×	<u>: </u>	ļ		×	×	į
PALAVA	×	×	×	×	×	×	×		20	×			ļ		20	×	×	×	×	ļ	×	×	×
SUMAVA	×	×	×	×	 .		_	ļ	ļ	×	×		×	×		ļ	×	<u> </u>	ļ		×	×	ļ
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DENMARK																							
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ESTONIA		•																					
WEST ESTONIAN ARCHIPELAGO	×	×		×		×		×	×		×			×	×		×	×	×		×		

FINLAND																								
NORTHERN KARELIAN	×	×	×	×	×	×	×	×	×	^	×			^	×	×		×	×			×	×	×
FRANCE																								
ATOLL DE TAIARO				ļ		ļ	ļ		ļ	ļ	ļ			ļ	ļ	ļ			ļ	ļ	ļ	ļ	ļ	
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RESEARCH TOPICS

PESTICIDES POLLUTION ATMOSPHERIC POLLUTANTS **ACIDIC DEPOSITION DANAMICS** POPULATIONS WILDLIFE POPULATION RARE/ENDANGERED SPECIES SPECIES **PESTS AND DISEASES** SEDIMENTATION X = EXISTING PROGRAM # = NUMBER OF YEARS OF RECORDS # = PRIORITY AREA HYDROLOGICAL CYCLE FIRE HISTORY/EFFECTS **ECOSYSTEM CYCLES** ECOSYSTEM MODELING AND PROCESSES **ECOLOGICAL SUCCESSION** RESEARCH COMPARATIVE ECOLOGICAL BIOGEOCHEMICAL CYCLES HISTORY OF SCIENTIFIC STUDY **SYSTEM** СЕОСВАРНІС ІИГОВМАТІОИ **BEVISION** BIBLIOGRAPHY - YEAR OF LAST **BELEBENCES** BIBLIOGRAPHY - NUMBER OF HISTORICAL RECORDS **BIBLIOGRAPHY SHAARDOTOHA JAIRBA**

CZECH REPUBLIC

STNATUJJO9 RETAW

KRIVOKLATSKO	×	×	300		<u></u>		Ţ	×	 .	ļ				×		_ >	×	×	×	_	×	×		×	
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TREBON BASIN	×	×	45		×		y	×				×		×			×	×	×			×	×	×	
DENMARK																									
NORTH-EAST GREENLAND	25	×					×		×		×							×	×			7			
ESTONIA																									
WEST ESTONIAN ARCHIPELAGO																×		×	×			•••••			
FINLAND																									
NORTHERN KARELIAN	×	×			×		×	×	×		×	×	×	×		×	×	×	×	_	 ×	×	×	×	
FRANCE																									1
ATOLL DE TAIARO			•••••	•••••								•••••					•••••								
CAMARGUE	20	Ξ					×	×			×	×		×	, 	×	•••••	×	×						
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	× = EXI	STING	= EXISTING PROGRAM	AM	# = PRIC	JRITY	= PRIORITY AREA										
	HUMAN	SN	SYSTEMS	S		ŀ		MAN	MANAGEMEN	ENT	PRACTICES	TCE	.				
	ARCHAEOLOGY	CULTURAL ANTHROPOLOGY	DEMOGRAPHY/SETTLEMENT PETTERNS PETTERNS	ETHNOBIOLOGY	LAND TENURE\ USE\MANAGEMENT	BESONBCE ECONOMICS	TRADITIONAL LAND USE SYSTEMS	AAULTUDIRDA	АРРЯОРЯГАТЕ ЯЛАЯ ТЕСНИОГОСУ	ECOSYSTEM RESTORATION	GENETIC RESOURCE MANAGEMENT	MINING RECLAMATION	ТИЗМЭЭАИАМ ОИАЈЗЭЙАЯ	RECREATION/TOURISM	RESOURCE PRODUCTION TECHNOLOGIES	SOIL CONSERVATION	ТИЗНЕВ МАИА ВЕМЕИТ
CZECH REPUBLIC																	
KRIVOKLATSKO	×		×	}			×			×	×	×			×		
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ATOLL DE TAIARO							>			>				>			
CAMARGOE	````	>		>			< >	>		<	>	>		< >		>	>
CEVENINES	~ T	<		<			-	<			<	~		<		<	<



SITE SUPPORT

X = EXISTING PROGRAM # = PRIORITY AREA # = NUMBER OF STATIONS, SCIENTISTS, PLOTS, ETC.

	NUMBER OF TYPES OF RECORDS, PROGRAMS, FACILITIES (MAXIMUM = 71)
	PERMANENT RESEARCH STAFF
	WEATHER STATION
ES	ATERSHED RESEARCH SITE
MONITORING AND RESEARCH FACILITIES	PERMANENT PLOTS:
ING /	LAKE/STREAM PERMANENT PLOTS:
MONITORING AND RESEARCH FACIL	HYDROLOGICAL STATION
MON	NOITATS NOITUJJO9 RIA
	ROAD ACCESS
	LODGING FOR SCIENTISTS
JRE	YAAABIJ
NFRASTRUCTURE	YAOTAROBAJ
ASTR	YTIJIOA I LAIROTARUO
INFR	CONFERENCE FACILITIES

CZECH REPUBLIC						`													
KRIVOKLATSKO	×				×	9	 ×	×	×				ļ	8	×	<u> </u>	×		49
KRKONOSE	×				×		 ×		ļ		×	×	ļ	×	×	<u> </u>	_	<u> </u>	54
PALAVA	×				×	9	 ×	×			×	×			×				46
SUMAVA	×					ิฉ	 ×	×	ļ	·····	×	×			×	_			49
TREBON BASIN	×	×	ļļ	×	×		 ×	ა	×			2			×	9		<u></u> .	59
DENMARK																		,	
NORTH-EAST GREENLAND	2	7		7	8		2	α	7			×			22			—	32
ESTONIA																			
WEST ESTONIAN																	_	<u> </u>	
ARCHIPELAGO	×			×	×	52		×							×	35	2	<u>;</u>	8
FINLAND																			
NORTHERN KARELIAN	×	×		×	×	95	 ×	×		×	×	×		×	×			<u> </u>	9
FRANCE																			
ATOLL DE TAIARO																_	_	<u> </u>	0
CAMARGUE	×			×	×	×	 ×					17			×		0		4
CEVENNES	×				~	ઍ	 ×		က			က		4	9	15	10		53

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RESOURCE MAPS SOIFS REGIONAL LAND TENURE **TYND NSE GEOLOGICAL** YTIJAUQ RƏTAW **ATACI NOITATADAY** SURFACE HYDROLOGY # = PRIORITY AREA PRECIPITATION CHEMISTRY **PALEOECOLOGY ECOLOGICAL MONITORING** MARINE ECOSYSTEMS X = EXISTING PROGRAM # = NUMBER OF YEARS OF RECORDS GROUNDWATER HYDROLOGY FRESHWATER ECOSYSTEMS **CLIMATE** YTIJAUQ AIA COLLECTIONS BIOLOGICAL SURVEY AND SJAMMAM ИАНТ ЯЗНТО СЗТАЯВЗТЯЗУ **BIOLOGICAL INVENTORY STNAJ9 RAJUOSAV** NONVASCULAR PLANTS BIRDS SJAMMAM **S**ETARBETTES

VEGETATION

JIHAARDOGOT

FRANCE (CONT.)																	
GUADELOUPE ARCHIPELAGO	×	×	×	×	×	×	×		×	×	×	×	 .	×	 !	×	×
IROISE	×	×	×	×	15	×	×		100	×		×		×	30	×	×
MONT VENTOUX	×			×	×	×	×		×	×	×		 	×	×	×	×
VALLEE DU FANGO	×	×	×	×	×	×	×		14	×			 ×	×	×	×	×
VOSGES DU NORD	×	×	15	×	15	×	×	×	×	×			 7	×	×	×	×

GERMANY																							
BAYERISCHER WALD	×	×	×	×	×	×	×	×	×	×	×					ļ	<u> </u>	ļ	ļ	×	×	×	
BERCHTESGADEN ALPS	×	×	×	×	×	×	×	×	×	×		 !	<u></u>	ļ	ļ	12 1	<u> </u>	61	ļ	×	×	×	
MIDDLE ELBE	×	×		×	×	×	×	×	×	×	×	}	<u></u>		×	ļ	×	ļ	ļ	×	×	×	
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HOLSTEIN	×	×	×	×	×	×	×	×	×	••••••	×	×	×	 ×	 ×	 ×	×	×	×	×	×	×	_

BASIC RESOURCE INFORMATION

RESEARCH TOPICS

X = EXISTING PROGRAM # = NUMBER OF YEARS OF RECORDS # = PRIORITY AREA

POLLUTION

POPULATIONS SPECIES **PESTS AND DISEASES SEDIMENTATION** HYDROLOGICAL CYCLE FIRE HISTORY/EFFECTS **ECOSYSTEM CYCLES** ECOSYSTEM MODELING AND PROCESSES **ECOLOGICAL SUCCESSION** RESEARCH COMPARATIVE ECOLOGICAL BIOGEOCHEMICAL CYCLES HISTORY OF SCIENTIFIC STUDY SYSTEM GEOGRAPHIC INFORMATION **BEVISION** BIBLIOGRAPHY - YEAR OF LAST **BEFERENCES** BIBLIOGRAPHY - NUMBER OF HISTORICAL RECORDS **SIBLIOGRAPHY SH9ARDOTOH9 JAIRBA**

STNATUJJO9 RETAW

ACIDIC DEPOSITION

WILDLIFE POPULATION

STNATULIOS DIRENTS

RARE/ENDANGERED SPECIES

PESTICIDES

DYNAMICS

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GUADELOUPE ARCHIPELAGO

FRANCE (CONT.)

VALLEE DU FANGO

MONT VENTOUX

IROISE

VOSGES DU NORD

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WADDENSEA OF HAMBURG

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SAXONY

VESSERTAL-THURINGIAN

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WADDENSEA OF SCHLESWIG

HOLSTEIN

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1992

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BERCHTESGADEN ALPS

PFAELZERWALD

MIDDLE ELBE

BAYERISCHER WALD

GERMANY

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WATERSHED MANAGEMENT SOIL CONSERVATION **LECHNOLOGIES** RESOURCE PRODUCTION RECREATION/TOURISM RANGELAND MANAGEMENT MANAGEMENT PRACTICES MINING RECLAMATION **MANAGEMENT** GENETIC RESOURCE **HOLLAROTER MESTORATION TECHNOLOGY** JARUR STAIRRORRAL **ARUTJUO!RAL SYSTEMS TRADITIONAL LAND USE** RESOURCE ECONOMICS USE/MANAGEMENT LAND TENURE/ **ETHNOBIOLOGY HUMAN SYSTEMS PATTERNS DEMOGRAPHY/SETTLEMENT** CULTURAL ANTHROPOLOGY **ABOLOGY**

FRANCE (CONT.)																	
GUADELOUPE ARCHIPELAGO		×		×	×	 ×	×	×	×	×			×	×	×	×	
IROISE	×	×	×	×	×	 ×	×	×		×			×		×		
MONT VENTOUX		×		×		 _	×	×	×		×	×	×		×	×	
VALLEE DU FANGO	×			×		×	×		×				×			×	
VOSGES DU NORD		×				 ×	×	×	×	×		×	×		×		

GERMANY																	
BAYERISCHER WALD							×		ļ	×		×	×	×		×	×
BERCHTESGADEN ALPS							×	×		×			×	×		×	×
MIDDLE ELBE		×						×	<u></u>	×		×	×	×		×	
PFAELZERWALD	×			×			×		<u></u>	×	×			×	×	×	
RHOEN		×					×	×	×	×	×	×	×	×		×	×
RUEGEN	×	×	×		×	×	×	×		×	×	×		×		•••••	×
SCHORFHEIDE-CHORIN		×					×	×	×	×	×			×		×	×
SPREEWALD		×					×	×	×	×	×	×		×		×	×
VESSERTAL-THURINGIAN									<u>.</u>								
FOREST							×		×	×	×	×	×	×	•••••	•••••	×
WADDENSEA OF HAMBURG									<u>.</u>								
WADDENSEA OF LOWER																	
SAXONY			×	×	×		×			×	·········	•••••	••••••	×	•••••	×	
WADDENSEA OF SCHLESWIG-									<u>.</u>								
HOLSTEIN	×	×	×		×	×		×	×	×		×	×	×	×	×	×

(<u></u>
CQ



= NUMBER OF STATIONS, SCIENTISTS, PLOTS, ETC. SITE SUPPORT X = EXISTING PROGRAM # = PRIORITY AREA

	РЕВМАИЕИТ ВЕЅЕРВСН ЅТАГГ
	WEATHER STATION
S	WATERSHED RESEARCH SITE
D	VEGETATION
Z O	PERMANENT PLOTS:
2 A	LAKE/STREAM
ž X	PERMANENT PLOTS:
TOR	HYDROLOGICAL STATION
MONITORING AND RESEARCH FACILITIES	NOITATS NOITUJJO9 AIA
	ROAD ACCESS
	LODGING FOR SCIENTISTS
E	YAARIJ
UCTL	YAOTAAOAA
VFRASTRUCTURE	VTIJIDAR LAIROTARUD
Ę,	CONFERENCE FACILITIES

NUMBER OF TYPES OF FECORDS, PROGRAMS, FACILITIES (MAXIMUM =

FRANCE (CONT.)													
GUADELOUPE ARCHIPELAGO	×	×	×	×	2	×		×	×	×	×	×	ଯ
IROISE	×	×	×	×	42	×		×		75		×	7
MONT VENTOUX	×		×	×	×	×	•	•••••			×	×	16
VALLEE DU FANGO	×		×		15	×		×	S.	ω		×	9
VOSGES DU NORD	×		×	×	×	×	×			×		×	×

55 44 46 49

GERMANY														
BAYERISCHER WALD	×	×		×	70	×	×	×	×	×		×	ည	
BERCHTESGADEN ALPS	×	×	×	×	15	×		×	×	8	×	×	7	
MIDDLE ELBE	×			×		×		••••		×				
PFAELZERWALD	×		×	×	×		×					×		
RHOEN	×		×	×	10	×	×	×		×	×	×		
RUEGEN	×	×				×		×				×		
SCHORFHEIDE-CHORIN	×		×	×	20		×	×		×	×	×		
SPREEWALD	×			×	10		×	×	×	×	×	×		
VESSERTAL-THURINGIAN							•	•••••		••••				
FOREST	×				4	×	×			×		7	7	
WADDENSEA OF HAMBURG	×		×		×						×			
WADDENSEA OF LOWER										•••••				
SAXONY	×	×	×	×				×		×		×		
WADDENSEA OF SCHLESWIG-										•				

HOLSTEIN

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		OPOGRAPHIC		×	×			×	×		×		×	×		×	>	8		ļ	
	APS	SOILS		×	×		}	×	×				}			×		91		×	
	빙	REGIONAL LAND TENURE		×	×								×	••••••		}					•
	RESOURCE MAPS	LAND USE		×	×			10	13								>	< 88			
	RES	GEOLOGICAL		×	×		2	×	10	9	×		×			×	>	8 ک			
		WATER QUALITY						40	13	×	2		19			×				3)
		VEGETATION DATA		×	×			40	13	38	င္က		ន			×	>	< 88		40	
⋖		SURFACE HYDROLOGY		×	×		20	100	13	×	4					×				15	,
Y ARE		YRECIPITATION CHEMISTRY		-	•		×	ည	,	×							•				
- PRIORITY AREA	IJ	PALEOECOLOGY		}									×				•••••				,
a P	ECOLOGICAL MONITORING	MARINE ECOSYSTEMS		ļ		•								×				68		ļ	•
SQL	LINC	СВОПИВМАТЕВ НУВВОГОСУ		ļ			8	40	10	×			ļ								
RECOF	AL M	FRESHWATER ECOSYSTEMS		ļ						ω	2		19			×	••••	-		က	
NUMBER OF YEARS OF RECORDS	200	OLIMATE		×	×		က		,	×			×			×	>	6		×	
: YEAF	8	YTIJAUD RIA		ļ			ļ			×			ļ							က	-
ER OF	Ш	COLLECTIONS		_	×		L			×	_		_ ×			_ ×	-	6		-×	-
NUMB	-	BIOCOGICAL SURVEY AND																. 6			
#	_	VERTEBRATES OTHER THAN		ļ	×					13			×			×					
GRAM	ITORY	VASCULAR PLANTS		×	×					13			×			×	×	8		ļ	
3 PRO	VEN	NONVASCULAR PLANTS		Ş	×		ļ	2	13	<u>.</u>	30		×			×	×	8		ļ	
X = EXISTING PAC	AL IN	Saria		×	×																
X = E)	000	SJAMMAM		×	×			5	13	13	40		×			×					***************************************
	BIOLOGICAL INVEN	SƏTARBƏTRƏVNI		×				10	13	13	88		×					91			'
				Γ																	
																				S	
				ARIA	ડ્ <u>ડ</u>									AND			٥ ٫		7	CHATKAL MOUNTAINS	
				SAM	YMP	>		λĘ	(5)	0				ISI TI			UCCI F777		STAI		
			SCE	EOF	ITOL	3AR	FE	OBAC	NSA	FER1		AND	PNEY	H BU	>	0	FNEL	AARE	3YZ\$	SALA	
			GREECE	GORGE OF SAMARIA	MOUNT OLYMPUS	HUNGARY	AGGTELEK	HORTOBAGY	KISKUNSAG	LAKE FERTO	PILIS	IRELAND	KILLARNEY	NORTH BULL ISLAND	ITALY	CIRCEO	COLLEMELUCCIO MONTEDIME770	MIRAMARE	KYRGYZSTAN	HAT	
			9	<u>(0</u>	≥	I	שׁ	工	ᅩ		Δ١	=	天	Z	=	ပြ	ပ ≥	Σ	X	ပ	j

RESEARCH TOPICS

BASIC RESOURCE INFORMATION

X = EXISTING PROGRAM # = NUMBER OF YEARS OF RECORDS # = PRIORITY AREA

STNATUJJO9 RETAW PESTICIDES POLLUTION ATMOSPHERIC POLLUTANTS ACIDIC DEPOSITION $\times \times$ $\times \times$ **DYNAMICS** × **POPULATIONS** WILDLIFE POPULATION RARE/ENDANGERED SPECIES $\times \times$ SPECIES PESTS AND DISEASES **SEDIMENTATION** HADBOLOGICAL CYCLE FIRE HISTORY/EFFECTS × **ECOSYSTEM CYCLES** ECOSYSTEM MODELING AND PROCESSES **ECOLOGICAL SUCCESSION** X \times RESEARCH COMPARATIVE ECOLOGICAL BIOGEOCHEMICAL CYCLES 9 HISTORY OF SCIENTIFIC STUDY **SYSTEM** GEOGRAPHIC INFORMATION 1992 **BEVISION** BIBLIOGRAPHY - YEAR OF LAST 150 **BEFERENCES** BIBLIOGRAPHY - NUMBER OF HISTORICAL RECORDS <u>ර ස ත</u> × × **SIBLIOGRAPHY** $\times 10 \text{ or}$ **SHAARDOTOH9 JAIRBA** CHATKAL MOUNTAINS GORGE OF SAMARIA NORTH BULL ISLAND MOUNT OLYMPUS COLLEMELUCCIO MONTEDIMEZZO **KYRGYZSTAN** AKE FERTO HORTOBAGY HUNGARY KISKUNSAG MIRAMARE AGGTELEK RELAND KILLARNEY GREECE CIRCEO ITALY



CHATKAL MOUNTAINS

RESEARCH TOPICS

WATERSHED MANAGEMENT SOIL CONSERVATION RECHNOLOGIES

TECHNOLOGIES RECREATION/TOURISM RANGELAND MANAGEMENT MANAGEMENT PRACTICES MINING RECLAMATION **MANAGEMENT** GENETIC RESOURCE **ECOSYSTEM RESTORATION LECHNOLOGY** JARUR STAIRRORARA **AGRICULTURAL** SYSTEMS **TRADITIONAL LAND USE** BESONDE ECONOMICS USE/MANAGEMENT LAND TENURE/ **ETHNOBIOLOGY HUMAN SYSTEMS ENABITTA9 DEMOGRAPHY/SETTLEMENT** CULTURAL ANTHROPOLOGY **ABOLOGY**

GREECE												
GORGE OF SAMARIA	×		×		ļ	 !	<u></u>		ļ	}	ļ	
MOUNT OLYMPUS	×	×	-					ļ	×			
HUNGARY												
AGGTELEK		·····		_		ļ		~	ļ	ļ	ļ	
HORTOBAGY		×		×	×	×	<u></u>	×	ļ			
KISKUNSAG				<u> </u>		×		<u></u>	ļ			
LAKE FERTO				_		 		ļ	ļ			
PILIS	×	×				×		×	×			
IRELAND									#			
KILLARNEY				×		×	ļ	ļ	×			
NORTH BULL ISLAND						×			×			
ITALY												
CIRCEO						×			×		ļ	
COLLEMELUCCIO- MONTEDIMEZZO				×		×		: : : : : : : : : : : : : : : : : : :	×			
26 MIRAMARE									×		×	
KYRGYZSTAN												



SITE SUPPORT X = EXISTING PROGRAM # = PRIORITY AREA

= NUMBER OF STATIONS, SCIENTISTS, PLOTS, ETC.

	INFR,	NFRASTRUCTURE	UCTU	띪			MONITORING AND RESEARCH FACIL	ONITORIN	VG AI	G AND FACILITIES	တ္သ			
	CONFERENCE FACILITIES	CURATORIAL FACILITY	YAOTAROBAJ	YAARAIJ	LODGING FOR SCIENTISTS	ROAD ACCESS	NOITATS NOITUJJO9 AIA	HYDROLOGICAL STATION	LAKE/STREAM	VEGETATION	WATERSHED RESEARCH SITE	WEATHER STATION	PERMANENT RESEARCH STAFF	NUMBER OF TYPES OF FECORDS, PROGRAMS, FACILITIES (MAXIMUM = 71)
GREECE														
GORGE OF SAMARIA		×			×	×								25
MOUNT OLYMPUS		×			×	×								26
HUNGARY														
AGGTELEK	×				8	×	×	×		·····		×		21
HORTOBAGY	××		××	×	88 8		××	××				××	ر د	40
LAKE FERTO	×		×		4	×	×	×				×		32
PILIS	×							•				×		36
IRELAND														
KILLARNEY	×		×			×			တ	ಚ		×		31
NORTH BULL ISLAND	2	7	×	×		×	×	×		•				[17]
ITALY										·				

27

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COLLEMELUCCIO-

CIRCEO ITALY

MONTEDIMEZZO

MIRAMARE

CHATKAL MOUNTAINS

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KYRGYZSTAN

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	_	X = EX	STING	X = EXISTING PROGRAM		NON = #	WBER ()F YEA	NUMBER OF YEARS OF RECORDS	FECOF	₽ SQŁ	= PRIC	= PRIORITY AREA	NEA			_					_	
	B101	OGIC	AL IN	BIOLOGICAL INVENTORY	JRY			SOL	70150	N MC	ECOLOGICAL MONITORING	RING		-			Ä	RESOURCE MAPS	S S	APS			
	SETARBETREVIOLE	SJAMMAM	SIRDS	NONVASCULAR PLANTS	VASCULAR PLANTS	VERTEBRATES OTHER THAN MAMMALS	COLLECTIONS BIOLOGICAL SURVEY AND	YTIJAUD AIA	CLIMATE	FRESHWATER ECOSYSTEMS	GROUNDWATER HYDROLOGY MARINE ECOSYSTEMS	PALEOECOLOGY	PRECIPITATION CHEMISTRY	SURFACE HYDROLOGY	VEGETATION DATA	YTIJAUD AƏTAW	GEOLOGICAL	LAND USE	BEGIONAL LAND TENURE	SOILS	OIH4ARD040T	VEGETATION	
NETHERLANDS																							
WADDENSEA AREA	8	30		30	100 50	20	×		100		Ō	66		66	30	30	×			×	×	×	
NORWAY																							
NORTH-EAST SVALBARD	Н															ļļ							
POLAND																•	•						
BABIA GORA	120	120		120	180	120	×	5	30	4	14		5		ļ		×	×		×	×	×	
BIALOWIEZA	81	74		101	102	74	×	9	89		44		9		73	ļ	_			×	×	×	
EASTERN BESKID	×	×		×	×	×	×	×	×	×	×		×	×		×	×			×	×	×	
KARKONOSZE	×	×		×	×	×	×	 ×			×		×							×	×	×	
LUKAJNO LAKE	20	8				•••••	×	10		×				.,							×	×	
SLOWINSKI		×			×		×	×	40		×		×		×			×		×	×	×	
TATRA MOUNTAINS	×	×		×	×	×	×	×	×	×	×		×	×			×	×		×	×	×	
PORTUGAL														•									
PAUL DO BOQUILOBO	Н				5	9	×											×				100	Ċ.
ROMANIA																						}	2
DANUBE DELTA	×	×		×	×	×	×		×	×	×			×						į	×	×	
PIETROSUL MARE	2			င္က	30	8	×		20	10	10			22	9	30	8	8	•••••	·	100	8	
RETEZAT	100			20	20	20	×		20	10	10			2			—			50	100	09	

BASIC RESOURCE INFORMATION

RESEARCH TOPICS

= PRIORITY AREA # = NUMBER OF YEARS OF RECORDS X = EXISTING PROGRAM

WATER POLLUTANTS **PESTICIDES** POLLUTION ATMOSPHERIC POLLUTANTS **ACIDIC DEPOSITION DANAMICS** POPULATIONS **WILDLIFE POPULATION** RARE/ENDANGERED SPECIES SPECIES *PESTS AND DISEASES* SEDIMENTATION HADBOLOGICAL CYCLE $\times \times \times$ $\times \times \times$ FIRE HISTORY/EFFECTS **ECOSYSTEM CYCLES ECOSYSTEM MODELING** AND PROCESSES $\times \times$ ECOLOGICAL SUCCESSION **BESEARCH** COMPARATIVE ECOLOGICAL BIOGEOCHEMICAL CYCLES 162 \times & &HISTORY OF SCIENTIFIC STUDY **SYSTEM** GEOGRAPHIC INFORMATION **BEAISION** BIBLIOGRAPHY - YEAR OF LAST **BELEBENCES** BIBLIOGRAPHY - NUMBER OF HISTORICAL RECORDS **YHAARDOIJBIB** × 15 **SHAARDOTOHA JAIRBA** ∞ \otimes \times \times \times NORTH-EAST SVALBARD PAUL DO BOQUILOBO WADDENSEA AREA *LATRA MOUNTAINS* NETHERLANDS PIETROSUL MARE **EASTERN BESKID** DANUBE DELTA **UKAJNO LAKE** KARKONOSZE PORTUGAL **BABIA GORA BIALOWIEZA** ROMANIA SLOWINSKI NORWAY POLAND RETEZAT



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	×	STING	EXISTING PROGRAM	¥	I = PRIORITY AREA	TIT.	AREA										_	
	HUMAN		SYSTEMS	(0		ŀ	2	ANA	GEME	TN.	MANAGEMENT PRACTICES	ICES		Ì				
	АРСНАЕОГО <u>С</u> У	CULTURAL ANTHROPOLOGY	DEMOGRAPHY/SETTLEMENT DEMOGRAPHY/SETTLEMENT	ETHNOBIOLOGY	LAND TENURE/ USE/MANAGEMENT	LESOURCE ECONOMICS	TRADITIONAL LAND USE SYSTEMS	AGRICULTURAL APPROPRIATE RURAL	TECHNOLOGY	ECOSYSTEM RESTORATION	GENETIC RESOURCE MANAGEMENT	MINING RECLAMATION	RANGELAND MANAGEMENT	РЕСЯЕРТІОИ/ТОИРІЅМ ВЕЅОИВСЕ РВОDИСТІОИ	LECHNOLOGIES	SOIL CONSERVATION	MATERSHED MANAGEMENT	
NETHERLANDS											•							
WADDENSEA AREA										×			×	×				
NORWAY			•															
NORTH-EAST SVALBARD	П						П	ļļ						-				
POLAND	,						•											
BABIA GORA											×							
BIALOWIEZA										 ×	 ×	×		~				
EASTERN BESKID				×			×	×		×	×			×		×	×	
KARKONOSZE					×		×			×					×	~		
LUKAJNO LAKE SI OWINSKI										>			× >					
TATRA MOUNTAINS				×	×		×	×	×	< ×	×	×		`` < ×	×	×	×	
PORTUGAL																	•	
PAUL DO BOQUILOBO	Н						×	×	×	×			×					
ROMANIA																		
DANUBE DELTA		×		×	×			×	×			×	×		×		×	
PIETROSUL MARE		×		×			×	×	×	×	×	×	×	×		×	×	
RETEZAT		×		×			×	×	×	×	×	×		~			×	

SITE SUPPORT	= PRIORITY AREA
	X = EXISTING PROGRAM

= NUMBER OF STATIONS, SCIENTISTS, PLOTS, ETC.

	NUMBER OF TYPES OF FACILITIES (MAXIMUM = 71)
1	_
_	РЕВМАИЕИТ ВЕЅЕАВСН ЅТАГГ
	WEATHER STATION
ES	ANTERSHED RESEARCH SITE
Ę	VEGETATION
일당	PERMANENT PLOTS:
G A FA	LAKE/STREAM
홅	PERMANENT PLOTS:
MONITORING AND RESEARCH FACILITIES	HYDROLOGICAL STATION
MON	NOITATS NOITUJJOA RIA
	HOAD ACCESS
	LODGING FOR SCIENTISTS
JRE	ГІВВАВУ
UCTU	YAOTAAO8AJ
INFRASTRUCTURE	YTIJIDAH LARINOTARUD
INFR	CONFERENCE FACILITIES

NETHERLANDS															İ		
WADDENSEA AREA	×	×	×	×	5		×		×	유	20		×	ଷ	نــا	42	_
NORWAY														•			
NORTH-EAST SVALBARD	П	ļ	ļ	ļļ		-						<u> </u>			ا	0	_
POLAND																•	
BABIA GORA		×	×	×	ļ	ļ	_	4	!*****		200		×	2		42	
BIALOWIEZA	×	×	×	×	ļ	.	_	×			တ္တ		×	က	<u>:</u>	47	
EASTERN BESKID	×	×	×	×	2						×		×		•	45	
KARKONOSZE	×		×	×			×	×	×				×			36	_
LUKAJNO LAKE			×	×												21	
SLOWINSKI	×	×	×	×	ຂ		×	×					×	×		36	
TATRA MOUNTAINS	×	×	×	×			Щ		×	×	×	×	×			22	
PORTUGAL						•											
PAUL DO BOQUILOBO	П		×		10				×				×		ٺـــا	16	
ROMANIA																	
DANUBE DELTA	×		×	×					×				×			46	
PIETROSUL MARE	×						×	×	20			×	×			42	
RETEZAT	×		×		×			×	50			×	×			46	
															i		

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		VEGETATION
		OIH4AR2O4OT
	AAPS	SOILS
	n T	REGIONAL LAND TENURE
	RESOURCE MAPS	LAND USE
	RES.	©EOLOGICAL
		YTIJAUD RƏTAW
		ATAG NOITATƏÐƏV
¥		SURFACE HYDROLOGY
# = PRIORITY AREA		PRECIPITATION CHEMISTRY
RIOR	9	PALEOECOLOGY
•	CORI	MARINE ECOSYSTEMS
SADS	NO	СВООИВМАТЕЯ НҮВВОГОСУ
- RECC	AL N	FRESHWATER ECOSYSTEMS
# = NUMBER OF YEARS OF RECORDS	ECOLOGICAL MONITORING	CLIMATE
JF YE		YTIJAUD RIA
ABER (COLLECTIONS BIOLOGICAL SURVEY AND
Š		SJAMMAM BIOLOGICAL SUBVEY AND
#		VERTEBRATES OTHER THAN
SRAM	VTORY	STNAJA RAJUOSAV
PROC		STNAJA RAJUDSAVNON
ISTING	AL IN	SIRDS
X = EXISTING PROGRAM	BIOLOGICAL INVE	SJAMMAM
	BIOL	INVERTEBRATES
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Ц	J
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ū	J
Ц	-
Z	2
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RUSSIAN FEDERATION																				
ASTRAKHANSKIY	65	65	65	65	65	×	ļ	ļ	ļ	12		ļ	ļ	ļ	×			×	×	×
KAVKAZSKIY	62	62	62	62	85	×	5	ļ	10 6	99	5	ļ	ļ	15	×	×		×	×	×
KRONOTSKIY	7	10	7	2	10	×	ļ	ļ	 .		<u></u>			ļ	×			×	×	×
LAKE BAIKAL: BAIKALSKIY	7	10	7	2	9	×	Ì	18	ļ		 !	×	ļ		×	<u></u>		×	×	×
LAKE BAIKAL: BARGUZINSKIY		13	က	∞	13	×	ļ	14	<u></u>			×	<u>:</u>	ļ			<u></u>	×	ļ	_
LAPLANDSKIY		20		30	20	×	10	ļ	!		<u></u>	ļ						-	ļ	
OKA RIVER VALLEY	15	40	×	8	40	×	ļ	ļ	ļ	×		53	ļ	30					-	×
PECHORO-ILYCHSKIY	×	20	×	ଯ	23	×		ļ	ļ		ļ	×	ļ	×		×				×
SAYANO-SHUSHENSKIY	10	10	7	2	2	×	ļ	10 1	10			2		ļ	×			×	×	×
SIKHOTE-ALINSKIY	20	20	20	ည	22	×	ღ	ļ	ļ		<u></u>	10			×			×	×	×
SOKHONDINSKIY		 ×		×	×	×		ļ	ļ	×	<u></u>	×		×					×	×
TSENTRAL'NO-CHERNOZEMNY	40	20	20	22	22	×	ļ	40			ļ	30	ļ	ļ		×		×	×	×
TSENTRAL'NO-LESNOY	20	20	20	20	20	×	7	28	<u></u>	6	 	20	 	4	×	×		×	×	×
TSENTRAL'NOSIBIRSKIY		5		7	7	×					 	<u></u>	ļ	ļ					ļ	×
VORONEZHSKIY	10	40	ည	20	4			54												

SLOVAKIA																						
EAST CARPATHIANS	×	×	×	×	×	×	×		×	×		 ļ		×	ļ	_ ×	×	×		×	×	×
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SLOVENSKY KRAS	9	35	×		55	35	×		20	×	ន	 ×	30	8		88	×	×	×	×	ļ	×
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RESEARCH TOPICS

X = EXISTING PROGRAM # = NUMBER OF YEARS OF RECORDS # = PRIORITY AREA

POLLUTION

	ž	WILDLIFE POPULATION
ES	LATIC	RARE/ENDANGERED SPECIES
SPEC	POPU	PESTS AND DISEASES
		NOITATNAMIGES
		HYDROLOGICAL CYCLE
'n		FIRE HISTORY/EFFECTS
CLES	S	ECOSYSTEM MODELING
N C	ESSE	ECOFOGICAL SUCCESSION
YSTE	PROC	COMPARATIVE ECOLOGICAL
ECOS	AND	BIOGEOCHEMICAL CYCLES
		HISTORY OF SCIENTIFIC STUDY
		ВЕОВРАНІС ІИГОРМАТІОИ ВУЗТЕМ
		REVIOGRAPHY - YEAR OF LAST
		<u> </u>
AL		BIBLIOGRAPHY - NUMBER OF
ORIC	SOHO	УНЧАЯ: ВІВLІОЄВАРНУ
HIST	RECO	AERIAL PHOTOGRAPHS
	HISTORICAL ECOSYSTEM CYCLES SPECIES	ECOSYSTEM CYCLES AND PROCESSES

STNATUJJO9 RETAW

ACIDIC DEPOSITION

ATMOSPHERIC POLLUTANTS

PESTICIDES

DYNAMICS

RUSSIAN FEDERATION																	
ASTRAKHANSKIY	×	×		×		ļ	ļ	×			×	×	×		×		×
KAVKAZSKIY	2	62			^ ×	×	×		×		×	×	×	×	×	 ×	×
KRONOTSKIY	12	×		×					×	×	×	×	×				
LAKE BAIKAL: BAIKALSKIY	12	×		×					×	×	×	×	×				
LAKE BAIKAL: BARGUZINSKIY		×		×								×	×	×	×		×
LAPLANDSKIY													×		×		×
OKA RIVER VALLEY	20	×	••••	×				×		×	×	×					
PECHORO-ILYCHSKIY	5	×		×						×	×	×	×		×		×
SAYANO-SHUSHENSKIY	×			×						×		×	×				
SIKHOTE-ALINSKIY				×	^ ×		×	×	×	×		×			 ×		×
SOKHONDINSKIY		×	••••	×						×		×	×	•••••	•••••	•••••	×
TSENTRAL'NO-CHERNOZEMNY	4	×		×				×		×		×	×				
TSENTRAL'NO-LESNOY	20	×		×						×		×	×		×	 ×	
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VORONEZHSKIY	×	×		×		~		×		×	×	×	×				×

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EAST CARPATHIANS

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WATERSHED MANAGEMENT SOIL CONSERVATION **TECHNOLOGIES** RESOURCE PRODUCTION RECREATION/TOURISM RANGELAND MANAGEMENT **MANAGEMENT PRACTICES** MINING RECLAMATION **MANAGEMENT** GENETIC RESOURCE **ECOSYSTEM RESTORATION TECHNOLOGY** JARUR ETAIRGORGA **AGRICULTURAL SASTEMS** TRADITIONAL LAND USE RESOURCE ECONOMICS USE/MANAGEMENT **LAND TENURE**\ **ETHNOBIOLOGY HUMAN SYSTEMS PATTERNS DEMOGRAPHY/SETTLEMENT** CULTURAL ANTHROPOLOGY **ABOLOGY**

ASTRAKHANSKIY			×		×		×	 	 		ļ
KAVKAZSKIY		×	×	×	×	×	×	×	×	×	ļ
KRONOTSKIY	×	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	×		×			<u></u>		×	
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LAPLANDSKIY					<u></u>		×	ļ	<u></u>		ļ
OKA RIVER VALLEY			×		×	×	!	ļ			×
PECHORO-ILYCHSKIY							×	ļ	 		ļ
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SITE SUPPORT

		PERMANENT RESEARCH STAFF
		WEATHER STATION
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2	RESEARCH FACILITIES	PERMANENT PLOTS: VEGETATION
₩ 5 ×	1 FAC	LAKE/STREAM PERMANENT PLOTS:
MONITORING AND	ARC	HYDROLOGICAL STATION
MON	HESE	NOITATS NOITULION BIA
		HOAD ACCESS
		LODGING FOR SCIENTISTS
ļ	JRE	YAAAA
į	UCIL	YAOTAAOBAJ
	NFRASTRUCTURE	CURATORIAL FACILITY
	NFR	CONFERENCE FACILITIES

NUMBER OF TYPES OF PACILITIES (MAXIMUM = '

4 3 2 4

RUSSIAN FEDERA

ASTRAKHANSKIY

30 37 37 41 36

TSENTRAL'NO-CHERN

SENTRAL'NO-LESNO SENTRAL'NOSIBIRSK

VORONEZHSKIY

SAYANO-SHUSHENSK

SIKHOTE-ALINSKIY

SOKHONDINSKIY

PECHORO-ILYCHSKIY

OKA RIVER VALLEY

APLANDSKIY

AKE BAIKAL: BARGU

-AKE BAIKAL: BAIKAL

KAVKAZSKIY KRONOTSKIY 4

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EAST CARPATHIANS

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	AAPS	SOILS
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	RESOURCE MAPS	LAND USE
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		YTIJAUD RƏTAW
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¥		SURFACE HYDROLOGY
# = PRIORITY AREA		YRTCIPITATION CHEMISTRY
RIOR	ಶ	PALEOECOLOGY
#	ORIN	MARINE ECOSYSTEMS
SORC	NON	GROUNDWATER HYDROLOGY
= RECC	SALA	FRESHWATER ECOSYSTEMS
# = NUMBER OF YEARS OF RECORDS	ECOLOGICAL MONITORING	CLIMATE
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GRAZALEMA	×	×	ļ	×	×	×	×	×	×	×		ļ	 !	ļ	×	ļ		į	ļ	×	ļ	ļ
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MARISMAS DEL ODIEL	×	×		×	×	×	×	×	4	×	×	×	ļ	×	×	×	-	ļ	×	×	×	ļ
MONTSENY	2	2		25	25	10	×		28		ļ			 !	ļ	25	5	×		×	ļ	×
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RESEARCH TOPICS

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		OTIO.	ATMOSPHERIC POLLUTANTS
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•		TIONS	WILDLIFE POPULATION DYNAMICS
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F REC	COSYSTEM CY	PROC	COMPARATIVE ECOLOGICAL RESEARCH
# = NUMBER OF YEARS OF RECORDS # = PRIORITY AREA	ECOS	AND	BIOGEOCHEMICAL CYCLES
OF YI			
ABE F			HISTORY OF SCIENTIFIC STUDY
» NO			GEOGRAPHIC INFORMATION SYSTEM
			BIBLIOGRAPHY - YEAR OF LAST REVISION
X = EXISTING PROGRAM	7		REFERENCES BIBLIOGRAPHY - NUMBER OF
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GRAZALEMA	×	×				×		ļ	×		 .		ļ			×	×					_
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ORDESA-VINAMALA									×	×			×	_		×	×					
SIERRA NEVADA	×	×	540	1992	×	×			×					×	*	×	×		×		*	
SIERRAS DE CAZORLA,																						
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TURKMENISTAN REPETEK

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ТИЗМЭФАИАМ ОЗНОВЗТАМ SOIL CONSERVATION **TECHNOLOGIES** RESOURCE PRODUCTION RECREATION/TOURISM RANGELAND MANAGEMENT MANAGEMENT PRACTICES MINING RECLAMATION **MANAGEMENT** GENETIC RESOURCE ECOSYSTEM RESTORATION **TECHNOLOGY** JARUR STAIRGORGGA **AGRICULTURAL SYSTEMS TRADITIONAL LAND USE** RESOURCE ECONOMICS **USE/MANAGEMENT** LAND TENURE/ **ETHNOBIOLOGY HUMAN SYSTEMS PATTERNS** DEMOGRAPHY/SETTLEMENT CULTURAL ANTHROPOLOGY **ARCHAEOLOGY**

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SITE SUPPORT X = EXISTING PROGRAM # = PRIORITY AREA

= NUMBER OF STATIONS, SCIENTISTS, PLOTS, ETC.

	РЕВМАИЕИТ ВЕЅЕАВСН ЅТАГГ
	WEATHER STATION
S	WATERSHED RESEARCH SITE
MONITORING AND RESEARCH FACILITIES	PERMANENT PLOTS: VEGETATION
MONITORING AND RESEARCH FACIL	LAKE/STREAM PERMANENT PLOTS:
TORI ARCI	HYDROLOGICAL STATION
MON	NOITATS NOITUJJO9 RIA
	ROAD ACCESS
	LODGING FOR SCIENTISTS
JRE	ХЯАЯЯ
UCTL	YAOTAROBAL
NFRASTRUCTURE	YTIJIDAT JAIROTARUD
INFR	CONFERENCE FACILITIES

NUMBER OF TYPES OF FACILITIES (MAXIMUM = 71)

SPAIN														i	
ALTO MANZANARES	×	×	×	×	×	×		×	×	×		×	ည		3
CANAL Y LOS TILES										•	•	×			٠,
DONANA	×	×	×	×	7	×		×	×		×	×	15		4
GRAZALEMA	×	×		×	52	×		×			×		9		က
MANCHA HUMEDA	×		×	×		×		×	••••			×	4		' -
MARISMAS DEL ODIEL		×				×	•••••	•••••	•	8			15		က
MONTSENY			×	×	ω	×		•••••	7			×	7		က
ORDESA-VINAMALA			×	×		×		 ×					12		-
SIERRA NEVADA		×		×		×		×				×			Ŋ
SIERRAS DE CAZORLA,	•••							•••••		••••••	•••••				
SEGURA Y LAS VILLAS	×	×	×	••••	4	×	•••••	×	•••••	•••••		×		; 	က
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SUISSE

X = EXISTING PROGRAM # = NUMBER OF YEARS OF RECORDS # = PRIORITY AREA

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	JIHAAAĐO4OT
IAPS	SOILS
RESOURCE MAPS	BRUNAL LAND TENURE
OUR	LAND USE
RES	GEOLOGICAL
_	YTIJAŲO RƏTAW
	ATAQ NOITATƏÐƏV
	SURFACE HYDROLOGY
	YATSIMƏHƏ NOITATIQIƏBA
ల్త	PALEOECOLOGY
ECOLOGICAL MONITORING	MARINE ECOSYSTEMS
NON	уролован язтамиловр
CAL	FRESHWATER ECOSYSTEMS
LOGIC	CLIMATE
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	COLLECTIONS
i	BIOFOGICAL SURVEY AND
	VERTEBRATES OTHER THAN
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NORTH NORFOLK COAST

ST. KILDA **TAYNISH**

MOOR HOUSE-UPPER OCH DRUIDIBEG

TEESDALE

49 2

SLE OF RUM

RESEARCH TOPICS

BASIC RESOURCE INFORMATION

PESTICIDES POLLUTION ATMOSPHERIC POLLUTANTS **ACIDIC DEPOSITION DYNAMICS POPULATIONS WILDLIFE POPULATION** RARE/ENDANGERED SPECIES SPECIES **PESTS AND DISEASES SEDIMENTATION** # = PRIORITY AREA HYDROLOGICAL CYCLE FIRE HISTORY/EFFECTS **ECOSYSTEM CYCLES** ECOSYSTEM MODELING AND PROCESSES X = EXISTING PROGRAM # = NUMBER OF YEARS OF RECORDS **ECOLOGICAL SUCCESSION BESEARCH** COMPARATIVE ECOLOGICAL BIOGEOCHEMICAL CYCLES HISTORY OF SCIENTIFIC STUDY SYSTEM GEOGRAPHIC INFORMATION **BEVISION** BIBLIOGRAPHY - YEAR OF LAST **BELEBENCES** BIBLIOGRAPHY - NUMBER OF HISTORICAL RECORDS **SIBLIOGRAPHY SHAARDOTOHY JAIREA**

STNATUJJO9 RETAW

ASKANIYA-NOVA		×			•••••	143	×		×			 ×		×		×		••••		×		
CARPATHIAN	×	×			×	×										×	×	×				
CHERNOMORSKIY		×				×	^	 ×	^ ×	~ ×	^ ×	×		^ ×	 ×	×	×			×	~	×
UNITED KINGDOM																						
BEINN EIGHE	က	30		••••	•••••			×								×		×				
BRAUNTON BURROWS	49	×	•	•••••	•••••				×			×	•••••			 ×		••••				
CAERLAVEROCK	×		•	•												×	×					
CAIRNSMORE OF FLEET,								<u>:</u>					•••••						•••••			
MERRICK-KELLS AND	••••	******	•…••	•	•••••			•••••	•••••	•••••	••••	•••••	•••••		•••••	••••		••••••	•••••		•••••	
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UKRAINE

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Full Text Provided by FRIC

WATERSHED MANAGEMENT SOIL CONSERVATION **LECHNOLOGIES ВЕЗОПИСЕ РЯОВИСТІОИ** RECREATION/TOURISM RANGELAND MANAGEMENT MANAGEMENT PRACTICES MINING RECLAMATION **MANAGEMENT** GENETIC RESOURCE **ECOSYSTEM RESTORATION TECHNOLOGY** JARUR STAIRGORGGA **AGRICULTURAL SYSTEMS** TRADITIONAL LAND USE RESOURCE ECONOMICS USE/MANAGEMENT LAND TENURE/ **ETHNOBIOLOGY HUMAN SYSTEMS PATTERNS DEMOGRAPHY/SETTLEMENT** CULTURAL ANTHROPOLOGY **ARCHAEOLOGY**

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	ASKANIYA-NOVA	×			×	×	×	×	×		×	×	ļ	×	ļ	
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	MERRICK-KELLS AND		•••••			•••••	•••••	•••••	•••••	•••••						
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ST. KILDA TAYNISH



SITE SUPPORT X = EXISTING PROGRAM # = PRIORITY AREA

= NUMBER OF STATIONS, SCIENTISTS, PLOTS, ETC.

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		PERMANENT RESEARCH STAFF
		WEATHER STATION
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9	RESEARCH FACILITIES	PERMANENT PLOTS: VEGETATION
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MONITORING AND	ARC	HYDROLOGICAL STATION
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		YAOTAROBAL
	NFRASTRUCTURE	YTIJIDA I JAIROTARUD
	N THE	CONFERENCE FACILITIES

NUMBER OF TYPES OF PECORDS, PROGRAMS, PACILITIES (MAXIMUM = 71)

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ASKANIYA-NOVA	×		×		9	×				×			22	40
CARPATHIAN	×	×	×	×	×			•		×	×	×		ଷ
CHERNOMORSKIY	×	×	×	×	35	×			ω	×			6	43
UNITED KINGDOM														
BEINN EIGHE	×	×	×	×	14	×	×					×	×	5 8
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VEGETATION **JIH9ARDO90T** RESOURCE MAPS SOILS REGIONAL LAND TENURE **LAND USE GEOLOGICAL YTIJAUQ RETAW VEGETATION DATA** SURFACE HYDROLOGY PRECIPITATION CHEMISTRY **PALEOECOLOGY ECOLOGICAL MONITORING** MARINE ECOSYSTEMS X = EXISTING PROGRAM # = NUMBER OF YEARS OF RECORDS GROUNDWATER HYDROLOGY FRESHWATER ECOSYSTEMS **CLIMATE** YTIJAUQ RIA COLLECTIONS BIOLOGICAL SURVEY AND SJAMMAM **VERTEBRATES OTHER THAN BIOLOGICAL INVENTORY** VASCULAR PLANTS NONVASCULAR PLANTS BIRDS STAMMAM **SETARBETTES**

UNITED STATES																						
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CALIFORNIA COAST RANGES	×	×		×	×	×	•	<u></u>	÷	Ģ-1		ç					÷	÷	ļ	٠	×	×
CAROLINIAN-SOUTH ATLANTIC	×	×	×	×	×	×	×	×	×	25	×	×	ļ	×	×	×	×	×	ļ	×	×	×
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CENTRAL CALIFORNIA COAST	×	7	×	×	×	7	•	·····	·····	******	·	2			····	·····	_	·		ş	×	×
CENTRAL GULF COASTAL																		ļ		ļ		
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RESEARCH TOPICS

		SEDIMENTATION
		HYDROLOGICAL CYCLE
' 0		FIRE HISTORY/EFFECTS
CLES	S	ECOSYSTEM MODELING
SM C	ESSE	ECOFOCICY SUCCESSION
SYSTE	PROC	COMPARATIVE ECOLOGICAL RESEARCH
ECO	AND	BIOGEOCHEMICAL CYCLES
		*
		HISTORY OF SCIENTIFIC STUDY
		GEOGRAPHIC INFORMATION
		BIBLIOGRAPHY - YEAR OF LAST REVISION
۸L		BEFLOGBAPHY - NUMBER OF
ORIC.	SORC	BIBLIOGRAPHY
HIST(RECO	AERIAL PHOTOGRAPHS
		· .
	HISTORICAL ECOSYSTEM CYCLES	

ACIDIC DEPOSITION

WILDLIFE POPULATION

PESTS AND DISEASES

SEDIMENTATION

ATMOSPHERIC POLLUTANTS

RARE/ENDANGERED SPECIES

POLLUTION

SPECIES POPULATIONS

PESTICIDES

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ALEUTIAN ISLANDS	30					×		×							×	×		×		
BEAVER CREEK						×				×	×	×			•••••					
BIG BEND	7	×	675	1985	×	×			×		×	×		×	×	×	×			×
BIG THICKET	5	×	123	1987	7	×			×		×				×					×
CALIFORNIA COAST RANGES	8	×			×	×		×	*	×	×	×	*	×	×	×	×			×
CAROLINIAN-SOUTH ATLANTIC	8	×	2000	1992	×	×	10	×	×		×	15	×	•••••	×	×	×			×
CASCADE HEAD	40	20	200	1991		×	×	10	7	×	×		2	~	10	ည	×	×	••••	
CENTRAL CALIFORNIA COAST	20	×			×	×	×	×	×	×	×	×	×	×	*	•	×			×
CENTRAL GULF COASTAL												•••••			•••••		•••••	•••••	•••••	
PLAIN	က	×	3000	1992	×	×	×	×	×	*	×	×	×	×	*	×	×			¥
CENTRAL PLAINS	20	×	200	1983	×	×	×	×	×	×	×	×				×	×			
CHAMPLAIN-ADIRONDACK	×	×			×	×	×	×	×	×	×	×	×	×	×	×	×			×
CHANNEL ISLANDS	20	×			×	×		×	×	×	×			×	×	×		×	×	×
CORAM	36	×	100	1992	ည	1.5			€ 21	•••••	7	4	4	 9	•••••	44				
DENALI	30	×	009	1992		×	×		×	×	×	×	×	•••••		×	×	×		×
DESERT		×				×			¥	*	******	×		×	•••••		•••••			
EVERGLADES	40	×			4		×	×	×	×	×	×			×	×	×	×	×	×
FRASER	4					×			×				×	×		×				
GLACIER	×	ည	2500	1991	×	×		×	×	×	 ×	×	×	 ×	×	×	×	×	×	×



SOIL CONSERVATION **TECHNOLOGIES ВЕЗОПИСЕ РЯОРИСТІОН** RECREATION/TOURISM RANGELAND MANAGEMENT MANAGEMENT PRACTICES MINING RECLAMATION MANAGEMENT GENETIC RESOURCE ECOSYSTEM RESTORATION **LECHNOLOGY JARUR STAIŖGORGGA AGRICULTURAL** # = PRIORITY AREA **SYSTEMS** TRADITIONAL LAND USE RESOURCE ECONOMICS USE/MANAGEMENT LAND TENURE/ X = EXISTING PROGRAM **ETHNOBIOLOGY HUMAN SYSTEMS PATTERNS DEMOGRAPHY/SETTLEMENT** CULTURAL ANTHROPOLOGY **ARCHAEOLOGY**

WATERSHED MANAGEMENT

UNITED STATES																	
ALEUTIAN ISLANDS		×		} !	 !	; !	×		}	×		×			ļ		
BEAVER CREEK																	
BIG BEND	×	×	×	×	•					×		×		×		×	
BIG THICKET										×		×		×	••••••••••••••••••••••••••••••••••••••		
CALIFORNIA COAST RANGES		×					×			*	×			×		×	×
CAROLINIAN-SOUTH ATLANTIC		×		·		(······	×	×	×	×	×			×		×	
CASCADE HEAD	×	×	×		×					10		×		×	က	ļ	
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PLAIN	×	×	×		×	×	×		×	×		•••••		×	×	×	¥
CENTRAL PLAINS	×		×		×			×				×	*			×	×
CHAMPLAIN-ADIRONDACK	20	×	20	×	22	22	×	×	×	×	×	×		×	22	×	×
CHANNEL ISLANDS		×		×			×	×		×			×	×		×	×
CORAM										4					41		
DENALI	ထ	×	15	×	22	8	×				×	×		×	25		
DESERT													×				
EVERGLADES							×			×	×	×	×	×		×	×
FRASER							×		•••••			•	•	×	••••	•••••	×
GLACIER	×			•				•••••	•••••	×	×	×	•••••	×	•••••	•••••	
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SITE SUPPORT X = EXISTING PROGRAM # = PRIORITY AREA

= NUMBER OF STATIONS, SCIENTISTS, PLOTS, ETC.

	PERMANENT RESEARCH STAFF
	WEATHER STATION
ES	этіг ноячэгэн бінгы
	PERMANENT PLOTS: VEGETATION
NG A	LAKE/STREAM PERMANENT PLOTS:
MONITORING AND RESEARCH FACILITIES	HYDROLOGICAL STATION
MON	NOITATS NOITUJJO9 AIA
•	ROAD ACCESS
	LODGING FOR SCIENTISTS
JRE	YAAABIJ
UCTL	YAOTAROBAL
NFRASTRUCTURE	YTIJIDAF JAIROTARUD
INFR	CONFERENCE FACILITIES

(ITES (MAXIMUM = 71)
RECORDS, PROGRAMS,
NUMBER OF TYPES OF

UNITED STATES													
ALEUTIAN ISLANDS				×								×	×
BEAVER CREEK								×				×	
BIG BEND	×	×	×	×	7	×	×	×		30		×	သ
BIG THICKET		×		×	∞	×	×			7		×	က
CALIFORNIA COAST RANGES	×	×	×	×	×	×	×	×	×	×	×	×	27
CAROLINIAN-SOUTH ATLANTIC	×	×	×	×	×	×	×	×		×	×	×	25
CASCADE HEAD	×				×	×	×			×		×	×
CENTRAL CALIFORNIA COAST	×	×	×	×	99	×	×	×		×	×	×	125
CENTRAL GULF COASTAL													
PLAIN	×	×	×	×		×		••••	14	က	•	×	×
CENTRAL PLAINS	×	×	×		∞	×	×				မ	×	4
CHAMPLAIN-ADIRONDACK	×	×	×	×	×	×	×	×	×	×	×	×	×
CHANNEL ISLANDS	×	×	×	×	×	×	×	×		×		သ	N
CORAM	7				7	ន		19		4		41	ω
DENALI	×	×	×	×	×	×	×	×	×	×		×	8
DESERT		×				×						×	
EVERGLADES	×	×		×	×		×	×		×		×	88
FRASER	×		×			×		×				×	7
GLACIER '	×	×	×	×	×	×	×	×	×	×	×	×	×

24 28 33 12 89 24

VEGETATION **JIH9ARDO9OT** RESOURCE MAPS SOIFS REGIONAL LAND TENURE LAND USE GEOLOGICAL YTIJAUQ RETAW **ATAC NOITATEDEN** SURFACE HYDROLOGY # = PRIORITY AREA PRECIPITATION CHEMISTRY **PALEOECOLOGY ECOLOGICAL MONITORING** MARINE ECOSYSTEMS X = EXISTING PROGRAM # = NUMBER OF YEARS OF RECORDS СВОИМВИТЕЯ НҮВРОГОСУ FRESHWATER ECOSYSTEMS **CLIMATE** YTIJAUQ RIA COLLECTIONS BIOLOGICAL SURVEY AND SJAMMAM **ИЕВТЕВВАТЕЗ ОТНЕЯ ТНАИ BIOLOGICAL INVENTORY** VASCULAR PLANTS NONVASCULAR PLANTS BIRDS SJAMMAM **SETARBETTES**

U.S.A. (CONT.)					,																	
GLACIER BAY - ADMIRALTY	ç	ť		ç	ξ	ç	>		ç	c		<u> </u>			ļ			ç	}	ļ	ļ	
GUANICA	2	2		2 0	10	2	<×		3 12	 2		3		-	2 8		<u> </u>	3				×
H.J. ANDREWS	15	15		15	82	15	×	<u></u>	<u> </u>	15	<u></u>	·•••••		÷			÷				<u>.</u>	×
HAWAIIAN ISLANDS	¥	9		10.2	8	×	15	က		1.5	<u> </u>	<u></u>	· · · · · · · · · · · · · · · · · · ·		10		×	ļ	<u></u>	×	×	×
HUBBARD BROOK	×	×	22	×	×	×	×	က	<u></u>	ļ	} -	····	į	ļ	ļ	ļ	╄	Ļ	×	ļ	ļ	×
ISLE ROYALE		75	9	က	75		×	9	ļ	į	<u>.</u>		į	ļ	ļ	ļ	╄	į	19	ļ	ļ	×
JORNADA	×	×	ς,	×	×	×	×	×	!	į	×	ļ	į	ļ	ļ	<u> </u>	!	·····	<u></u>	ļ	ļ	×
KONZA PRAIRIE	×	ა	×	×	×	×	×	<u></u>	ļ	ļ	×	<u></u>	<u></u>	ļ	ļ	ļ	╄	Ļ	<u></u>	ļ	į	×
LAND BETWEEN THE LAKES	2	25	58	ည	52	52	52	22	ļ	į	ļ	·····	.	<u>.</u>	·····	 	∺	<u></u>	53	ļ	į	32
LUQUILLO				×	9		×	7	ļ	ļ	ļ	 !	<u>;</u>		ļ .		<u>: </u>	į		ļ	ļ	×
MAMMOTH CAVE AREA	10	15	54	9	15	×	×	∞	ļ	ļ	ļ	····	ļ	ļ	į	ļ	<u>: </u>		51	ļ	ļ	×
MOJAVE AND COLORADO									 !		!	<u></u>	<u></u>	ļ	ļ	<u></u>		ļ	*····	<u></u>	į	
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RESEARCH TOPICS

HYDROLOGICAL CYCLES

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MOJAVE AND COLORADO

MAMMOTH CAVE AREA

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NEW JERSEY PINELANDS

DESERTS

NIWOT RIDGE

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AND BETWEEN THE LAKES

KONZA PRAIRIE

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HAWAIIAN ISLANDS

H.J. ANDREWS

GUANICA

SLAND

HUBBARD BROOK

ISLE ROYALE JORNADA

GLACIER BAY - ADMIRALTY

U.S.A. (CONT.)

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TECHNOLOGIES RESOURCE PRODUCTION RECREATION/TOURISM RANGELAND MANAGEMENT MANAGEMENT PRACTICES MINING RECLAMATION MANAGEMENT GENETIC RESOURCE **ECOSYSTEM RESTORATION LECHNOLOGY** JARUR STAIR9OR99A **LARUTJUDIRDA SASTEMS TRADITIONAL LAND USE BESONNOE** ECONOMICS USE/MANAGEMENT LAND TENURE/ **ETHNOBIOLOGY HUMAN SYSTEMS PATTERNS DEMOGRAPHY/SETTLEMENT** CULTURAL ANTHROPOLOGY **ARCHAEOLOGY**

WATERSHED MANAGEMENT

SOIL CONSERVATION

U.S.A. (CONT.)		·										٠					
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SITE SUPPORT X = EXISTING PROGRAM # = PRIORITY AREA

= NUMBER OF STATIONS, SCIENTISTS, PLOTS, ETC.

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MOJAVE AND COLORADO

MAMMOTH CAVE AREA

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NEW JERSEY PINELANDS

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GLACIER BAY - ADMIRALTY

U.S.A. (CONT.)

HAWAIIAN ISLANDS

H.J. ANDREWS

GUANICA

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SLE ROYALE JORNADA

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ORGAN PIPE CACTUS

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ROCKY MOUNTAIN

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Full Text Provided by ERIC

-		VEGETATION
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RESEARCH TOPICS

X = EXISTING PROGRAM # = NUMBER OF YEARS OF RECORDS # = PRIORITY AREA

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STANISLAUS-TUOLUMNE	4			••••		×							×	×			ļ		ļ	
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TARA RIVER BASIN

REPUBLIC

FORMER YUGOSLAV CHATKAL MOUNTAINS

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ERIC Full Text Provided by ERIC

WATERSHED MANAGEMENT SOIL CONSERVATION **TECHNOLOGIES** RESOURCE PRODUCTION **RECREATION/TOURISM** RANGELAND MANAGEMENT MANAGEMENT PRACTICES MINING RECLAMATION **MANAGEMENT** GENETIC RESOURCE ECOSYSTEM RESTORATION TECHNOLOGY JARUR STAIRTORAGA **AGRICULTURAL SASTEMS TRADITIONAL LAND USE BESONBOLE ECONOMICS** USE/MANAGEMENT LAND TENURE/ **ETHNOBIOLOGY HUMAN SYSTEMS SNA**3TTA9 **DEMOGRAPHY/SETTLEMENT** CULTURAL ANTHROPOLOGY **ABCHAEOLOGY**

U.S.A. (CONT.)																	
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SITE SUPPORT X = EXISTING PROGRAM # = PRIORITY AREA

= NUMBER OF STATIONS, SCIENTISTS, PLOTS, ETC.

	PERMANENT RESEARCH STAFF
	WEATHER STATION
S	WATERSHED RESEARCH SITE
MONITORING AND RESEARCH FACILITIES	PERMANENT PLOTS: VEGETATION
IG AI FAC	LAKE/STREAM PERMANENT PLOTS:
ORIN	HYDROLOGICAL STATION
MONITORING AND RESEARCH FACIL	NOITATS NOITUJJO9 AIA
<u> 2 </u>	NOITVIS NOITI NOI UIV
	ROAD ACCESS
	LODGING FOR SCIENTISTS
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N-R-R	CONFERENCE FACILITIES

NUMBER OF TYPES OF FACILITIES (MAXIMUM = 71)

SAN DIMAS	×		×	×	20	×	×	×		9	용	×	8	
SAN JOAQUIN	×	×	×	×		×						×	7	
SEQUOIA-KINGS CANYON	×	×	×	×	×	×	×	×		×	×	×	4	
SOUTH ATLANTIC COASTAL														
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CHATKAL MOUNTAINS FORMER YUGOSLAV

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REPUBLIC

Tabular Data Summaries

Country Biosphere Reserves by Biome

Data Summaries by Biome

Data Bases by Frequency



DISTRIBUTION OF BIOSPHERE RESERVES BY COUNTRY AND BIOME

	TEMPERATE BROAD-LEAF FOREST	COMPLEX MOUNTAIN SYSTEMS		TEMPERATE NEEDLE-LEAF FOREST	TEMPERATE GRASSLAND	MIXED ISLAND SYSTEMS	WARM DESERT	TUNDRA	TEMPERATE RAINFOREST	COLD DESERT	LAKE SYSTEMS	TROPICAL DRY FOREST		COUNTRY TOTAL	COUNTRY % OF TOTAL
AUSTRIA BELARUS BULGARIA	1 1	0	. 0	0 0 0	0 0 0		0 0 0	:	0 0	0 0 0		0 0 0		4 1 17	2% 1% 10%
CANADA	2		;	2	0		0	:	0	0		0		6	3%
CROATIA	0	0	1	0	0	0	0	0	0	0	:	0		1	1%
CZECH REPUBLIC	2	2	0	0	0	•	0		0	0	•	0		4	2%
CZECH. & POLAND	0				0	0	0	0	0	0	0	0		1	18
DENMARK	0			0	0		0		0	0	:	0		1	1%
ESTONIA	1			0 1	0	:	0	•	0	0	•	0		1	1왕
FINLAND	0			:	0		0		0	0	. :	0		1	1%
FRANCE	3			0	0	2	0	:	0	0	0	0		8	5%
GERMANY	10			0	0	-	0		0	0		0	_	12	7%
GREECE	0		•	0	0		0	:	0	0		0		2	1%
HUNGARY IRELAND	5 2	0 0		0	:	0	0	:	0	0	:	0		5	3%
ITALY	0	:		0	0		0	- :	0	0	:	0		2	1% 2%
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POLAND	4	0		0	0		0		0	0	•	0		4	2%
POLAND & SLOVAKIA	2	0		0	0		0		0	0	0	0	_	2	1%
PORTUGAL	0	0		0	0	0	0		0	0	:	0		1	1%
ROMANIA	2	0	0	0	1		0	:	0	0	;	0		3	2%
RUSSIAN FEDERATION	6		0	4	1		0	0	0	1	•	0		14	8%
SLOVAKIA	2	0	0	0	0	0	0	0	0	0	0	0		2	1%
SPAIN	0	0	10	0	0	1	0	0	0	0	0	0		11	6%
SWEDEN	0	0	i	0	0	0	0	;	0	0	0	0		1	1%
SWITZERLAND	0	:		0	0	0	0		0	0	0	0	_	1_	<u>1</u> 용
TURKMENISTAN	0	0	:	0	0	0	0	0	0	1	0	0		1	1%
UKRAINE	1	0	•	0	2	0	0	0	0	0	0	0		3	28
UNITED KINGDOM	6	6	•	0	0	0	0	0	0	0	0	0		12	7%
UNITED STATES YUGOSLAVIA	11			1	3		5		4	<u></u>	1	_ 1		47	27%
IUGUSLAVIA	0	1	0	0	0	0	0	0	0	0	0	0		1	1%
BIOME TOTAL	63	47	23	8	7	7	5	5	4	3	2	1		175	
% OF EUROMAB BR	36%	27%	13%	5%	4%	4%	3%	3%	<i>2</i> %	2%	1%	1%			



NUMBER OF BIOSPHERE RESERVES IN BIOME REPORTING INFORMATION FOR CATEGORY

INFORMATION SUMMARY

	VEGETATION
	OIH4ARĐO4OT
RESOURCE MAPS	SOILS
CE	REGIONAL LAND TENURE
OUR	LAND USE
RES	GEOLOGICAL .
	WATER QUALITY
	VEGETATION DATA
	SURFACE HYDROLOGY
	PRECIPITATION CHEMISTRY
ပ္ခ	PALEOECOLOGY
TORII	MARINE ECOSYSTEMS
NON	СВООИВМАТЕВ НҮВВОГОСУ
CAL	FRESHWATER ECOSYSTEMS
ECOLOGICAL MONITORING	CLIMATE
EC0	YTIJAU Q RIA
	COLLECTIONS SIOLOGICAL SURVEY AND
}	STAMMAM
	VERTEBRATES OTHER THAN
TORY	VASCULAR PLANTS
VEN	NONVASCULAR PLANTS
AL IN	SOAIB
BIOLOGICAL IN	SJAMMAM
BIOL	INVERTEBRATES

BIOME:																						
TEMPERATE RAINFOREST	3	4	7	က	4	က က	4	7	4	4		3 2			4	2	4	က	2	~	က	က
TEMPERATE NEEDLE-LEAF					• · · · · · · · · · · · · · · · · · · ·	}		ļ	ļ	ļ	ļ	ļ	ļ	<u></u>							ļ	
FOREST	ည	ω	က	വ	ω	7	7	ည	9	4	~		4	•••••	4	ည	2	က	~	ည	ည	7
TROPICAL DRY FOREST	0	-	-	0	-	-	-	-	-	-	-	1		_	<u>.</u>	-	-	0	0	_	-	_
TEMPERATE BROAD-LEAF						! ! !			 !			ļ		ļ		ļ				ļ	ļ	
FOREST	26	9	22	22	22	26	22	35	22	42	40	13 11	30	52	42	49	48	88	5	49	55	56
EVERGREEN													ļ		· · ·	ļ						
SCLEROPHYLLOUS	_	•••••				•••••		•••••	•••••		•••••	•••••	•••••	•••••	•••••			:		•••••	•••••	
WOODLAND	16	18	Ξ	17	ຂ	ຂ	18		 8							15	8	8	7	19	8	17
WARM DESERT	4	4	4	က	4	4	4	4	2	က	4	- 2	က	2	4	4	4	2	~	5	2	2
COLD DESERT	-	7	-	-	7	~	က	7	က							0	5	-	-	က	က	က
TUNDRA	~	4	0	-	4	4	4	7	4				ļ	ļ		-	က	2	-	0	4	4
TEMPERATE GRASSLAND	9	7	α	ა	7	9	7	-	7		ļ	.	ļ	 .	ļ	2	2	9	0	9	2	9
COMPLEX MOUNTAIN					 ! !	! !							ļ	.	· ·					ļ	ļ	
SYSTEMS	ଯ	ဗ္ဗ	9	<u>€</u>	88	ස	9	9	•••••		•••••		•••••			22	99	82	ည	34	4	37.
MIXED ISLAND SYSTEMS	က	က	-	4	ა	က	4	7	မ	က	က	2	-	က	4	2	4	က	0	4	ည	9
LAKE SYSTEMS	-	2	2	-	2	-	2	2					_	2	ļ	8	_	-	α	~	7	8
TOTAL BIOSPHERE RESERVES																					ŧ	
(EX 170) 126 146	126	146	29	109	152	146	151	8	146	96	81	29 28	88		-	108	136	105	35	132	148	147
PERCENT OF TOTAL 74% 86%	748	868	35%	8 8	868	86%	868	47%	86%	56% 4	48% 1.	178 16	% 40 8	8 708	8 768	648		83	21%	78%	878	868

RESEARCH TOPICS

NUMBER OF BIOSPHERE RESERVES IN BIOME REPORTING INFORMATION FOR CATEGORY

PESTICIDES POLLUTION STNATUJO9 SIRBH980MTA **ACIDIC DEPOSITION** DYNAMICS POPULATIONS WILDLIFE POPULATION RARE/ENDANGERED SPECIES SPECIES *PESTS AND DISEASES* SEDIMENTATION HYDROLOGICAL CYCLE FIRE HISTORY/EFFECTS **ECOSYSTEM CYCLES ECOSYSTEM MODELING** AND PROCESSES **ECOLOGICAL SUCCESSION** RESEARCH COMPARATIVE ECOLOGICAL BIOGEOCHEMICAL CYCLES HISTORY OF SCIENTIFIC STUDY GEOGRAPHIC INFORMATION REVISION BIBLIOGRAPHY - YEAR OF LAST BELEBENCES BIBLIOGRAPHY - NUMBER OF **HISTORICAL** RECORDS **RIBLIOGRAPHY RERIAL PHOTOGRAPHS**

WATER POLLUTANTS

BIOME:

TEMPERATE RAINFOREST	4	က	2	2	F	2	2	5	4				4	2		4	4	4	~	 	~
TEMPERATE NEEDLE-LEAF																					
FOREST	9	ဖ	8	7	-	ည	က	•••••	•••••	••••	•••••		•••••					4		•••••	9
TROPICAL DRY FOREST	-	-	0	o	-	0	_	_	_	_	_	_	0	0	_	_	_		-	-	-
TEMPERATE BROAD-LEAF														_	ļ	ļ		ļ		<u></u>	
FOREST	88	21	18	5	52	48	5 8	3 44	5	82	S S	32	2	<u>දැ</u> 	9 55	5 51	_	35 3	36 1	<u></u>	40
EVERGREEN											<u></u>		ļ		ļ		_		ļ		
SCLEROPHYLLOUS					•••••													•••••	•••••	••••••	
WOODLAND	8	19	22	9	9	16	∞							_				•••••	•••••		10
WARM DESERT	4	4	2	N	4	2	-							_		ļ	_	ļ	ļ	ļ	က
COLD DESERT	2	က	0	0	-	က	-	က	2	-	-	2	0	7	ļ	-	7	0	8	0	-
TUNDRA	4	က	-	-	0	4	-										_	ļ		ļ	-
TEMPERATE GRASSLAND	4	7	2	7	က	7	ဖ							_		ļ	_	! .		4	က
COMPLEX MOUNTAIN																		.			
SYSTEMS	22	3	<u></u>	6	ω	ನ	7	•••••			••••	•••••	•••••		•••••			15 1		•••••	33
MIXED ISLAND SYSTEMS	ນ	9	-	-	က	4	က	2	5	8	2	က	က	2		ۍ ت	2		0	-	-
LAKE SYSTEMS	7	7	5	2	-	7	-										~	1			-
TOTAL BIOSPHERE RESERVES																					

88

81 48%

75 44%

130 7%

136

101 5%

77

%

88

4 26%

78%

PERCENT OF TOTAL

136 80%

(EX 170) 133

51

63 37%

125 748

81 48%

RESEARCH TOPICS

SUMMARY INFORMATION

	SOIL CONSERVATION
	TECHNOLOGIES
	RESOURCE PRODUCTION
ОВУ	MEIRUOT/NOITABROBR
NUMBER OF BIOSPHERE RESERVES IN BIOME REPORTING INFORMATION FOR CATEGORY HUMAN SYSTEMS MANAGEMENT PRACTICES	HANGELAND MANAGEMENT
REPORTING INFORMATION FOR CA MANAGEMENT PRACTICES	MINING RECLAMATION
OF S	TNAMAGEMENT
MAT	GENETIC RESOURCE
NFOR	ECOSYSTEM RESTORATION
NG I	TECHNOLOGY
IAG	JARUR STAIRGORGA
REPO MAN	AAHUTJUOIRÐA
Ã.	SASTEMS
8 .	TRADITIONAL LAND USE
ÆS IN	RESOURCE ECONOMICS
ËB	USE/MANAGEMENT
SE	LAND TENURE/
JERE I	ETHNOBIOLOGY
SP E	PATTERNS
S S	DEMOGRAPHY/SETTLEMENT
NUMBER OF BIOSPHER HUMAN SYSTEMS	уеолочоянтия _Ј аяитлир
NOMB HOM	ARCHAEOLOGY

ТИЗМЭФАИАМ ОЭНЅЯЗТАМ

TEMPERATE RAINFOREST	7	က	~	0	2	-	က	0	0	က	2	2	0	2	-	က	-
TEMPERATE NEEDLE-LEAF			ļ	<u>.</u>	ļ	ļ	ļ										
FOREST	8	Ŋ	8	8	က	-	4	-	-	4	8	2	0	4	8	2	က
TROPICAL DRY FOREST	0	0	0	0	0	0	-	0	0	-	-	_	_	-	0	-	-
TEMPERATE BROAD-LEAF			ļ			<u></u>	ļ										
FOREST	14	ន	16	15	14	=	4	30	2	46	82	22	17	44	<u></u>	33	26
EVERGREEN			ļ		<u></u>	<u>.</u>	<u></u>						<u></u>	<u>.</u>	<u>.</u>		
SCLEROPHYLLOUS			•••••		•••••												
WOODLAND	ည	12	က	9	വ	4	9	9	ည	16	7	9	∞	17	က	13	6
WARM DESERT	7	က	-	က	-	0	က	7	7	4	0	7	2	က	-	က	က
COLD DESERT	0	0	-	0	-	-	7	0	0	7	0	-	-	_	-	-	0
TUNDRA	0	7	0	0	0	0	က	0	-	7	0	7	0	7	0	0	0
TEMPERATE GRASSLAND	2	4	-	8	4	-	2	2	4	က	က	7	2	7	7	9	4
COMPLEX MOUNTAIN			ļ	ļ		ļ	ļ										
SYSTEMS	9	~	က	~	က	α	17	7	က	17	0	∞	О	14	വ	19	7
MIXED ISLAND SYSTEMS	0	7	0	-	-	0	7	-	-	4	က	0	0	4	-	2	က
LAKE SYSTEMS	7	7	-	-	7	-	0	0	0	7	-	0	0	-	0	0	-
TOTAL BIOSPHERE RESERVES																	
(EX 170)	32	82	30	32	36	22	6	26	38	104	26	24	43	92	83	92	28
DEDCENIT OF TOTAL	2,6	210	100	90	010	1 20	000	900	ò	Š	000	Ċ	L	2	ָ נ	į	,

34%

54%

17%

56%

3 **43**

2 %

3%

61%

3%

53%

13%

21%

19%

88

(EX 170) 35
PERCENT OF TOTAL 218

SITE SUPPORT

NUMBER OF BIOSPHERE RESERVES IN BIOME REPORTING INFORMATION FOR CATEGORY

	РЕВМАИЕИТ ВЕЅЕАВСН ЅТАГГ
	иоітате язнтазм
ES	этіг нояазея дэнгяэтам
	PERMANENT PLOTS: VEGETATION
NG AI	LAKE/STREAM PERMANENT PLOTS:
MONITORING AND RESEARCH FACILITIES	HYDROLOGICAL STATION
MONI	NOITATS NOITUJJOA RIA
	NOAD ACCESS
	LODGING FOR SCIENTISTS
RE	YAARBI
UCTU	YAOTARO8AJ
INFRASTRUCTURE	VTIJIDAT JAIROTARUD
INFR.	CONFERENCE FACILITIES

SUMMARY INFORMATION

BIOME:													
TEMPERATE RAINFOREST	3	2	7	က	4	7	က	7	-	က	က	4	4
TEMPERATE NEEDLE-LEAF													
FOREST	9	9	ဖ	∞	ഹ	7	4	ည	4	ა	^	9	9
TROPICAL DRY FOREST	-	-	0	-	-	0	-	-	0	-	0	-	-
TEMPERATE BROAD-LEAF													
FOREST	25	3	45	45	47	46	35	38	15	33	8	53	36
EVERGREEN													
SCLEROPHYLLOUS	•••••			•••••				•••••	•••••				
WOODLAND	15	5	9	16	17	22	4	15	4	7	ဖ	18	15
WARM DESERT	4	က	4	4	4	4	က	2	0	4	7	5	က
COLD DESERT	7	က	7	7	7	က	7	-	-	0	0	က	2
TUNDRA	7	က	7	4	-	7	7	7	0	က	-	4	က
TEMPERATE GRASSLAND	2	ည	7	4	7	7	က	7	က	4	က	5	9
COMPLEX MOUNTAIN													
SYSTEMS	24	5	16	ន	30	30	15	23	^	8	2	30	22
MIXED ISLAND SYSTEMS	4	က	4	4	4	သ	0	7	က	က	က	9	2
LAKE SYSTEMS	-	-	-	2	2	1	2	1	-	1	-	2	0

TOTAL BIOSPHERE RESERVES
(EX 170) 121
PERCENT OF TOTAL 718

%	Bio. Res. #	
		BASIC RESOURCE INFO
		BIOLOGICAL INVENTORY
89.4%	152	***************************************
88.8%	151	
85.9%	146	
85.9%	146	
74.1% 64.1%	126 109	
34.7%	59	
•		
		ECOLOGICAL MONITORING
85.9%	146	
76.5%	130	
70.0%		
63.5%		WATER QUALITY
56.5%	96	
47.6%	81	GROUNDWATER HYDROLOGY
47.1%	80	AIR QUALITY PRECIPITATION CHEMISTRY
17.1%	68 29	
16.5%	28	PALEOECOLGY
10.576	20	FALEOLOGIC
		RESOURCE MAPS
87.1%	148	TOPOGRAPHIC
86.5%	147	··
80.0%	136	GEOLOGICAL
77.6%	132	SOILS
61.8%	105	
20.6%	35	REGIONAL LAND TENURE
		HISTORICAL RECORDS
80.0%	136	BIBLIOGRAPHY
78.2%	133	AERIAL PHOTOGRAPHS
68.2%	116	HISTORY OF SCIENTIFIC STUDY
30.0%	51	GEOGRAPHIC INFORMATION SYSTEM
		DEGE 4 DOU TO DIGO
		RESEARCH TOPICS
		ECOSYSTEM CYCLES AND PROCESSES
73.5%	125	ECOLOGICAL SUCCESSION
66.5%	113	COMPARITIVE ECOLOGICAL RESEARCH
59.4%	101	SEDIMENTATION
47.6%	81	HYDROLOGICAL CYCLE
45.3%	77 72	ECOSYSTEM MODELING
42.9% 37.1%	73 63	FIRE HISTORY AND EFFECTS BIOGEOCHEMICAL CYCLES
37.1%	03	DIOGEOGREMICAL CYCLES



%	Bio. Res.	#	CATEGORY						
			SPECIES POPULATIONS						
80.0%		136	RARE AND ENDANGERED SPECIES						
76.5%		130 WILDLIFE POPULATION DYNAMICS							
46.5%		79	PESTS AND DISEASES						
	RESEARCH TOPICS								
			POLLUTION						
48.2%		82	WATER POLLUTANTS						
47.6%		81	ATMOSPHERIC POLLUTANTS						
44.1%		75	ACIDIC DEPOSITION						
25.3%		43	PESTICIDES						
		_							
			<u>HUMAN SYSTEMS</u>						
52.9%		90	TRADITIONAL LAND USE SYSTEMS						
34.1%		58	CULTURAL ANTHROPOLOGY						
21.2%		36	LAND TENURE/ USE/MANAGEMENT						
20.6%	35		ARCHAEOLOGY						
18.8%		32	ETHNOBIOLOGY						
17.6%		30	DEMOGRAPHY/SETTLEMENT PATTERNS						
12.9%		22	RESOURCE ECONOMICS						
			MANAGEMENT PRACTICES						
61.2%		104	ECOSYSTEM RESTORATION						
55.9%		95	RECREATION AND TOURISM						
54.1%		92	SOIL CONSERVATION						
34.1%		58	WATERSHED MANAGEMENT						
32.9%		56	AGRICULTURAL .						
32.9%		56	GENETIC RESOURCE MANAGEMENT						
31.8%		54	MINING RECLAMATION						
25.3%		43	RANGELAND MANAGEMENT						
22.4%		38	APPROPRIATE RURAL TECHNOLOGY						
17.1%	29		RESOURCE PRODUCTION TECHNOLOGIES						
			SITE SUPPORT						
			INFRASTRUCTURE						
75.9%		129	ROAD ACCESS						
72.9%		124	LODGING FOR SCIENTISTS						
71.2%		121	CONFERENCE FACILITIES						
66.5%		113	LIBRARY						
61.8%		105	LABORATORY						
49.4%		84	CURATORIAL FACILITY						
			MONITORING AND RESEARCH FACILITIES						
80.6%		137	WEATHER STATION						
56.5%		96	HYDROLOGICAL STATION						
52.9%		90	PERMANENT PLOTS: VEGETATION						
43.5%		74	AIR POLLUTION STATION						
34.1%		58	WATERSHED RESEARCH SITE						
22.9%		39	PERMANENT PLOTS: LAKE/STREAM						
60.6%		103	PERMANENT RESEARCH STAFF						
55.576									



%	Bio. Res. #	CATEGORY
89.4%	152	VACCULAR DI ANTO
88.8%	152	VASCULAR PLANTS BIOLOGICAL SURVEY AND COLLECTIONS
87.1%	148	TOPOGRAPHIC
86.5%	147	VEGETATION
85.9%	146	MAMMALS
85.9%	146	VERTEBRATES OTHER THAN MAMMALS
85.9%	146	CLIMATE
80.6%	137	WEATHER STATION
80.0%	136	GEOLOGICAL
80.0%	136	BIBLIOGRAPHY
80.0%	136	RARE AND ENDANGERED SPECIES
78.2%	133	AERIAL PHOTOGRAPHS
77.6%	132	SOILS
76.5%	130	VEGETATION DATA
76.5%	130	WILDLIFE POPULATION DYNAMICS
75.9%	129	ROAD ACCESS
74.1%	126	INVERTEBRATES
73.5%	125	ECOLOGICAL SUCCESSION
72.9%	124	LODGING FOR SCIENTISTS
71.2%	121	CONFERENCE FACILITIES
70.0%	119	SURFACE HYDROLOGY
68.2%	116	HISTORY OF SCIENTIFIC STUDY
66.5%	113	COMPARITIVE ECOLOGICAL RESEARCH
66.5%	113	LIBRARY
64.1%	109	NONVASCULAR PLANTS
63.5%	108	WATER QUALITY
61.8%	105	LAND USE
61.8%	105	LABORATORY
61.2%	104	ECOSYSTEM RESTORATION
60.6%	103	PERMANENT RESEARCH STAFF
59.4%	101	SEDIMENTATION
56.5%	96	FRESHWATER ECOSYSTEMS
56.5%	96	HYDROLOGICAL STATION
55.9%	95	RECREATION AND TOURISM
54.1%	92	SOIL CONSERVATION
52.9%	90	TRADITIONAL LAND USE SYSTEMS
52.9%	90	PERMANENT PLOTS: VEGETATION



%	Bio. Res. #	CATEGORY
49.4%	84	CURATORIAL FACILITY
48.2%	82	WATER POLLUTANTS
47.6%	81	GROUNDWATER HYDROLOGY
47.6%	81	HYDROLOGICAL CYCLE
47.6%	81	ATMOSPHERIC POLLUTANTS
47.1%	80	AIR QUALITY
46.5%	79	PESTS AND DISEASES
45.3%	77	ECOSYSTEM MODELING
44.1%	75	ACIDIC DEPOSITION
43.5%	74	AIR POLLUTION STATION
42.9%	73	FIRE HISTORY AND EFFECTS
40.0%	68	PRECIPITATION CHEMISTRY
37.1%	63	BIOGEOCHEMICAL CYCLES
34.7%	59	BIRDS
34.1%	58	CULTURAL ANTHROPOLOGY
34.1%	58	WATERSHED MANAGEMENT
34.1%	58	WATERSHED RESEARCH SITE
32.9%	56	AGRICULTURAL
32.9%	56	GENETIC RESOURCE MANAGEMENT
31.8%	54	MINING RECLAMATION
30.0%	51	GEOGRAPHIC INFORMATION SYSTEM
25.3%	43	PESTICIDES
25.3%	43	RANGELAND MANAGEMENT
22.9%	39	PERMANENT PLOTS: LAKE/STREAM
22.4%	38	APPROPRIATE RURAL TECHNOLOGY
21.2%	36	LAND TENURE/ USE/MANAGEMENT
20.6%	35	REGIONAL LAND TENURE
20.6%	35	ARCHAEOLOGY
18.8%	32	ETHNOBIOLOGY
17.6%	30	DEMOGRAPHY/SETTLEMENT PATTERNS
17.1%	29	MARINE ECOSYSTEMS
17.1%	29	RESOURCE PRODUCTION TECHNOLOGIES
16.5%	28	PALEOECOLGY
12.9%	22	RESOURCE ECONOMICS





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Office of Educational Research and Improvement (OERI) Educational Resources Information Center (ERIC)



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