



Evaluation of the state of nature conservation in Spain

October 2008

Report of
ECOLOGISTAS
en acción

Sumario

- 3 Introduction**
- 5 Regulatory and administrative management framework**
- 9 Protection of species**
- 13 Protection of natural sites**
- 19 New threats**
- 23 Conclusions and proposals**



Área de Conservación de la Naturaleza
Ecologistas en Acción
Marqués de Leganés, 12 - 28004 Madrid
Phone: +34 915312389, Fax: +34 915312611
naturaleza@ecologistasenaccion.org
www.ecologistasenaccion.org

*Translated by Germaine Spoerri, Barbara Sweeney, José H. Wilson,
Teresa Dell and Adrián Artacho, from Red de Traductoras/es en Acción*



Introduction

Spain is known and appreciated worldwide for its natural abundance. Its favourable biogeographical position, variety of climate and orography, extensive coastline and significant groups of islands confer Spain with extraordinary natural conditions.

The great diversity of ecosystems, natural areas and wild species native to Spain make it the country with the greatest biodiversity in Europe and a point of reference on the issue of nature conservation.

Figures released by the Spanish Ministry of the Environment are revelatory in this regard. The total estimated number of taxons in Spain exceeds 100.000. It is the country with the highest number of endangered vascular plants in the European Community and 26% of its vertebrates are included in the “endangered”, “vulnerable” or “rare” categories, according to classification of the International Union for Conservation of Nature (IUCN).

A clear example of the importance of biodiversity in Spain is the identification of more than 121 types of habitats, which represent more than 65% of habitat types listed in the European Directive 92/34 and more than 50% of habitats considered priority by the Council of Europe.

Spain also has a total of 1,600 protected natural areas, declared protected under national or regional government regulations, which represents 11.8% of the national territory. Moreover, if we add to this total the areas in the European Union’s Natura 2000 Network which are in the process of being awarded the status of area under some degree of protection; this would bring the total to 14 million hectares, or 28% of national territory. (Europarc, 2007 directory).

But beyond the endangered species and protected areas there is the natural environment itself, which is so extensive that it wouldn’t be an exaggeration to say, that the majority of Spain can be credited with strong ecological values, and that the huge urban, industrial and intensive agricultural zones are the only areas with barely any natural significance.

What this means, is that nature conservation and biological diversity are of vital importance in Spain and that, conversely, Spain has a great responsibility for the protection and conservation of a natural environment which confers it its character and makes it unique.

Nature conservation in Spain has evolved greatly since the birth of an incipient environmental defence movement in the 1950s. But it wasn't until recent decades, with the rise of social interest in matters relating to the environment, that real action on the part of public bodies began to be taken. This work has been and continues to be carried out in the midst of great difficulties and contradictions which have meant that, while environmental protection has improved greatly, an ecological crisis is emerging and the problem of biodiversity loss becomes more serious every day.

While a lot of effort and limited resources are being employed to protect what is left of the natural environment, the development of economic activities is consuming and degrading natural resources at a dizzying rate which doesn't appear to be slowing. In recent decades and particularly in recent years, economic and population growth in Spain has created a need, which is growing every day, for new housing developments, large infrastructures and industrial and energy projects while at the same time, industrial spillage and dumping, the production of toxic waste, biocide use and, in particular, water consumption and air contamination never stop growing.

In any case, in the present climate of economic crisis, the issue of the environment has become, if not dispensable, then of secondary importance and easily postponed. Expectations that conservation policies will receive the necessary push are very low.

In this context, this report will attempt to evaluate the current state of nature conservation in Spain, focusing on recent changes, and with the intention of providing practical analysis and proposals. It does not pretend to be an exhaustive report, but rather one which highlights the most important aspects of nature conservation which Ecologistas en Acción have witnessed in their work and experience of more than 25 years in defence of the environment.



Regulatory and administrative management framework

The Spanish regulation framework regarding nature conservation acts on four different scales – the local level, the autonomic regional level, the national level and finally, on the international level. Therefore, Spain is equipped with a wide legislative index that, in spite of its lacks, **would offer enough legislative tools for the defence and conservation of nature, given that there was the true will to fully put them into practice.**

The impulse, which has been given to nature conservation in Spain, has fundamentally been triggered by local and international agreements and since the incorporation to the European Union, by the European directives. For a long time, these agreements have guided Spain's policies of conservation and still are, nowadays, the main reference for evaluating the development of national and autonomic regional policies of nature conservation. **Spain, today, is one of the European countries with the highest number of sanctions, complaints and reports related to breach and/or insufficient fulfilment of the European laws of nature conservation.**

Inside the European Union, in 2007, with 62 cases followed by Spain with 42, Italy was the country with the most still on-going procedures of infringement to the environmental legislation - most of them related to nature conservation. Other data, which depict the high grade of breach of environmental regulation, is the fact that Spain is also the member state of the European Union with the highest number of petitions in environmental topics through the Petitions Committee of the European Parliament.

Concretely, in 2007, more than one third of all the petitions related to environmental issues came from Spain, regardless of the fact, that the European Union already counts 27 members states.

The basic national legislation acts as the receiver of international obligations and channels the general dispositions towards regional regulatory rules. The national regulation has recently got updated successfully with the promulgation of the National Law of Natural Heritage and Biodiversity in 2007, and has extended its influence to areas with greater impacts on the natural environment as it is in the case of rural development (Law of Rural Sustainable Development 2007) and the use of forestal resources (Law of Mounts of 2006).

Furthermore, the incorporation of the Penal Code in force to overlook crimes against fauna, flora or natural sites, the creation of the Protection Service of Nature in charge by the Guardia Civil, the District attorney's offices specialized in environment and the awarding of full police functions to environmental agents are all significant advances in matters of regulation.

Competencies for autonomous legislation, and, mainly and more important, for environmental management, where differences and deficits become more and more evident, lie, as we know, on the level of the Autonomous Communities (the regions).

There can hardly be found analogous models of action among the 17 Autonomous Communities and 2 Autonomous Cities into which relapses full responsibility of environmental management of the area. We rather encounter a wide spectrum of types of procedure, administrative structure and endowment of media applied to nature conservation.

Regional regulations are not always comparable, which can result to contexts, where natural cross-border sites are protected and managed in a way or another, all depending on the side of the territorial limits where they are located. Examples, which illustrate what is really happening, are the projects of the Guadarrama National Park or the National Park of the Picos de Europa. Equally, a species that in one Autonomous Community is declared "on the verge of extinction", can be catalogued like "vulnerable" in neighbouring ones, as it happens with the Perdicera Eagle (*Hieratus fasciatus*), or, even worse, a species as emblematic and threatened as the Iberian Wolf (*Canis lupus*) can be hunted in Castilla and León while it is officially declared "on the verge of extinction".

On the level of administrative organization, the regional competencies on conservation can equally relapse into a Council, a Headquarter, a Service or a Section, which make the relations and coordination between Autonomous Communities enormously difficult.

In what Public Administrations seem to have reached a recent agreement, is the regrettable reduction of the administrative rank of the environment. To the disappearance of the specific Environment Ministry, which existed up until this year (now merged with Agriculture and Fisheries), has been added the factual disappearance of Regional Councils for the Environment, the last one shut down in Castilla-La Mancha.

Evidently, the Spanish competencies framework has lead to an everyday growing regionalization of environmental management, which profoundly clashes with the indispensable global approach of

nature conservation, especially for the reason of political differences between regions and political parties and since the lack of effective instruments of institutional character prevent an effective coordination of activities.

In practice, the problem is very serious **because the norm and criteria disparities are putting into danger the efficient and coherent setting of strategies and plans related to conservation. Furthermore, this complicates and sometimes even blocks the correct application of penalties regulations in the Penal Code for crimes against nature conservation.** As it is already very complicated that the judicial system works on the pursuit of the crimes, on which firm judgements hardly ever have relapsed, it gets even more difficult when it comes to the contradictory interpretations of autonomous norms and regulations.

The key instruments to coordinate the conservation policies with which Spain has been provided, are the Sectorial Conference of Environment and the National Commission of Protection of Nature, from where diverse strategies and plans are promoted and approved to be, later on, put into practice by the Administrations.

Up until now, the works of these organs have advanced in specific topics, but has , clearly spoken, failed in the most important and ambitious:

The Spanish Strategy for Conservation and Sustainable Use of Biological Diversity was approved by the Sectorial Conference of Environment in December 1998, and presented publicly by the Minister of Environment at that time.

Its making, which was happening in an unusually participative process, emanated from the Agreement of Biodiversity and represented an initiative of great environmental interest, including all aspects necessary for the sustainable preservation of biological diversity in Spain.

Incomprehensibly, it was the Ministry of Environment itself, who paralyzed almost completely its development and application. In spite of having been planned and repeatedly requested, the Strategy neither managed to be approved by the Ministers Council, nor was it discussed in the Spanish Parliament. The lack of official support to this document, in turn, has limited the real capacity of policy coordination of policies developed by the entire Government.

Ten years after its appearance and introduction, it continues being neither developed nor applied (apart from very honourable exceptions). On the top of that, it hasn't even been approved by the Ministers Council. One of the principal lacks has been the lack of sectorial plans of action, which should have been put into practice by December, 2001. In only three of at least sixteen sectors, which were considered essential in the Spanish strategy paper, plans of action have been managed to become approved: Forest, Wetlands and the White Paper of Environmental Education.

The neglect of elaboration of these plans has implied serious consequences for Spanish biodiversity, because these plans are simply indispensable for achieving real environmental conservation policies,

which include the principles of conservation and sustainability in all different sectors of economic and social activity. With the recent approval of the Law of Natural Heritage and Biodiversity, the elaboration of a National Strategic Plan of Natural Heritage and Biodiversity, which would replace the Spanish Strategy, is still outstanding.

On this line of breach **it doesn't seem either, that Spain is in disposition to fulfill the commitment of halting the loss of biodiversity by 2010.** The "Countdown 2010" is an initiative of the International Union for Conservation of Nature (IUCN) through which a European alliance for stopping the loss of biodiversity has been created, making the year 2010 the first target date for attainment of the various objectives. In the Gothenburg meeting of 2001, the Heads of State of the European Union, among them the Spanish, promised to stop the loss of biodiversity until 2010.

Social setting, anti-conservation lobby

The complicated situation in which nature conservation in Spain finds itself, owes a lot to the current socioeconomic climate, and in particular, to the **existence of a lobby which could be labelled anti-conservation**, which while perhaps it is not structured in the way a normal lobby would be, acts in a way a normal lobby would.

In the face of any kind of initiative, whether it be legal, political or administrative, which would suppose an improvement in the area of nature conservation, this pressure group reacts in an inadmissible manner, often aggressive and employing misleading arguments. This situation has been clearly reflected in the processes of approval of the Natura 2000 Network and the Law of Natural Heritage and Biodiversity, where a conglomerate led by eminent and determined sections of the world of hunting, intensive agriculture and right-wing political parties, mobilized a significant social sector against the passing of these bills.

The actions of these pressure groups, in which proper organizations such as ASAJA, APROCA, ATICA, the Spanish Hunting Federation, and diverse Regional Governments (mainly led by hegemonial Spanish right-wing party) stand out, clash with the general view and feeling of society which demands a greater attention to the environment and, in particular, to nature conservation.



Protection of species

Spanish territory is home to 10,000 different species of plant and it is reckoned that there are 20,000 species of fungus, lichen and moss, and between 8,000 and 9,000 species of vascular plants (ferns and flowering plants). This represents 80% of the species present in the European Union and almost 60% of those found in the whole of the continent. Of this last group, more than 6,500 are indigenous plants, including 1,500 endemisms of worldwide uniqueness, and a further 500 endemisms shared with North Africa. In the Canary Archipelago the percentage of plant endemisms reaches 15%.

In terms of fauna, the Iberian Peninsular is again characterised by possessing the richest biology in Western Europe, with a total of 68,000 animal species, more than 50% of the species present in the European Union. Of these, 770 species are vertebrates, excluding marine fish. Spain is the country in Europe with the widest variety of mammals and reptiles, third in amphibians and fish. Due to their isolation, 44% of the animal species in the Canary islands are endemic.

Spanish regulation establishes the general protection of wild flora and fauna, but puts emphasis on threatened species, which are catalogued and given special attention.

Following Spain's subscription to the Berne Convention, the first Catalogue of Protected Animal Species was endorsed by Royal Decree 3181/1980. The protection of plant species began later, with a catalogue created through Royal Decree 3091/1982.

Later, after the pioneering Law 4/89 of March, Conservation of Natural Sites and Wild Flora and Fauna was endorsed, the older catalogues were updated and rewritten as the current National Catalogue of Endangered Species. This catalogue has been revised with the enactment of the Natural Heritage and Biodiversity Law in 2007 and now comprises 602 species of threatened flora and fauna.

363 of the catalogued species are in the category of special interest, and it must be pointed out that

successive judicial sentences have not recognised the “protected” nature in penal terms, meaning that the actual protection regime is much lower.

So, approximately 6% of Spanish wild species are in the Catalogue, and less than 3 % hold an effective protection regime.

Number of taxons (species and sub-species) included in Categories of Threats					
Group	In danger of extinction	Sensitive to habitat alteration	Vulnerable	Of special interest	Total
TOTAL	166 *	21 *	61 *	363 *	611 * 602 taxons
<u>FLORA</u>	112 *	7 *	9 *	11	139 *
INVERTIBRATES	16	7	9	10	42 taxons
<u>Not Arthropods</u>	4	1	4	1	10 taxons
<u>Arthropods</u>	12	6	5	9	32 taxons
VERTEBRATES	38 *	7 *	43 *	342 *	430 *
<u>Fish</u>	4	0	6	1	11 taxons
<u>Amphibians</u>	1	0	1	20	22 taxons
<u>Reptiles</u>	5	3	1	42	51 taxons
<u>Birds</u>	21 *	3	12 *	251 *	287 *
<u>Mammals</u>	7	1 *	23 *	28 *	59 *
					56 taxons

* Includes taxons (species and subspecies) with populations in different categories of threats.

Source: http://www.mma.es/portal/secciones/biodiversidad/especies_amenazadas/catalogo_especies/acceso_catalogo.htm

At the national level, National Strategies have only been endorsed for seven endangered species with no Plan for recovery or conservation, since the implementation is left entirely up to the Autonomous Communities (the regions).

On the 25th February 1999 National Strategies were endorsed for the Conservation of the **Iberian Lynx** (*pardinus*), on the 19th October 1999 the Strategy for the Conservation of the **Cantabrian Brown Bear** (*Ursus arctos*), on the 4th July 2000 the Strategy for the Recovery of the **Bearded Vulture** (*Gypaetus barbatus*) and on the 9th July 2001 the Strategy for the Conservation of the **Iberian Imperial Eagle**

(*Aquila adalberti*). In December 2004 the National Strategy for the Conservation of **Iberian Wolf** (*Canis lupus*) was endorsed, in March 2004 the National Strategy for the Conservation of the **Cantabrian Capercaillie** (*Tetrao urogallus cantabricus*), in January 2005 the National Strategy for the Conservation of the Pyrenean Capercaillie (*Tetrao urogallus acquitanicus*) and lastly, the National Strategy for the Conservation of the **White-headed Malmsey** (*Oxyrura leucocephala*) was also endorsed in January 2005.

Another Strategy has been added to these, which is of a different field and conception but has an influence in species conservation: the **National Strategy against the use of Poisoned Bait in the Natural Environment**. This was endorsed by the Sectorial Environment Conference on the 23rd October 2004, to put an end to the deaths of animals caused by the use of poisoned bait. The Ministry puts the number of fauna which died poisoned in the decade 1990- 1999 at 3,668, 43% belonging to species included in the National Catalogue of Endangered Species. In the current decade the deaths have continued at similar levels, or even higher for some species, such as the Iberian imperial Eagle and the black Vulture.

Lastly, continuing in the line of trying to tackle some of the problems which have worst affected fauna recently, the **Royal Decree 1432/2008 of the 29th August, establishing means for the protection of avifauna against collision and electrocution by high-voltage overhead cables has been endorsed**. According to calculations by WWF/Adena, SEO/Birdlife, Greenpeace, Ecologistas en Acción and Friends of the Earth, hundreds of thousands of birds die every year in Spain electrocuted and from shock. Many of the species affected are found to be threatened by extinction and in fact, accidents with electricity grid are the primary cause of unnatural mortality for bird species of large size such as the great buzzard and certain raptors. For example, in 10 years, they counted 200 Bonelli's eagles and 80 imperial eagles killed directly by electrocution.

The management of the protected species is the responsibility of the Autonomous Communities who can heighten the protection regime established in the National Catalogue and who are entrusted with putting the Strategies into practice in the field and endorsing and applying the recovery and conservation plans. In this respect the landscape is one of lack of co-ordination when not directly of negligence.

Less than 5% of the threatened species can count on any kind of protection, conservation or management Plan from the regions. We can bear in mind that some Autonomous Communities have not endorsed any, not even for the species in danger of extinction or for those that the National Strategies anticipate as such. This is the case with the Community of Madrid, which is without any kind of plans, neither for what should happen with the Strategies for the Iberian Lynx, nor with the Imperial Eagle. This does not tally with the corresponding developments in some Communities.

In other more scandalous cases, some Administrations, **eager to remove “obstacles” to the development of particular projects, in addition to avoiding the application of the wild species protection regulations, even go as far as to deny the very presence of the species,** even when

contrasted scientific studies confirm it. Once again the examples of the Iberian Lynx and the Community of Madrid come to the fore in relation to the protests provoked by the widening of the M-501.

On the other hand, **lack of co-ordination and setting of criteria have become an inseparable characteristic of wild species management in Spain.** There is no other way of describing the fact that for the one same species, in some Autonomous Communities individuals of endangered species may legally be taken from the wild, such as to provide captive breeding centres or falconers with birds, whilst other Communities, following the ever necessary criterion of prevention, prohibit this. Or the fact that there are currently as many captive breeding centres of Iberian imperial Eagle and Iberian Lynx as there are Autonomous Communities in which each of these species is present.

The advances in the past few years in terms of species conservation are in evidence, but whilst a few “flagship” species which are well known to the public are given great attention, often too much, **the majority of endangered and non-endangered species are neglected and in a general process of decline.**

To conclude, old problems in species conservation hang on as new ones start and the Administrations are still a long way from acting correctly. This is the case with fauna casualties, the management of the Iberian Wolf, the struggle against invasive species, the protection of marine species and the lack of biological corridors.



Protection of natural sites

The conservation of nature in absence of a model of horizontal proceedings and actions which includes all types of sites and lands (today as utopistic as the much proclaimed sustainability) requires the delimitation of specific territorial zones as an instrument of protection. These zones have to be defended from alterations to ecosystems and their inhabiting species.

In Spain, there are various coexisting formulas of the manner of protection of natural sites which sometimes overlap in one single territory. Departing from the new law on natural heritage and biodiversity (Ley de Patrimonio Natural y de la Biodiversidad), authorities intended putting order and sense into the different typologies of protected sites, which now all together form the national network of protected natural sites called the National Network of Natural Protected Sites (Red Estatal de Espacios Naturales Protegidos, ENP) and respectively the networks of the Autonomous Communities. The new law has not been put into practice **given that some Autonomous Communities continue maintaining their own formulas, which do not meet the criteria of the UICN for the designation of protected areas very well.**

In some form or other, the objective of the ENP-networks is to protect the most important ecosystems and territories from the point of view of nature conservation and in particular try to safeguard a representative sample of the existing ecosystems and habitats and their most threatened species.

In the last years, the number of declared protected sites by the state and the Autonomous Communities has significantly been increased, in a way, that today, we find a total of 1600 protected natural sites approved under the protection of the national or regional normative, which represent, in total, a 11.8% of the Spanish territory. Nevertheless, the final impulse was given with the implementation in the course of the Natura 2000 Network of the European Union since there, the total surface under any types of protection regime increases up to 14 millions of hectares, which would be 28% of the territory (Europarc, annuario 2007).

The implementation of the Natura 2000 Network, like some other ENPs, does not turn out to be easy, in other words, it has and still encounters reluctance, if not the resistance of some regional administrative authorities and the openly displayed opposition of some anti-conservation collectives. Moreover the tendency has close to always been the try of reduction of the ENP-limits to an essential minimum, shutting out zones with conflict potential and / or planned development of projects with major impacts on the environment.

The number of cases where ENPs have been displaced or fragmented to give shelter to this kind of situation increases every day. One example of this, comes from the fact, **that Spain finds itself in the middle of an infringement procedure from the European Commission for insufficient or deficient designation of the zones for the Natura 2000 Network in the Autonomous Communities of Galicia, Valencia, Cataluña, Extremadura, Castilla-La Mancha, Baleares, Andalucía and the Canary Islands.**

In theory, the inclusion of a determined territory into a protected site should insure, if not the absolute defence from all types of aggressions, at least a barrier of restrictions or a brake to the most impacting and grave ones of them. Overall, this is not the case in Spain.

The examples of aggression to theoretically protected sites are so numerous, that the listing of them in this report is simply impossible. Evolving from this fact, a great part of the activities of environmental groups, which dedicate themselves at the protection of nature share as a common objective the preservation of these sites from all types of aggressions. The most frequent ones of these, have, in the last years, been related to transport infrastructure development of all kinds (highways, airports, railway tracks and harbours), the disproportionate urban expansion, huge tourism and leisure complexes, industrial and energetic projects (gas pipelines, badly located wind power parks, hydroelectric power stations, mining exploitations), hydraulic infrastructure (reservoirs, transfer infrastructure and the exploitation of underground water reserves) and also with the intensification of agrarian, fishing and hunting activities inside the protection limits.

Neither national parks nor the sites of the Autonomous networks have been spared from these aggressions and least the sites of the Natura 2000 network, which ultimately has been the main target of most of the problems.

Cases like the national park "Tablas de Daimiel", which finds itself in a critical moment of descatalogization as biosphere reserve, the modification of the law of natural sites of Murcia (Ley de Espacios Naturales de Murcia), which aims at drawing out protected zones to urbanize them, the doubling of the M-501 highway in Madrid or the amplification of the Ciudad Real airport are probably the most striking examples of how far the situation can lead in certain cases.

Another example with an enormous repercussion and under investigation from the European Union faced with a complaint of the main environmental groups, are the 10 points of infrastructure renewing/building included in the special transport infrastructure plan (Plan Especial de Infraestructuras de

Transporte). With a major impact on the Natura 2000 Network, the groups have claimed that the financing through the Autonomous Communities should be withdrawn and stopped. The cases are the following:

1. **Highway A-43 Puerollano-Mérida.** Among the affected species have to be pointed out the Iberian imperial eagle, the black vulture, the black stork, the Perdicerian azor-eagle, the Iberian lynx and the sites of the Natura 2000 Network in the west of Ciudad Real and the central zone of Badajoz.
2. **Highway Toledo-Ciudad Real-Córdoba.** Affects the SCI (Site of Community Interest) and SPA (Special Protected Area) of Montes and Toledo and Sierra Morena (with important presence of the species like the lynx, the imperial eagle, the black stork and the black vulture). The stretch Puertollano-Córdoba will produce an enormous environmental impact at the crossing of the Acudia valley and one of the best conserved areas of Sierra Morena, which will not mean any kind of improvement regarding the communication between both the locations.
3. **Highway Linares-Albacete.** Will affect the SCI Sierra de Alcaraz and the SCI Río Guadalmena significantly, which form the best zones for the lynx of Albacete.
4. **Highway silver route A-66 from Gijón to Sevilla.** The stretch: Zafra-Sevilla will affect numerous sites of the Natura 2000 Network and very important zones for the lynx, the imperial eagle or the black stork. Unavoidably, this will have an impact over the Sierra de Aracena. Specifically, the road will affect the holm and cork oak meadows, which are in a very sane state of conservation, as well as the dense Mediterranean wood- and scrublands, producing a grave barrier effect. Furthermore, the stretch Benavente-Zamora will affect the Villafáfila reserve (great bustard, kestrel, etc.).
5. **Highway A-48 Costa de la Luz (Cádiz-Algeciras).** Will affect the national park of the Alcornocales, as well as the mountains of Tarifa, an area of great environmental value. It is regarded as a very important passing zone of migrating birds.
6. **Highway Cuenca-Teruel.** Crossing through the middle of the Montes Universales. This concerns an area of great environmental value with a very cracked relief. This highway will affect the SCI-SPA of the Serranía basin (royal eagle and alimoche).
7. **Highway IV Centenary (Ciudad Real-Valencia).** Will affect the SPA Calatrava countryside (great bustard, kestrel and pilferer) and the SPA Montiel countryside (Iberian imperial eagle).
8. **High-speed railway line Madrid-Extremadura.** The railway tracks from Madrid to Cáceres will affect a great number of Natura 2000 Network sites, among them the steppe zone in the west of the Guadarrama River and the emblematic species like the great bustard or the Iberian lynx.
9. **Enlargement of the northern harbour of Valencia.** Will generate a strong impact on the Albufera and the beaches situated at the south of the harbour.
10. **Granadilla harbour (Tenerife).** Will affect one of the best conserved stretches of the island and marine habitats, which at the same time are declared as Site of Community Interest (Lugar de Interés Comunitario).

Finally, we see very clearly, that there still is a lack of protection and management of natural sites, which

has to be tackled. Among the things to do, we find that it is necessary to undertake an amplification of the ENP-network and Natura 2000, the financial resources and distribution problem, the solution of the cases in which the management is shared by state and CC AA or by CC AA and the problems, which provoke the further fragmentation of the territory.

All this can be checked and profoundly explained by looking at the data offered by the Europarc annual report 2007, in which can be found the principal figures and also some singularities of the Spanish protected sites in force today.

National Parks

At present, there exist 14 national parks which add up to a surface of 350'000 hectares. Naming and locations are as follows: Picos de Europa (Asturias, Cantabria and León), Ordesa y Monte Perdido (Huesca), Teide (Tenerife), Caldera de Taburiente (La Palma), Aigüestortes y Lago San Mauricio (Lleida), Doñana (Huelva and Sevilla), Tablas de Daimiel (Ciudad Real and Toledo), Timanfaya (Lanzarote), Garajonay (Gomera), Cabrera (Mallorca), Cabañeros (Ciudad Real), Sierra Nevada (Granada and Almería), las Islas Atlánticas (Pontevedra and A Coruña) and Monfragüe (Cáceres).

After the ruling 102/1995 of the constitutional court, which declared the fifth additional disposition of the law 4/89 as void, a juridical regimen was established in law 41/97, which attributed the management of the national parks not only to the general administration of the country but also to some of the Autonomous Communities (regions) where these protected areas are located.

Autonomous Networks of ENPs (Espacios Naturales Protegidos, protected natural sites)

They include, in addition to the national parks, specific figures of full regional competences, among these the national parks, the nature reserves, the natural monuments, the protected landscapes and others – all together, up to close to 40 different typologies.

They make up the core of the ENP-networks for their legal status, even if they have lost parts of their principal roles through the implantation of the Natura 2000 Network.

Below these figures, in Spain, there are 6 millions officially declared hectares under protection, which make up an 11% of the total surface (half of them being national parks).

Natura 2000 Network

With the goal of protecting biodiversity, the European Union passed the so-called Habitat Directive, in which a framework for the conservation of the fauna and wild flora as well as for the habitats of common interest has been defined. The directive (92-43/CEE) was adopted on May 21st 1992 and has established the obligation of member states to contribute to the creation of a European ecological

network called Natura 2000 Network .

Spain has identified and outlined the SCIs (Lugares de Interés Comunitario, the Sites of Community Interest), which later passed on to become SACs (Zonas de Especial Conservación, special areas of conservation), which, along with the SPAs (Zonas de Especial Protección, Special Protected Areas), designated on the basis of the directive on birds (Directive de Aves, 79/409/CEE – relative to the conservation of wild birds), constitute the Natura 2000 Network . The Autonomous Communities are responsible of designating zones of special interests, which later are approved by the European Commission.

Today, we find 562 SPAs and 1'434 SCIs. The surface of the SPAs exceeds 9,5 millions of hectares while the SCIs contain 12,3 millions of hectares. Both surfaces have a high grade of overlapping, which means that some of the Natura 2000 Network sites are at the same time denominated as SPA and as SCI. In total, the Natura 2000 Network goes little beyond 14 millions of hectares – 28% of the Spanish territory.

The Natura 2000 Network also overlaps in close to 42% of its surface with the ENP-networks, but this overlapping varies from 100% (in Autonomous Communities which have assimilated the Natura 2000 Network into their network of protected natural sites) to 10-15% in the ones who kept the differentiated networks.

The delay in the designation of the SCI, the absence of preventive protection and the close to full lack of management plans in the SCI, have provoked that the state of conservation of a good part of the SCI has substantially worsened in the last years. Therefore, a lot of the SCI will predictably be in a worst condition of conservation than at the time when they were declared SCI.

Biosphere Reserves

In September 1968, the UNESCO organized an intergovernmental conference in Paris, where they were assigned to set the scientific basis for the rational use of biosphere resources. Emerging result of this conference was the launching of the Man and Biosphere Program MaB in 1971. It included, as one of its main objective, the building up of a global network of biosphere reserves, which started off in 1976 and presently includes 507 reserves distributed in 102 states throughout the world. Spain with its 38 reserves stands on third position. These sites though, do not go hand in hand with any legal declaration, which explains very well why Spain's ranking regarding protection lies much lower.

Strategic plan for conservation and rational use of wetlands

The ministry of environment - inside the general framework foreseen in the biodiversity strategy (Estrategia de Biodiversidad) – worked out a strategic plan for the conservation and rational use of wetlands (Plan Estratégico para la Conservación y Uso Racional de los Humedales). The objectives of this project are based on the strategic plan of the Ramsar agreement (Plan Estratégico del Convenio de

Ramsar) and the strategy on the Mediterranean wetlands (Estrategia sobre Humedales Mediterráneos). Spain has joined this agreement in 1982, having incorporated a total of 49 wetland zones of 158'288 hectares of the national territory up until today. These zones are classified by the Autonomous Communities, which, for a great part, have been declared, also as SPAS (Zonas de Especial Protección para las Aves, special protected areas for birds).



New threats

Conservation in Spain is seriously threatened and much of the aggravation of the previous situation is related to recent matters. From those, the two main issues ought to be pointed out: **climate change and the repercussions on biodiversity, and the higher interest that economic and politic matters attract in times of crisis compared to environmental issues.**

As a result from the new economic situation, one of the scapegoats was the Ministry of the Environment, recently assimilated into the Ministry of Agriculture. Nevertheless, there is worse to come. Within the measures appointed to face the crises, the environmental assessment procedures are hastier, public projects that invest on infrastructure, are encouraged and public expenditure is reduced, presumably at the expense of the environment.

In view of this situation, we could hardly expect that the Spanish conservation policies were provided with the necessary human and economic resources to develop, and even harder to think of going about achieving the necessary integration of the most aggressive sectoral policies concerning the environment.

As if the political prospect was not complicated enough, it gets even more complex if the issue of climate change is taken into account, whose main evaluated consequences will unquestionably be the sudden change in the ecosystem, particularly in Spain, because of its particular natural characteristics.

Climate change and conservation

In its fourth report, the Intergovernmental Panel on Climate Change (IPCC), states the reduction of the uncertainty of knowledge of the climate and confirms the influence of human activity in it, as it already stated in the 2001 report. The report describes the reduction of snow-covered areas in the world, the

decrease of the glaciers, the decrease on the number of cold nights and the increase on the number of warm ones.

The evidence of the impact on biodiversity is clearer every day. Phenological changes are observed in animals and plants from diverse locations in the world, including Spain. This circumstance is beginning to stir interest and concern among experts, international managers and society in general.

These global impacts have clear and determined consequences on Spain's biodiversity. It is expected that the direct impact on plant communities will be a prolonging of the period of plant activity and the increase of productivity, as well as the decrease of water availability. The estimation and simulation reports done indicate that the first of the mentioned effects will take place in the north of the Iberian Peninsula and the second will affect the Southern half of the Peninsula.

The direct consequences on the plants as a result of the rise of temperature mean that their vegetative activity period will increase, which, in areas without water limitations, will result in greater potential productivity. The adaptation to a different pattern of temperature will result in changes and phenological adaptations, all of which causes difficulty to predict the reactions in such changing conditions on diverse species or even on different individuals from the same species.

The beginning of new leaf, flower and fruit producing periods is expected to change, as well as the falling of leaves, given the extension of the length of "nice weather". This is what occurs in plants cultivated in gardens, squares and streets from our towns and villages. The opposite happens where temperatures are extreme and the water stress is particularly intense. In a number of gardens in towns in Southern Spain, falling of leaves has been observed even in August as a way to minimize the loss of water.

As the critical periods of the plant's biological cycle are brought forward in time, frost can be especially harmful in mountain areas, a site most fragile and vulnerable in the new situation of global change.

The predicted reduction in water availability and its impact on plant communities may be the greatest problem concerning the direct impact of climate change. The rise of temperature will reduce the net primary productivity in the Mediterranean area as the evapotranspiration rate rises. This is particularly serious in a number of areas within the Mediterranean climate influence where the rate of evapotranspiration and rainfall are practically the same. If we add that the **CGM models foresee the increase of the frequency and intensity of the drought periods in Spain, we can assume that the functional and structural changes in certain ecosystems may be particularly harmful.** Indirectly, there may be more forest fires with greater consequences. Fire, a disrupting element in the natural environment, will provoke not only the loss of natural landscape and other elements as well as other serious environmental, social and economic consequences, but also bring about the acceleration of substitution of plant species, which may have diverse degrees of adaptation to the new weather conditions.

Concerning the possible effects of the global change on animal species, there is a wide consensus about two possible future scenarios of the biodiversity of vertebrates; The ecosystems could migrate or move according to the climate, or the ecosystems will adapt to the new climate conditions. The first scenario is not very likely to occur, if we take into account the extreme fragmentation of the territory and the habitats of the diverse animal communities. Indeed, not even the genetic exchange between the diverse wild species is certain, due to the isolation of the territories caused by the man.

In island ecosystems, the ability to face the new conditions will be even smaller, as the only possible factor to change the distribution of the species is in altitude.

The second scenario does not presently allow us to make serious predictions, due to the lack of information and data. The direct effects of global change are more visible. every day Phenological changes have been detected in both vertebrate and invertebrate populations, which result in imbalanced situations between species with a high level of dependency and interaction. Furthermore, changes in the geographical distribution of some species have been discovered in both latitude and altitude. For some species, it implies the reduction of their distribution area, and a greater vulnerability (against forest fires, flooding, etc.).

Some information shows a greater virulence of parasites, as well as the rise of population of invader species. They are generally better adapted to abrupt environmental changes. **Some of the most vulnerable ecosystems are those that have richer and more diverse fauna, for example in the wetlands, coastal areas, and waterways in general. In other cases, mountain areas, for instance, are places of refuge for rare species or endangered species.**

Neither of the proposed scenarios, the moving of the distribution areas nor the rapid adaptation to the new conditions seems to be possible for the majority of the species, according to the experts.

In Spain, there is direct evidence of significant changes in plant and animal life cycles. In addition, the monitoring work done by governmental institutions confirm that the effects of climate change are very real.

Moreover, these impacts are highlighted by the interaction of other factors as the change of use and fragmentation of territory, occasional and diffused contamination, excessive exploitation of water resources as a result of uncontrolled demand, etc.



Conclusion and proposals

- Spain is a privileged country because of its biological biodiversity, which means its responsibility in the field of conservation is even greater than its neighbours’.
- The conservation of biological diversity should be seen as one of the main priorities of Spain, which has not occurred at a national level or at the Autonomous Communities (regional level) until now. This is a positive factor that may offer social and economic opportunities, provided that it is well used.
- National and international laws are widely broken by the Autonomous Communities (regions) and therefore by the Spanish State, particularly when discussing the classification of protected areas, endangered species and the defence of the natural heritage are often neglected.
- Inadequate application of the EC directives shows Spain’s lack of interest for the conservation of biological biodiversity. The lack of responsibility causes irreparable damage to species and natural areas that should be avoided.
- The recent approval of the Law of Natural Heritage and Biodiversity is an opportunity, but there is the risk of repeating the results of Law 4/89. In order to avoid it, the following is necessary:
 1. To increase human resources and economic support for the protection of nature, in the regional Administrations as well as in Justice.
 2. To speed up coordination between the Administrations and to unite action criteria, protection figures and management procedures.
 3. To make participation easier, and provide access to information on this matter, taking into account the NGO’s and scientific institutions.

4. To revise and abolish the many projects which may seriously affect the environment, and to establish filtering procedures to avoid environmental conflicts before they take place.
- Merging the Ministry of Environment with the Ministry of Agriculture was a bad decision which may mean a step backwards in conservation policies and the active protection of the biological biodiversity. In addition, it settled down a negative tendency, which already took place in certain Autonomous Communities such as Extremadura, Madrid and Castilla-La Mancha, who eliminated their regional environmental ministries.
 - The conservation of the biological biodiversity, as a primary goal accepted globally by the Conference of Rio, should stay out from economical fluctuation. The control and evaluation procedures cannot be postponed as a solution for the crisis.
 - It is urgent and necessary to support conservation policies in some aspects such as:
 1. Correctly broadening and limiting the Protected Sites Network.
 2. Urgent realization and approval of the Strategic State Plan of Natural Heritage and Biodiversity.
 3. Development and coordinated application of current Strategic Plans, as well as the approval of new plans, to solve the main problems that affect conservation, such as climate change, habitat fragmentation, electric wires, the running over of fauna by vehicles, illegal hunting and fences.
 4. Establishing an Ecological Corridors Network.

ECOLOGISTAS

en acción

Andalucía: Parque San Jerónimo, s/n, 41015 Sevilla
Tel./Fax: 954903984 andalucia@ecologistasenaccion.org

Aragón: C/ Cantín y Gamboa 26, 50002 Zaragoza
Tel./Fax: 976398457 aragon@ecologistasenaccion.org

Asturies: C/ San Ignacio 8 bajo, 33205 Xixón
Tel: 985337618 asturias@ecologistasenaccion.org

Canarias: Pase de Chil 13, 35014 L. P. de Gran Canaria
Tel: 928362233 - 922315475 canarias@ecologistasenaccion.org

Cantabria: Apartado nº 2, 39080 Santander
Tel: 942240217 cantabria@ecologistasenaccion.org

Castilla y León: Apartado nº 533, 47080 Valladolid
Tel: 983210970 castillayleon@ecologistasenaccion.org

Castilla-La Mancha: Apdo. nº 322, 19080, Guadalajara
Tel: 659155339 castillalamancha@ecologistasenaccion.org

Catalunya: Can Basté - Passeig. Fabra i Puig 274, 08031 Barcelona
catalunya@ecologistesenaccio.org

Ceuta: C/ Isabel Cabral 2, ático, 51001 Ceuta
ceuta@ecologistasenaccion.org

Comunidad de Madrid: C/ Marqués de Leganés 12, 28004 Madrid
Tel: 915312389 Fax: 915312611 comunidaddemadrid@ecologistasenaccion.org

Euskal Herria: C/ Pelota 5, 48005 Bilbao
Tel: 944790119 euskalherria@ekologistakmartxan.org

Extremadura: C/ Vicente Navarro del Castillo bl.A ptal 14, 06800 Mérida
Tel: 609681976 extremadura@ecologistasenaccion.org

La Rioja: Apartado 363, 26080 Logroño
Tel./Fax 941245114 larioja@ecologistasenaccion.org

Melilla: C/ Colombia 17, 52002 Melilla
Tel: 630198380 melilla@ecologistasenaccion.org

Navarra: C/ San Marcial 25, 31500 Tudela
Tel: 626679191 navarra@ecologistasenaccion.org

País Valencià: C/ Tabarca 12 entresol, 03012 Alacant
Tel: 965255270 paisvalencia@ecologistesenaccio.org

Región Murciana: C/ José García Martínez 2, 30005 Murcia
Tel: 968281532 - 629850658 murcia@ecologistasenaccion.org