#### Please provide the following details on the origin of this report.

Contracting Party:	SPAIN	
National Focal Point		
Full name of the institution:	MUSEO NACIONAL DE CIENCIAS NATURALES (CSIC). Madrid, and SPANISH MINISTRY OF ENVIRONMENT	
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Signature of officers responsible for submitting national report:	MARames	
Date of submission:	14-09-2004	

Please provide summary information on the process by which this report has been prepared, including information on the types of stakeholders who have been actively involved in its preparation and on material which was used as a basis for the report.

Information has been obtained from the GTI Spanish National Focal Point and also from different units and Departments of the Spanish Ministry of Environment responsible of monitoring and inventory activities involving taxonomic aspects.

### REPORT ON IMPLEMENTATION OF PROGRAMME OF WORK FOR THE GLOBAL TAXONOMY INITIATIVE

## Programme of Work for the Global Taxonomy Initiative Annex to Decision VI/8

### Operational Objective 1. Assess taxonomic needs and capacities at national, regional and global levels for the implementation of the Convention

a) no (please specify the reasons) b) no, but assessment is under way	
b) no, but assessment is under way	
c) yes, some needs assessments made (please provide details) X*	
d) yes, comprehensive assessments made (please provide details)	

Further comments on country-based taxonomic needs assessments and identification of priorities

User needs: Assessment has been carried out on the needs of Natural History collections taxonomical information required by different stakeholders.

Expertise: A Directory of Taxonomists is already available although it requires updating. The information on marine expertise in Spain was updated in 2000 as part of the EU Concerted Action European Register of Marine Species (ERMS).

Besides that, there is a project, funded and coordinated by the Spanish Ministry of Environment called "National Biodiversity Inventory", which objectives are to know the situation and patterns of the Spanish biodiversity, to evaluate and monitor the efficiency of conservation policies and their effect in biodiversity patterns and to help the achievement of the obligations under the CBD. This project includes the development of several projects, called "Atlas", of the main flora and fauna groups (their distribution, and conservation status)(see below, section additional information). All this information and work is allowing the identification of taxonomic information gaps in certain groups and species and will facilitate the establishment of future priorities.

- $\star$  Information collated by the Museo Nacional de Ciencias Naturales (MNCN -CSIC) and Ministry of Environment.
- 2. Has your country worked with other countries in the region to undertake regional taxonomic needs assessments and identify priorities in this regard?

a) no (please specify the reasons)	
b) no, but some collaborative projects are being considered or planned	
c) yes, some activities undertaken (please provide details)	X
d) yes, many activities undertaken (please provide details)	

Further comments on regional taxonomic needs assessment and identification of priorities  $% \left( 1\right) =\left( 1\right) +\left( 1\right) +\left$ 

In the framework of the EU Action EHNSIN -European Natural History Information Network- project (<a href="www.nhm.ac.uk/science/rco/enhsin">www.nhm.ac.uk/science/rco/enhsin</a>, taxonomic needs assessment has been made on the information requested on the specimens of collections.

The EU project Fauna Europaea (<a href="www.faunaeur.org">www.faunaeur.org</a>) also has a workpackage on End-user needs. In this case the assessment has focused on the need for information at the species level. The Museo Nacional de Ciencias Naturales (The Director) has been the lead of this workpackage. Several researchers of MNCN are group coordinators, as well as other Spanish researchers in universities. The project Fauna Ibérica will be the National Focal Point for updating the Fauna Europaea inventory (for Spain and Portugal) once the project is finished.

3. Is your country involved in any activities as part of a global taxonomic needs assessment?

a) no	
b) yes (please provide details)	In part

Further commments on the involvement in the activities for the global taxonomic needs assessment

Report has been presented in an European GTI meeting held in Vilm (Germany) June 21-23, 2004.

No other activities undertaken yet.

4. Is your country undertaking any activities of public education and awareness to promote the implementation of the programme of work for the GTI?

a) no	
b) yes, some programmes developed and some activities undertaken (please provide details)	X
c) yes, comprehensive programmes developed and many activities undertaken (please provide details)	

Further comments on public education and awareness programmes and activities

Dissemination of GTI, its objectives and programme of work through courses and conferences.

## Operational objective 2. Provide focus to help build and maintain the systems and infrastructure needed to obtain, collate and curate the biological specimens that are the basis for taxonomic knowledge

5. Is your country working to strengthen global and regional capacity building to support access to and generation of taxonomic information¹?

a) no (please specify the reasons)	
b) no, but some programmes under development	
c) yes, limited capacity building (please provide details)	
d) yes, significant capacity building (please provide details)	Х

Further comments on global and regional capacity building to support access to and generation of taxonomic information

<sup>&</sup>lt;sup>1</sup> Responses to question 5 are expected to focus on, but not limited to (a) human capacity building; (b) infrastructure capacity building.

The national Natural History institutions in Spain (Museo Nacional de Ciencias Naturales (MNCN) and Real Jardín Botánico (RJB), CSIC) contain ca. 8 million specimens in their collection that are well curated and fully available to users. They have databases up to 64% of the specimens in their collections (not yet available by the Internet).

A database containing metadata for more than  $250~\mathrm{NH}$  collections in Spain has been collated (Bio-CASE national node, MNCN), which constitutes the nucleus to implement the GBIF-España node of GBIF.

Network of Herbaria exists which also includes Portuguese collections.

Network of NH collections in Spain is underway (lead by MNCN)

During the period 2001-2004 MNCN + RJB (CSIC) were recognised as a EU Major Research Infrastructure, called BIOD-IBERIA. It has provided granted access to collections, equipment and expertise to 145 researchers from EU countries and EU Associated countries. Since 2004 BIOD-IBERIA has been replaced by SYNTHESYS (see question 6)

6. Is your country working with other countries to create and/or strengthen the networks for regional cooperation in taxonomy?

a) no	
b) no, but consultation is under way	
c) no, but some plans and programmes are under development	
d) yes, some activities undertaken for this purpose (please provide details)	
e) yes, comprehensive activities undertaken for this purpose (please provide details)	X

Further comments on strengthening of existing networks for regional cooperation in taxonomy

MNCN and RJB are members of the Consortium of European Taxonomic Facilities (CETAF) (<a href="http://www.cetaf.org">http://www.cetaf.org</a>). Currently the Spanish GTI Focal Bint is the Chair of the European Comsortium. Collaboration with other EU countries has been carried out in the framework of EU projects as EHNSIN and BioCASE (for collections) (<a href="http://www.biocase.org">http://www.biocase.org</a>) and ERMS (<a href="http://ERMS.biol.soton.ac.uk/">http://ERMS.biol.soton.ac.uk/</a>), Fauna Europaea (<a href="http://www.faunaeur.org">http://www.faunaeur.org</a>) or Euro+Med Plant Base (for species inventories) <a href="mailto:file://(http///www.s2you.com/euromed">file://(http///www.s2you.com/euromed</a>).

The EU Infrastructure Initiative project (SYNTHESYS)(2004-2008), brings together 20 Natural History Institutions from 11 European countries. It will provide grants for access to collections, equipment and expertise to researchers in EU countries and EU associated countries. SYNTHESYS (<a href="http://www.synthesys.info/">http://www.synthesys.info/</a>) will explore as well complementarity in collections and expertise, will develop standards for collection management and preservation, new collections (DNA, tissues collections) and investigate new physical non-destructive methods for the study of unique specimens (e.g. Type specimens)

Operational objective 3. Facilitate an improved and effective infrastructure/system for access to taxonomic information, with priority on ensuring that countries of origin gain access to information concerning elements of their biodiversity

7. Is your country involved in the development of a coordinated information system, in particular the infrastructure to ac data/information?	
a) no	
b) no, but some plans are being considered	
c) yes, to a limited extent (please provide details)	
d) yes, to a significant extent (please provide details)	X

Further comments on involvement in the development of a coordinated global taxonomy information system

Spain is member of GBIF. GBIF-España node (CSIC: RJB + MNCN) is digitizing taxonomic information starting at specimen level (collections over Spain) but it will also include information on Species.

More information can be found at  $\underline{www.gbif.es}$ . This website includes specimen and ecological data and also information about biodiversity projects and networks in Spain.

Besides that, the Spanish Ministry of Environment webpage includes information on the National Biodiversity Inventory. Although not all the information is already available on-line, it is periodically updated

(<a href="http://www.mma.es/conserv\_nat/inventarios/inv\_biodiversidad/index.htm">http://www.mma.es/conserv\_nat/inventarios/inv\_biodiversidad/index.htm</a>)

and

Information contained in all the Atlases already published (see additional information section) is also available in electronic format (CD-Rom) and can be purchased through the Spanish Ministry of Environment.

# Operational objective 4. Within the major thematic work programmes of the Convention include key taxonomic objectives to generate information needed for decision-making in conservation and sustainable use of biological diversity and its components

8. Has your country made any taxonomic studies and inventories at the national level which provide a basic assessment of forest biological diversity, in particular i areas under current threat for habitat conversion, or of high conservation value?	
a) no (please provide the reasons)	
b) no, but some programmes are under development	
c) yes, some studies and inventories made (please provide details)	X
d) yes, comprehensive studies and inventories made (please provide details)	
Further comments on taxonomic studies and inventories made for a basic assessment of forest biological diversity	

The nationally funded projects Fauna Ibérica (<a href="http://www.fauna-iberica.mmcn.csic.es/">http://www.rjb.csic.es/floraiberica</a>), Flora Micológica Ibérica (<a href="http://www.rjb.csic.es/fmi/FMI">http://www.rjb.csic.es/fmi/FMI</a> titulares.htm), Flora Briofítica (<a href="http://www.uam.es/informacion/asociaciones/SEB/fbi.html">http://www.uam.es/informacion/asociaciones/SEB/fbi.html</a>) and Flora Liquenológica are inventorying the biodiversity (fauna and flora) of the Iberian peninsula and Balearic Islands. The project BIOTA is making inventories of the Canary Islands biodiversity (<a href="http://www.gobcan.es/medioambiente/biodiversidad/">http://www.gobcan.es/medioambiente/biodiversidad/</a> ceplam/bancodatos/bancodatos.html). All of them include forest species.

#### In addition there are:

- Atlases of vascular plants (ANTHOS -RJB) (10x10 km) (http://www.programanthos.org/)
- Atlases of all vegetal and animal species catalogued (EU habitat Directive) (MMA)
- National Red list of endangered species (Law 1984)
- List of 25,000 animal species (out of the 68,000 estimated in ibero-balearic region), in process of databasing (FaIb MNCN)
- Databases of all new animal taxa described since 1978 in the Iberian Peninsula and Macaronesia (FaIb - MNCN)

In addition to these documents, there are already available different atlases in the framework of the National Biodiversity Inventory (see section additional information) with relevant information of flora and fauna associated with forest ecosystems: Atlases of vertebrate species in Spain, except marine fishes (10x10 km): Spanish reptiles and amphibious, Spanish fishes, Spanish breeding birds, Spanish mammals; All of them coordinated and published by the Spanish Ministry of Environment.

Besides that, the Ministry of Environment is undertaking other activities to evaluate the status and trends of forest biodiversity (mainly flora) which includes:

-Biodiversity evaluation within the National Forestry Inventory: The National Forestry Inventory is updated every ten years. The basic unit of reference is the province. At this moment the Ministry of Environment is undertaking the third National Forestry Inventory (which was initiated in 1997 and is scheduled to be completed by 2007). This new inventory incorporates several innovations with respect to the previous ones, considering the different functions that the forest systems carry out: productive, protective, ecological and recreational functions. Among the new aspects considered, the study and measurement of forest biodiversity plays and important role. In different plots (25 m radius), distributed over Spain, the following biodiversity parameters will be measured: presence and abundance of woody species, and presence and abundance of threatened plant species. In a subplot of  $5\ \text{m},$ the presence and abundance of non woody plant species will be also considered. Besides these measurements there will be also data on deadwood distribution, percentage of soil covered by different elements (wooded and non-wooded areas),  $\alpha$  presence of singular elements (like caves, burrows, etc..). Also, within the plot, the presence and abundance of observed fauna species will be recorded. More information can be found http://www.mma.es/conserv\_nat/inventarios/ifn/index.htm.

-Besides this more general approach to the status of forest biodiversity, that covers the whole surface of the country, the Ministry of Environment is also undertaking a more specific study to evaluate the status and health of forest ecosystems, within the ICP forest and EU forest monitoring program (www.icp-forest.org). Within this program, there exists what is called the intensive monitoring programme (or level II network), composed of different 50x50 m plots where different intensive measurements are carried out. In 2003 the so-called Forest Biota Project was launched, to evaluate intensively the status of forest biodiversity using this level II plot network (www.forestbiota.org). In Spain there are 54 of these level II plots. Twelve of them are equipped with different automatic instruments and are sampled fortnightly. In total, thirteen plots will be included in the forest BIOTA assessment in Spain. In these plots the following parameters will be measured: forest type, stand structure, deadwood, epiphytic lichens and ground vegetation. There exists the possibility of incorporate other parameters like invertebrate or amphibious fauna present (as other countries are doing). In Spain, so far, only the basic parameters are being considered. The periodicity of the measurements will vary depending on the studied parameter.

9. Has your country undertaken any taxonomy-related activities relating to marine and coastal biodiversity, in particular taxonomic work related to identification of ballast water organisms and monitoring health of mangrove systems through their invertebrate fauna ?

a) no	
b) not applicable	

c) no, but some programmes are under development	
d) yes, some activities undertaken (please provide details)	X
e) yes, many measures undertaken (please provide details)	

Further comments on taxonomy-related activities identified in the programme of work on marine and coastal biodiversity

The nationally funded projects Fauna Ibérica and Flora Ficológica are inventorying the marine and coastal biodiversity (fauna and algae) of the Iberian peninsula and Balearic Islands as part of their program. The project BIOTA also includes inventories of the Canary Islands marine species (see section additional information). Reviewed inventories already exist on Cephalopoda, Sipuncula, Polychaeta (in part) and Marine copepoda (in part), which also include species descriptions, identifications keys, world and Iberian geographical distributions and data on the biology. Checklists of these and other animal marine taxa are available on (<a href="http://www.fauna-iberica.mncn.csic.es/faunaib/index.php">http://www.fauna-iberica.mncn.csic.es/faunaib/index.php</a>)

As a more focused work, there already exists a national cetaceans inventory (1992-1998), which covers the cetaceans populations of the Mediterranean and Atlantic seas. In 1999 the so-called "Mediterranean Project" was finished. This project identified important areas for the cetaceans in the Mediterranean sea.

It is now in progress the drafting of a new project aimed at identifying, inventorying, and analyzing the current distribution and situation of several marine species under the "Habitats Directive" and the OSPAR and Barcelona Conventions. Finally, it has been recently published by the Ministry of Environment a Guide of marine invertebrates and fishes protected under international and national legislation.

On the other hand, no particular taxonomic work related to identification of ballast water organisms has been undertaken. There is, of course, general work on the subject undertaken by IMO. At this respect, Spain has recently signed the "International Convention for the control and management of ship's ballast water and sediments". Also, in this regard, some work has been undertaken specifically in Spain on Caulerpa spp as an invasive alien species that can be introduced by ballast water (see question 16).

10. Has your country developed taxonomic support for implementing relevant actions identified in the programme of work on dry and subhumid lands biodiversity, in particular identification of key indicator taxa like lichens?

a) no (please provide reasons and plans for improvement)	
b) not applicable	
c) no, but some programmes are under development	
d) yes, some activities undertaken(please provide details)	
e) yes, many activities undertaken (please provide details)	X

Further comments on taxonomic support for implementing the programme of work on dry and subhumid lands biodiversity

The nationally funded project Flora Liquenológica Ibérica is since 1989 inventorying lichens biodiversity in the Ibero-Balearic region.

11. Has your country developed taxonomic support for implementing relevant actions identified in the programme of work on inland waters biodiversity, in particular regional guides to freshwater fish and invertebrates as an input to ecosystem monitoring for river and lake health?

a) no	
b) no, but some programmes are under development	
c) yes, some activities undertaken(please provide details)	

d) yes, many activities undertaken (please provide details)

Further comments on taxonomic support for the implementation of the programme of work on inland waters biodiversity

All freshwater fishes that occur in Spain have been atlased. The atlas has been published by the Ministry for the Environment (2000), who has also the information on species distribution digitalized.

No specific projects for freshwater invertebrates are underway, although they are also included in the framework of FaIb project.

12. Has your country undertaken any taxonomy-related activities identified in the programme of work on agricultural biodiversity as well as relevant activities identified in the International Pollinator Initiative and the International Soil Biodiversity Initiative?

a) no
b) no, but some activities are being planned

c) yes, some activities undertaken (please provide details)

d) yes, comprehensive activities undertaken (please provide details)

Further comments on taxonomy-related activities for the implementation of the programme of work on agricultural biodiversity

Several general activities are being developed by the Ministry of Agriculture and fisheries on the inventory and conservation of agricultural biodiversity (including the conservation of traditional crops and breeds). No specific work has been undertaken regarding pollinators.

13. Is your country developing any taxonomic support for the implementation of the programme of work on mountain biodiversity, in particular identification of biodiversity components unique to mountain ecosystems?

a) no

b) no, but some programmes are under development

c) yes, limited support (please provide details)

d) yes, significant support (please provide details)

Further comments on taxonomic support for the implementation of the programme of work on mountain biodiversity

Not specific programs although mountain biodiversity is also included in the already mentioned projects on biodiversity.

14. Has your country developed taxonomic support for the implementation of the programme of work on protected areas?

a) no

b) no, but some programmes are under development

c) yes, some programmes in place and are being implemented (please provide details)

d) yes, comprehensive programmes are being implemented (please provide details)

Further comments on taxonomic support provided to the implementation of the programme of work on protected areas

First of all, the designation of the Natura 2000 sites following the criteria of the Habitats Directive and the implementation of this network implies the development and use of taxonomic support for the conservation of protected areas. The Natura 2000 network (that will represent approximately 24% of the national surface) is based in a taxonomic approach (including both flora and fauna), establishing different priority habitats as such and also habitats of importance for the conservation of different species.

Besides that, an atlas of the natural and semi natural habitats of Spain (1:50.000) has been developed by the Ministry of Environment and will be soon available.

# Operational objective 5. Within the work on cross-cutting issues of the Convention include key taxonomic objectives to generate information needed for decision-making in conservation and sustainable use of biological diversity and its components

15. Has your country taken any measures classification of biodiversity and its	 -
strategy on access and benefit-sharing?	1 4 1140101141
a) no	

b) no, but some programmes are under development	Х
c) yes, some measures taken (please provide details)	
d) yes, comprehensive measures taken (please provide details)	

Further comments on the measures to strengthen capacity for the inventory and classification of biodiversity and its components in the development of a national strategy on access and benefit-sharing

Not specific project to implement a national strategy for access and benefit-sharing but in addition to the national inventory projects already mentioned many activities are devoted to inventory biodiversity in other parts of the planet, especially in South and Central America.

International Cooperation ( $M^{\circ}$  Foreign Affaires) finance several cooperative projects mainly in Equatorial Guinea and South America

16. Has your country developed taxonomic support to address the issues of invasive alien species?

a) no		
b) no, but relevant policy and programme under development		
c) yes, some policies and programmes in place (please provide details)	Х	
d) yes, comprehensive policies and programmes in place (please provide details)		

Further comments on taxonomic support to address the issues of invasive alien species

There are several concrete actions. Some work has been developed for the Ruddy duck (Oxyura jamaicensis) which is an important invasive species in Spain affecting the autochthonous populations of the white headed duck (Oxyura leucocephala). At this respect, there is an eradication programme underway. Due to the similarities of both species, a short information brochure explaining the taxonomic differences between them has been recently published and distributed (see annex A).

There are also, some other specific activities on the identification and control of other invasive species as Caulerpa racemosa, and Caulerpa taxifolia (see annex B) or the American mink (Mustela vison) (see annex C) which are also affecting different autochthonous species.

Resides these specific activities, is now in preparation an atlas on invasive flora in Spain (species and distribution), which constitutes a relevant a very innovative initiative in the field of IAS.

In the future, the Ministry of Environment has the intention of preparing an Action Plan for invasive alien species.

17. Has your country developed taxonomic information system to support the maintenance, preservation and protection of traditional knowledge, innovations and practices of indigenous and local communities in accordance with Article 8(j) and related provisions?

a) no	
b) not applicable	
c) no, but some programmes are under development	
d) yes, some activities undertaken but a system is not in place yet (please provide details)	х
e) yes, a taxonomic information system in place (please provide details)	

Further comments on the taxonomic information system to support the maintenance, preservation and protection of traditional knowledge, innovations and practices of indigenous and local communities

It is now in preparation an atlas on Spanish etnobotanic knowledge, that will constitute a first step in the development of a traditional knowledge database associated with plant diversity.

 $18.\,\mathrm{Has}$  your country undertaken any taxonomy-related activities that support the implementation of the ecosystem approach and the work in the field of assessments, monitoring and indicators?

	a) no	
	b) no, but some programmes are under development	
Ī	c) yes, some programmes in place (please provide details)	
Ī	d) yes, comprehensive programmes in place (please provide details)	

Further comments on programmes and activities to support the implementation of the ecosystem approach and the work in the field of assessments, monitoring and indicators

One of the National Programmes of the National Research and Development Plan (2004-2007) is "Biodiversity, Earth Sciences and Global Change". ( $\frac{\text{http://www.mcyt.es/planidi/}}{\text{ntip://www.mcyt.es/planidi/}}$ ). This programme is intended to fund different projects related with biodiversity, and global change, including establishment and monitoring of biodiversity indicators and global change.

country additional Ιf your wishes provide information to on implementation of this programme of work, please indo so the following space (in Spanish)

A continuación se incluyen algunos datos relativos al Inventario Nacional de Biodiversidad, por tratarse de un proyecto muy relacionado con la Iniciativa Global de Taxonomía y, en general, con la inventariación de la biodiversidad:

El <u>Inventario Nacional de Biodiversidad</u> es un proyecto del Ministerio de Medio Ambiente, realizado a través de la Dirección General para la Biodiversidad, encaminado a la recogida, organización y distribución de información sobre la biodiversidad española, es decir sobre las especies de flora y fauna y los hábitat presentes en España.

#### Objetivos:

El Sexto Programa de Medio Ambiente de la Unión Europea propone como objetivo detener la pérdida de biodiversidad en el 2010. Este objetivo requiere entre otras cosas un sistema de recogida continua de información. En este sentido, los objetivos del inventario son:

- Conocer el estado y la tendencia de la biodiversidad, como base para todas aquellas aplicaciones que necesitan esta información a escala nacional, tanto de administraciones como de empresas, organizaciones y público en general
- Permitir evaluar la eficacia de las políticas de conservación, tales como las redes de espacios naturales protegidos, a nivel nacional, o las Directivas de Aves y de Hábitats a nivel de la Unión Europea.
- Cumplir los compromisos internacionales y en particular los derivados del Convenio sobre Diversidad Biológica.

El inventario responde al artículo 7 del Convenio sobre Diversidad Biológica, por el cual cada Parte Contratante debe identificar los componentes de la diversidad biológica que sean importantes para su conservación y proceder a su inventariación y seguimiento.

#### Estructura:

El Inventario consiste en una serie proyectos, denominados Atlas, cada uno de los cuales incluye básicamente la lista de especies españolas de un determinado grupo de fauna y flora, su distribución geográfica y su estado de conservación o Lista Roja de acuerdo con las categorías y criterios de la Unión Internacional para la Conservación de la Naturaleza (UICN), de la que España es Estado Miembro. El Inventario inició sus primeros trabajos en 1998 y su primera fase termina a finales de 2003, pero este mismo año han empezado los trabajos de seguimiento y actualización, pues no se trata de una "foto fija" sino de un proyecto continuo que permita disponer en todo momento de información actualizada sobre el estado y las tendencias de la biodiversidad española

Los productos disponibles del inventario son:

- Atlas y Libro Rojo de los peces continentales españoles (2000)
- Atlas y Libro Rojo de los anfibios y reptiles españoles (2002)
- Atlas de las aves reproductoras de España (2003)
- Atlas de los mamíferos españoles (2003)
- Atlas de los hábitat naturales y seminaturales de España (2004)
- Atlas y Libro Rojo de la flora vascular amenazada de España (2003)

Los de peces, anfibios y reptiles pueden ser consultados a través de la página web del Ministerio (www.mma.es), donde pronto estarán disponibles los restantes.

Además de estos atlas, está muy avanzado el atlas de las Plantas Introducidas invasoras, lo que constituirá un primer y completo análisis del problema de especies invasoras de flora en España.

Para la realización del Inventario el Ministerio de Medio Ambiente ha contado con las sociedades científicas que agrupan a los expertos españoles en biodiversidad: Asociación Herpetológica Española (AHE), Sociedad Española de Ornitología (SEO), Sociedad Española para el Estudio y la Conservación de los Mamíferos (SECEM), Sociedad Española para la Conservación y el Estudio de los Murciélagos (SECEMU), Sociedad Española de Fitosociología, Sociedad Española de Biología de la Conservación Plantas y Museo Nacional de Ciencias Naturales. En conjunto han sido entre 3.000 y 4.000 los especialistas que han colaborado en la realización del Inventario.

#### Primeros resultados:

Una vez finalizada la primera fase del Inventario se va a proceder a un análisis del conjunto de sus resultados para obtener un primer informe detallado sobre el estado de la biodiversidad española. Se pueden adelantar cuatro rasgos generales.

- En primer lugar se confirma la gran biodiversidad española en el contexto europeo.
- En segundo lugar destaca el gran número de endemismos de nuestra flora y fauna.
- En tercer lugar se pone de manifiesto que en términos globales la mayor parte de las especies se encuentran en estado aceptable de conservación.
- En cuarto lugar hay que señalar que la existencia de especies amenazadas no es en sí mismo un dato negativo, pues significa que aún están presentes en el territorio español, mientras han desaparecido de otros muchos de nuestro entorno.

Está también muy avanzada una nueva versión del CHM español que incluirá información sobre instituciones y proyectos relacionados con la inventariación de la biodiversidad en España. Estará accesible en www.mma.es

Por otro lado, a <u>nivel autonómico</u>, existen algunas iniciativas muy interesantes, como el llamado Proyecto BIOTA (Banco de datos de la Biodiversidad en Canarias), promovido por el Gobierno Autonómico de Canarias, y que se aplica a las islas Canarias, una de las áreas con mayor biodiversidad en España y en Europa.

El proyecto Biota-Especies constituye un conjunto de actuaciones para desarrollar la puesta en marcha y funcionamiento del Banco de Datos de Biodiversidad de Canarias. Es una iniciativa del Gobierno de Canarias que comienza a mediados del año 1998, cuyo objetivo principal es la creación de una base de datos con información sobre todas las especies que componen la biota de Canarias. Para ello, se ha llevado a cabo la selección y registro de la información existente de todos y cada uno de los elementos de la biota, tanto terrestre como marina.

Actualmente, en las bases de datos del Banco de Datos de Biodiversidad se encuentra registrada casi toda la biota terrestre y aproximadamente la mitad de la biota marina.

En una primera fase del proyecto se ha realizado un esfuerzo importante en recopilar toda la información existente sobre la biota de Canarias y en seleccionar aquella que aportara datos válidos para el Banco de Datos. En esta labor han participado numerosos expertos en los diferentes grupos taxonómicos de especies, coordinados por taxónomos especialistas del ámbito científico y académico de la Comunidad Autónoma de Canarias.

Paralelamente se ha diseñado un sistema informático que fuera capaz de almacenar y analizar la información previamente recopilada y seleccionada. Este sistema, denominado Atlantis, ha registrado hasta la actualidad información sobre unas 17.000 especies (aproximadamente 12.700 especies del medio terrestre y 4.200 especies del medio marino) y unas 3.600 subespecies del medio terrestre. Cada especie contiene información geográfica a dos escalas de precisión: cuadrículas de 500 y de 5.000 metros de lado

Para cada especie o subespecie se ha registrado su nombre científico, subnómines (nombres asignados a las especies que en la actualidad son erróneos), la asignación taxonómica a cada categoría (género, familia, orden, clase, phylum, subdivisión y división), situación geográfica según años y con varios niveles de precisión, niveles de protección (especies catalogadas o protegidas), hábitat, nivel de endemicidad y origen de las especies (nativo o introducido). En la actualidad se está procediendo también a la carga de imágenes sobre las especies.

Más información y acceso a las bases de datos puede encontrarse en: <a href="http://www.gobcan.es/medioambiente/biodiversidad/ceplam/bancodatos/bancodatos.html">http://www.gobcan.es/medioambiente/biodiversidad/ceplam/bancodatos/bancodatos.html</a>

ANNEXES AVAILABLE FROM THE NATIONAL REPORTS UNIT OF THE SCBD

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