2010

CONSERVATION STATUS OF BIRDS IN SPAIN

SEO/BirdLife

SEO/BirdLife
www.seo.org

Remiz pendulinus © Quique Marcelo

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index

4 **Foreword: SEO/BirdLife**
Birds as biodiversity indicators and the work of SEO/BirdLife.

5 **Foreword: the Ministry of Environment and Marine and Rural Affairs**
Biodiversity monitoring systems and new targets after 2010.

6 **Introduction**
The latest available information about bird populations and IBAs for the 'International Year of Biological Diversity'.

8 **General results**
It has not been possible to halt the loss of biodiversity during the last decade.

18 **Birds in farmland habitats**
Modern farming methods are the cause of conservation problems for many birds in Spain.

26 **Birds in steppe habitats**
This is the most neglected habitat in terms of conservation measures, and almost all bird species associated with it suffer conservation problems.

28 **Birds in scrub habitats**
The Dartford Warbler and the Southern Grey Shrike are highlighted as the most endangered species of this environment.

30 **Birds in forest and woodland habitats**
Although in general the conservation status of forest and woodland birds is better than that in other habitats, many species are still threatened.

38 **Birds in alpine habitats**
Currently this is one of the habitats with the least information on bird populations.

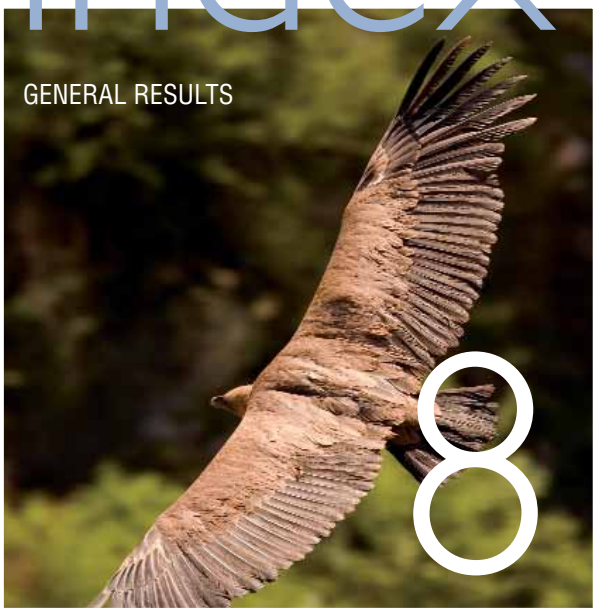
40 **Birds in rock face habitats**
Although most birds of prey associated with this environment show positive population trends, they are still threatened.

44 **Birds in wetland habitats**
After years of working to conserve Spanish wetlands, the situation for most of the associated bird species has not improved and many are still seriously threatened.

50 **Birds in marine habitats**
This group includes many species which have been very little studied; moreover, at sea there are numerous threats which mean that many of them are endangered.

54 **Birds in urban habitats**
Although the overall population of the bird species found in our cities is huge, some of them show worrying population declines.

56 **The status of Important Bird Areas**
The network of important areas for bird conservation has been completed thanks to the identification of marine IBAs.



FOREWORD: SEO/BirdLife

Birds as biodiversity indicators and the work of SEO/BirdLife.

It is difficult to overstate the important role that birds currently play as indicator organisms. Perhaps it is enough to point out that without them, it would have been far more time-consuming and costly to detect the very serious environmental problems caused by the use of DDT and other insecticides in the middle of the last century, or more recently, to discover the harmful effects that result from the intensification of agriculture on biodiversity. Without birds and, of course, without the hundreds or thousands of amateur ornithologists, organised through scientific and conservation associations, who contribute unselfishly with their knowledge and efforts to compile the necessary field information, we would not have access to as much biodiversity data as we do now. Since 1967, several species of birds have been used in the United States *National Pesticide Monitoring Program*. Since 1999 the population size of common birds has been used as one of the main indicators of quality of life and sustainable development in the United Kingdom. Little by little, as modern societies' enthusiasm for ornithology has grown, and concern about the environment and biodiversity conservation has also increased, long-term bird population monitoring programmes have also advanced, together with the institutional recognition of their practical applications.

In the case of Spain, the pioneering efforts date back to the 1970s with the organization of the winter waterfowl census and the work towards the national ornithological atlas. However, the common birds monitoring programme (SACRE, by its initials in Spanish) did not start until 1996. This represents a significant delay compared to other western European countries. Obviously, this is associated with the relatively late development of an interest in birds (by way of example, in 1980 SEO/BirdLife had not reached the figure of 500 members, while in 1990 it was just above 2,000 members, ten years later it exceeded 6,000 and today it is close to 12,000 members). Nevertheless, from very early on, we Spanish ornithologists saw very clearly what our goal was. In the belief that knowledge and the conservation of birds should go hand in hand, we have not wavered in our commitment to pursue high quality bird monitoring programmes. We have also been fortunate with the many years of trust placed in us by the public authorities responsible for biodiversity conservation, thus making possible the continuity of effort which is essential for the success of such programmes.

Sylvia undata © Francis Martín

For these reasons, the publication I am honoured to present here is, for me, and for all of us in SEO/BirdLife, a source of immense satisfaction. I believe that this document faithfully represents the different methodological approaches and the main results that, at last, allow us to have a relatively clear and accurate overview of the current state of Spain's bird fauna, which is the basic tool needed for its conservation. I am also confident that this information will be useful in the efforts of the different public authorities and non-governmental organisations to conserve biodiversity, especially important at a time when new goals are needed after the confirmation of the failure of the 2010 targets.

I cannot finish without expressing my thanks for the many sources of support that enable SEO/BirdLife to carry out its bird monitoring programme, especially our members and supporters who consistently get up at the crack of dawn to carry out field surveys. And last but not least, I would like to make clear our commitment to consolidate and improve as far as possible this very important work as we look to the future.

Eduardo de Juana
President
SEO/BirdLife

FOREWORD: MARM

Biodiversity monitoring systems and new targets after 2010

The United Nations has declared 2010 as the International Year of Biological Diversity. This is a unique opportunity to return biodiversity to the centre stage of politics. It coincides with the end of a cycle, marked by the failure to achieve the 2010 Target to stop biodiversity loss on the European Union scale. The EU Commission itself has acknowledged this fact in its interim assessment of the implementation of the EC Biodiversity Action Plan.

Over this whole period - that is, since the 2010 Target was announced until now - there have been important gaps in information and in standardised and comprehensive systems of indicators to assess compliance with the target. However, there are exceptions: for more than a decade, SEO/BirdLife - funded over the last six years by the Ministry of Environment, Rural and Marine Affairs (MARM, by its initials in Spanish) - has championed an initiative in Spain, setting up a monitoring system based on the most common birds, to study their population trends and the characteristics of their ecosystems.

Currently the work of the EU Spanish Presidency is in full swing. Spain supports an ambitious new post-2010 goal for the EU, which includes a long-term vision (2050) in which biodiversity and goods and services provided by ecosystems, are well protected and restored. There is also a medium-term mission (to be accomplished in 2020) to halt biodiversity loss and the degradation of ecosystem services, by restoring them as far as possible and by increasing the EU contribution to preventing global biodiversity loss.

Regardless of the final statement adopted for the new goal post 2010, it is clear that we must all work hard to achieve its compliance. However, there is no doubt that we now possess the invaluable basic knowledge to assess objectively the fulfilment of the new goals. This knowledge is largely the result of bird monitoring, carried out since 1998. In 2010 the MARM is due to complete the implementation of a biodiversity monitoring system in Spain. Here, SEO/BirdLife´s pioneering role is inspiring the monitoring being undertaken now with other groups of fauna and flora (mammals, amphibians, reptiles, freshwater fish, vascular plants and, soon, invertebrates).

This monitoring work is backed up by the instruments established by the Natural Heritage and Biodiversity Law 42/2007, which will establish indicators of trends in our biodiversity. By continuing this work, we will be able to take on the future evaluation of the challenges that we commit ourselves to in this Year of Biological Didiversity.

José Jiménez García-Herrera
Director General of Natural Environment and Forest Policy
Ministry of Environment and Rural and Marine Affairs

INTRODUCTION

The latest available information about bird populations and IBAs for the International Year of Biological Diversity

As 2010 is the International Year of Biological Diversity, this document has been published with aim of providing information on the status of biodiversity in Spain, based on bird populations.

In general, we understand biodiversity as "*the variety of plant and animal life in the world or in a particular habitat*" (Oxford English Dictionary). Ecologists add some nuances so that *the variety of lasting interactions among species and their immediate environment* is included in the definition. It is quite clear here that they are right, since - as we will see in subsequent chapters - it is in certain environments that most species with conservation problems are found, due to their close dependency on the habitats associated with that environment. In the same way, in the world of biology *biodiversity not only refers to the number of different species, but also to the number of populations of organisms*. Biodiversity is not only lost when species disappear; when thousands of individuals of a single species are lost, without it disappearing completely, this weakens the links between the different organisms and their surroundings, causing a drastic decline in biodiversity. Furthermore, it is possible to measure this loss in the number of individuals through bird monitoring programmes such as those carried out by SEO/BirdLife.

At present, birds are the animal group with the largest quantity of information available and they are therefore used as indicators of biodiversity health. Long-term monitoring programmes of bird populations, annual bird counts, the production and updating of atlases of bird distribution, the review of species action plans, the inventory of Important Bird Areas and all the work done by SEO/BirdLife thanks to thousands of volunteers, mean that birds are one of the tools by which we can understand the state of our environment.

In 2004, the publication of the latest *Red Book of Birds of Spain* and the new *Atlas of Breeding Birds of Spain* updated the figures used to establish the conservation status of our bird fauna. Six years on, SEO/BirdLife has continued to work on the inventory of birds and important bird areas, so that its conservation work is more effective.

With the aim of publicising the state of our birds in 2010, all the available and up-to-date information (up to and including 2009) has been methodically summarised in the present publication. The data come mainly from the Common Bird

Monitoring Programme (SACRE, by its initials in Spanish, 1996-2009), extended in 2008 with SACRE in winter, from the NOCTUA Programme for nocturnal birds (2004-2009), from the PASER ringing programme for migratory birds (1997-2009), from specific bird censuses (2004-2009) and from bringing together work undertaken by other people, groups or institutions. Where there is no new information available since the publication of the Red Book and the Atlas of Breeding Birds, the information presented is that included in these publications. The current status of the Important Bird Areas (IBAs) is also described, together with their degree of correspondence with the Special Protection Areas for birds (SPAs), with the data coming from the monitoring undertaken by a large number of volunteers.

There is now much more information available than there was six years ago, making it possible to reaffirm the concern for many species, sound the alarm for those species which previously had insufficient data available, or confirm the good conservation status of other species where appropriate. However, large information gaps still remain. Several projects set up in recent years by SEO/BirdLife - supported by the

The index obtained by SEO/BirdLife from the common bird monitoring programmes has become one of the indicators used by the Spanish Sustainability Monitoring Centre (OSE, in its initials in Spanish) to evaluate the Spanish development model. The 'Common Bird Index' is one of 6 Biodiversity Indicators considered in the Spanish Strategy for Sustainable Development (EEDS, in its initials in Spanish).

Ministry of Environment and Rural and Marine Affairs - will make it possible to identify conservation priorities more precisely: the new Atlas of Wintering Birds in Spain, the Common Bird Monitoring Programme in Winter and the computerisation of all the ringing data in Spain, which will make possible the publication of the first Atlas of Migratory Birds in Spain.

This document is divided into sections according to different environments. Each section describes the general characteristics of the habitat, its main conservation problems, the population trends of the common birds that are found there, and the current state of knowledge and conservation of the species which are monitored or for which there are separate census data available. Some generalist species could be included in the chapters for any of several different habitats, but they have been assigned to those where they are most frequently encountered.

The population trends of common bird species are expressed as an index calculated as the mean of the interannual variations between the first and last years considered by each monitoring programme (for more information about the significance of the trends, see: www.seo.org/seguimientodeaves). The conservation status of species considered to be uncommon has been established according to the latest available data and following the IUCN criteria, as in the production of the *Red Book of Birds of Spain*. Finally, the conservation status of the Important Bird Areas comes from the revision carried out between 2008 and 2010.

Emberiza calandra © Lius Barrón

In some habitats analyses by region have been carried out to identify the geographical differences in common bird trends.

Sylvia undata © Quique Marcelo

GENERAL RESULTS

It has not been possible to halt the loss of biodiversity during the last decade.

In the time that has elapsed since the publication of the most recent *Red Book of Birds of Spain* (2004), the vast majority of the species that were regarded as threatened continue to be so, and other species have become threatened or show disturbing negative trends. Some 23% of bird species with regular presence in Spain are at a high risk of extinction. A further 23% of common birds register a negative trend, and 74% of the Important Bird Areas (IBAs) show an unfavourable trend or are in an unfavourable conservation state.

Therefore, it is clear that Spain, along with the other European Union countries, has not fulfilled the target of halting biodiversity loss by 2010. This situation is the result of a combination of circumstances, which can be summarised as the lack of enforcement of existing laws and the delay in the development and implementation of the various strategies and plans to conserve species and protected areas. In Europe and in Spain the legislation is frankly very good (for example, the Birds and Habitats Directives, Law 4/1989, now replaced by the Law 42/2007, etc.), and it should allow us to improve significantly the situation of our bird species, which are still facing many threats. For instance, the destruction of habitats affects all of the threatened species and for 80% of them this threat is of high importance, according to the latest Red Book.

Currently, the Spanish bird fauna comprises 439 species that breed or winter in or migrate regularly across our country, although there are records of more than 500 species. Of these, 156 are listed in some of the categories of threatened species established by IUCN in the latest *Red Book of Birds of Spain* (2004). In 2010, in addition to the available data for the assessment made in the Red Book, information has been updated on 181 taxa through specific coordinated censuses or population estimates, and population trends are available for 142 species recorded in the common bird monitoring programme.

The indicators obtained through the study of birds must be a fundamental part of the monitoring system for the new post-2010 Biodiversity Target, which will be defined at European level during the Spanish Presidency of the EU (first half of 2010) and approved at the 10th Conference of the Parties to the Convention on Biological Diversity (October 2010 in Nagoya, Japan).

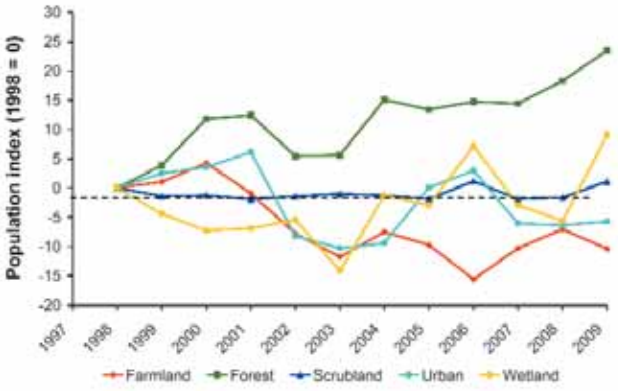
Common birds: the general picture

The trends of some birds that, up until now, had large populations and were widely distributed, should be of particular concern. The monitoring carried out for more than ten years shows that more than 20% of these birds, designated 'common birds', show a negative trend. This decline is a symptom, or an indicator, that the functioning of some habitats has changed to a significant degree. This situation must be addressed as soon as possible to avoid these and other species from being included on the Red List in the medium term. But reversing the negative trends may be a complex matter, as it implies the need to modify significant land-use policies such as those for agriculture, transport infrastructure or urban development.

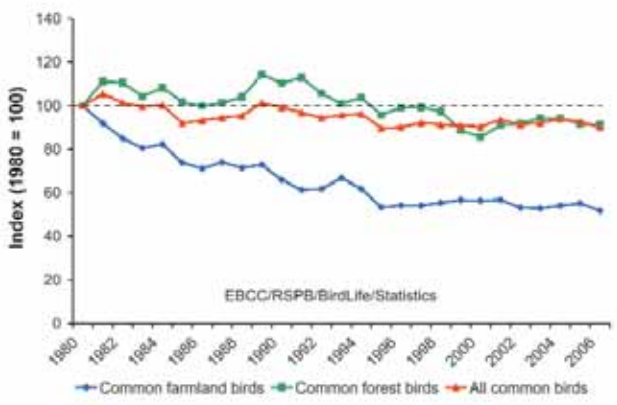
Among the common birds, only one taxon has been found to suffer a significantly important decline in the last 12 years: the Whinchat. This is a species associated with the agricultural environments of northern Spain, a habitat in which there appears to be a general decline, although not so marked, for all the species present. Besides the Whinchat, a moderate decline has been detected in 31 common birds. Most of them are also linked to farmland (Skylark, Calandra Lark, Zitting Cisticola, Pied Wagtail, Black-eared Wheatear, Goldfinch, Common Quail, Yellowhammer, Crested Lark, Tree Sparrow, Southern Grey Shrike and Corn Bunting) and others are related to more open environments, but also connected with farming systems (Eurasian Jackdaw, Serin, Little Owl and Green Woodpecker). Also the Dartford Warbler, very much associated with scrubland, shows a downward trend. The largest population increase has been observed in both the Eurasian Collared-Dove and the Great Spotted Cuckoo, in continuous trends detected over the last five years.

However, for the 140 most common birds in Spain the general trend is stable when all species are considered together: the average of the interanual variations between 1998 and 2009 was +0.2%. The reason for this apparent overall stability is that the declines in farmland habitats are offset by the increases in woodland and forest species, which have been consistent in recent years.

Cyanopica cyanus © Javier Milla



Trends in populations of common bird associated with different habitat types in Spain, 1998-2009



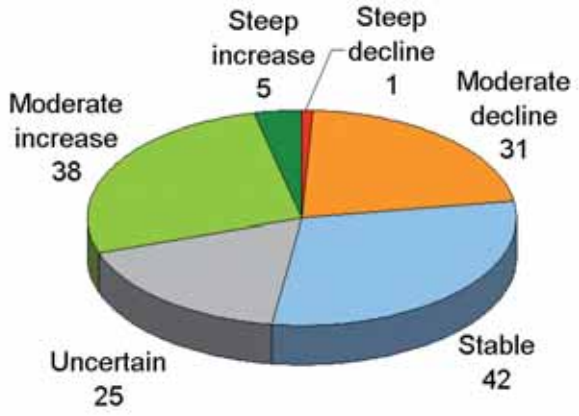
In Europe all the groups of common birds show negative trends.

Passer hispaniolensis © Luis Barrón

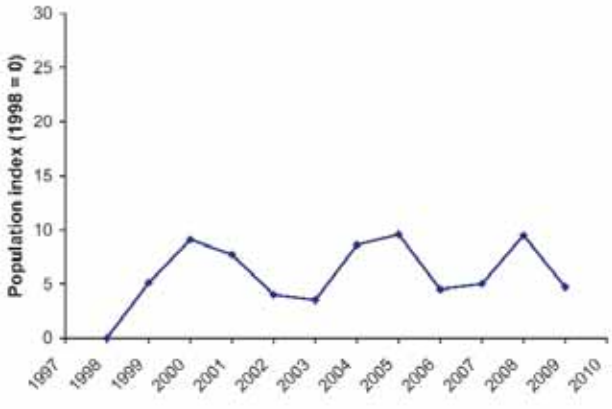
The SACRE Programme shows clearly that 30 out of the 38 species with a moderate positive trend are birds of scrub or forest environments. Nevertheless, some taxa in these habitats, such as the Common Bullfinch, the Common Whitethroat and the Green Woodpecker, show some degree of decline.

These indicators reveal that farmland is being subjected to a greater loss of biodiversity than other environments and, therefore, it is necessary to take specific measures to halt and reverse this decline. The recorded annual average decline in these populations is more and more pronounced (-0.6% up to 2008 and -1.1% up to 2009), and even more so in farmed dryland areas (especially in areas under the traditional cereal cropping system).

Carduelis carduelis © Antonio Pestana



The Common Bird Monitoring Programme (SACRE, by its initials in Spanish), undertaken in Spain between 1998 and 2009, via the annual repetition of 20 listening stations in nearly 900 areas (around 18,000 census points), has established one of the best indicators of our biodiversity.



Changes in populations of all common bird species, 1998-2009

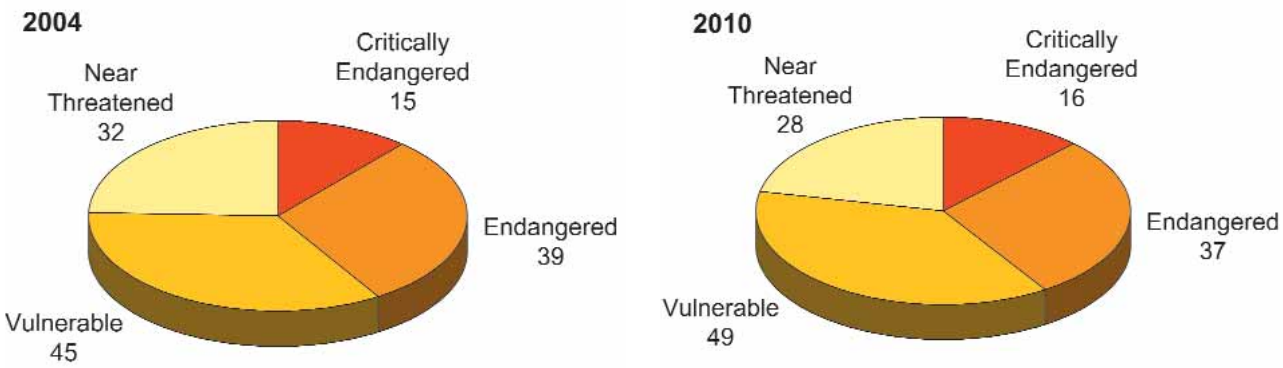
Threatened species: the general picture

Most of the species with a high risk of extinction ten years ago, continue to be threatened today. Fortunately, very few species or taxa have joined this 'negative' list.

Through the coordinated special census programme (carried out by SEO/BirdLife in recent years in cooperation with the Ministry and the regional governments), the population size, area of distribution and the trends of 84 species have been updated (when previous information was available), most of which are included in the *Red Book of Birds of Spain*.

Likewise, their conservation status has been updated from that published in the latest Red Book. For example, the Black Tern has passed from 'Endangered' to 'Critically Endangered'; two other species of tern, the Sandwich Tern and the Little Tern, from 'Near Threatened' to 'Vulnerable'; and the Hen Harrier and the Peregrine Falcon are now classified as 'Vulnerable' as their likelihood of extinction has increased.

However, not all the trends detected are negative. Following the results of the 2007 census, the Slender-billed Gull could move from 'Vulnerable' to unlisted, since the species is expanding in Spain and its population is growing.



Category changes in threatened species between 2004 and 2010

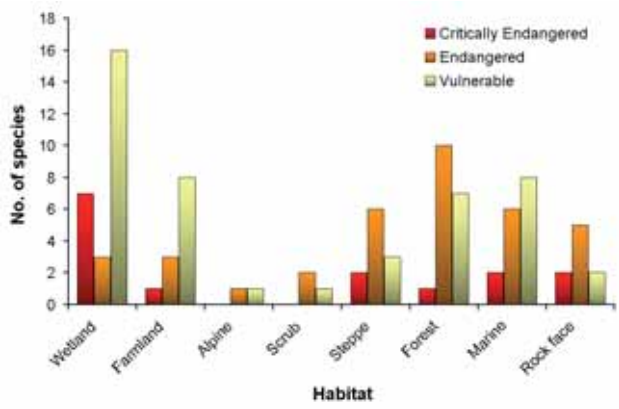
Currently, wetland birds are the most threatened species group. In fact, 8 out of the 16 taxa classified as "Critically Endangered" are birds associated with his environment, since most of them have very small populations and very strict habitat requirements. Although we no longer see wetland drainage schemes, our wetlands suffer pollution from agriculture, industry and domestic sewage discharges, poor water management and substantial human disturbance. The approval of new River Basin Management Plans and wetland SPA Management Plans in 2010 and 2011 are opportunities that must not be wasted.

The conservation status of birds in steppe habitats is also very worrying. Two-thirds of them (67%) are classified in the threatened categories: two are 'Critically Endangered' with populations nearly extinct, the **Small Buttonquail** and a subspecies of the **Lesser Short-toed Lark** (*Calandrella rufescens rufescens*); six are 'Endangered', **Houbara Bustard, Dupont's Lark, Cream-coloured Courser, Trumpeter Finch** and two endemic subspecies of the Canary Islands (**Stone-curlew** subsp. *distinctus* and **Lesser Short-toed Lark** subsp. *polatzeki*). The agricultural intensification brought about by the Common Agricultural Policy, the degradation of habitats caused by urban expansion and infrastructure construction, and bird mortalities in power lines are the main reasons for these declines, in addition to overgrazing in the Canary Islands.

The conservation status of seabirds is also inadequate. Despite the majority of their colonies being protected, the trend is negative, mainly because of the high mortality rate among adults. Accidental captures in marine fishing gear and hydrocarbon pollution are the main causes, in addition to rodent predation of eggs and chicks in seabird colonies. Particularly noteworthy is the fragile situation of the **Balearic Shearwater**, an endemic breeding bird of the Balearic Islands. It is necessary to declare maritime extensions of existing SPAs as soon as possible and to establish an effective strategy to avoid the accidental deaths of birds in fishing gear.

Chersophilus duponti © Juan Martín Simón

Although the conservation status of common forest birds is generally good, this group also includes a certain number of endangered species, such as the **Western Capercaillie**, the **Red Kite** and some forest passerine species, endemic to the Canary Islands, catalogued as 'Endangered'.



Number of species included in some of the threatened categories in the different habitat types examined.

While the overall situation is unfavourable, experience shows that when strong conservation decisions have been taken for one species, encouraging results have been obtained. A good example is the **Spanish Imperial Eagle**. In this case, a national strategy has been adopted as well as recovery plans in a large part of its geographical range; public authorities and NGOs have invested considerable resources in its conservation. This bird of prey has nearly doubled its breeding population in the last ten years: from 131 pairs in 1998 to 253 in 2009.

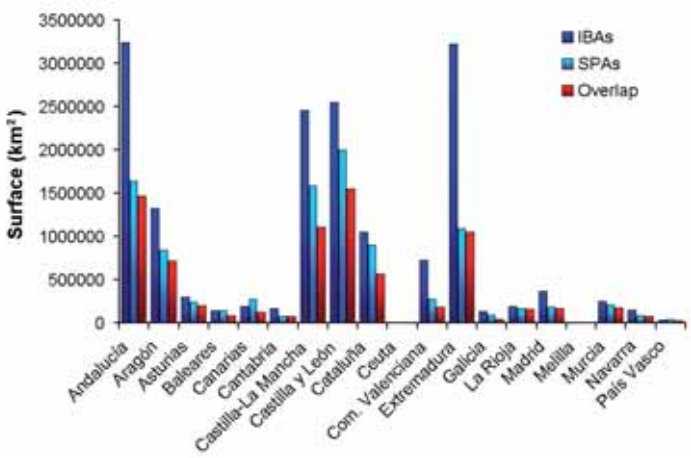
Status of Important Bird Areas

One of the reasons for the downward trend in many species in Spain is the continuous degradation of the most important areas for their conservation. In recent years more land has been protected, but still not enough, and the effectiveness of this protection is yet to be seen.

Despite the fact that close to 50% of the IBAs have been protected as SPAs, hardly any of them have their obligatiory Management Plan and the regional governments invest very little in their conservation.

Only 28% of the most important areas for bird conservation (IBAs) are fully protected by some form of legal designation. In 19% of cases, the majority of the IBA is protected, so it can be said that only half of them are declared as SPA in the way that they should be. Furthermore, 22% are only partially protected and 23% have less than 10% of their area protected.

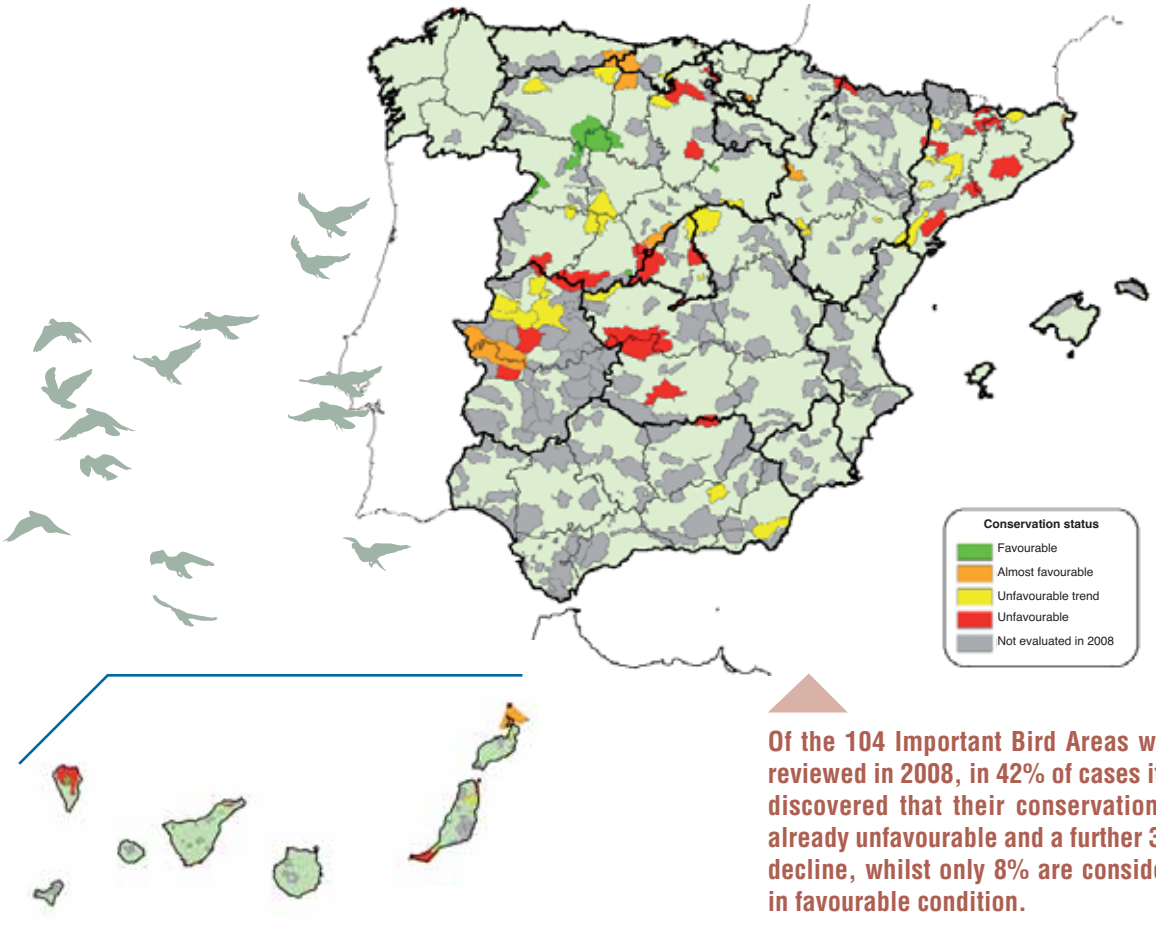
The conservation status of the IBAs, and thus that of the SPAs,



Surface area of IBAs, SPAs and overlaps between the two, in each Autonomous Community

is extremely worrying. The review of the condition of these areas in Spain by SEO/BirdLife, carried out between 2008 and 2010, concludes that 42% of them are in unfavourable condition and in 32% of the cases the trend is unfavourable, while just 8% are well protected.

The main reasons for this continuous degradation are human disturbance, road building, overexploitation of resources, agricultural intensification, urban development and infrastructures related to energy industries and mining extraction.



Of the 104 Important Bird Areas which were reviewed in 2008, in 42% of cases it has been discovered that their conservation status is already unfavourable and a further 32% are in decline, whilst only 8% are considered to be in favourable condition.

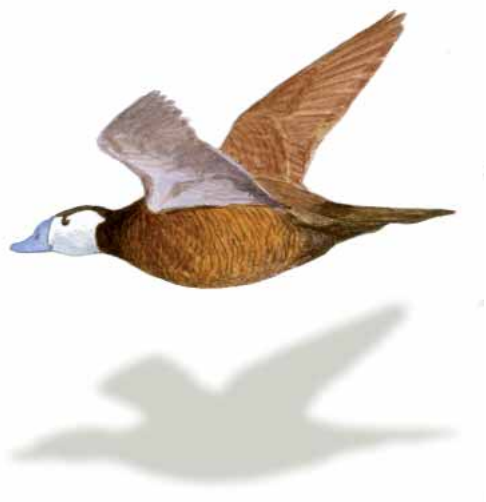
Between 2004 and 2008, through an EU LIFE project and with support from the Ministry of Environment and Rural and Marine Affairs, SEO/BirdLife developed an innovative methodology to identify important areas for seabird conservation. The results constitute the first inventory of marine IBAs published in Spain.

It is a ground-breaking project with a broad scope, the objectives of which were the development of a reference methodology for the identification of such areas in other parts of the world and the production of an exhaustive inventory of of marine IBAs which would serve as guide for the designation of the Natura 2000 network in the Spanish marine environment.

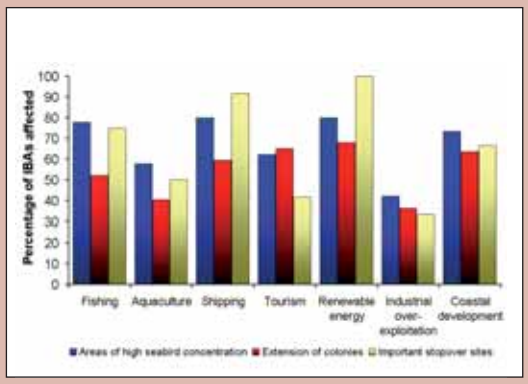
The project has made it possible to identify 42 marine IBAs through the use of novel techniques and greater logistical facilities for the study of birds at sea; both for the gathering of information (censuses at sea, remote sensing) and for its analysis (cartographic interpretation through geographic information systems, habitat models, etc.)

These 42 areas are scattered throughout Spanish waters: ten around the Canary Islands; eight in the north-west mainland (Cantabrian Sea-Galicia), eight in the Atlantic-Mediterranean transitional zone (between the Sea of Alborán and the Gulf of Cádiz) and 16 in the Mediterranean (eight around the Balearic Islands and eight along the mainland continental shelf and continental slope). The peculiarities of each region (physical and biotic characteristics and seabird commmunities), have had a strong influence in the type of IBA identified.

Seabirds are increasingly threatened, and at a faster pace than any other group of birds in recent decades. The causes are the growing intensity and diversity of the threats they face, both on land and at sea: predation by introduced exotic species, habitat degradation and destruction, human disturbance, fisheries (accidental capture), maritime traffic, tourism, wind turbines, construction on the coast, etc. In principle, all human activities at sea could represent a certain degree of threat for the 27 species that met the criteria to identify these 42 marine IBAs.



The types of threats in the marine environment are highly varied and affect birds during the reproductive periods, in the migration, in the breeding areas, in areas of concentration, etc.

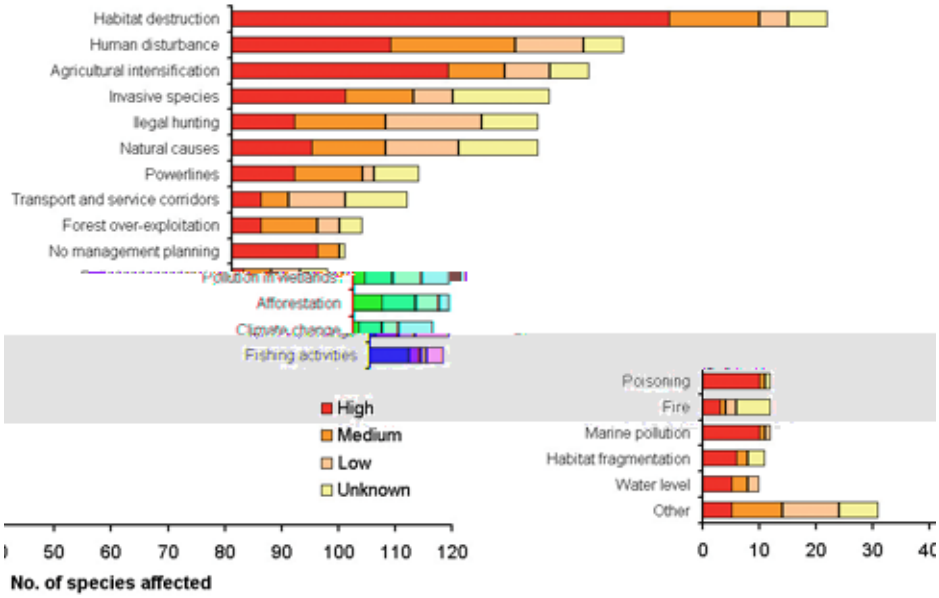


Threats

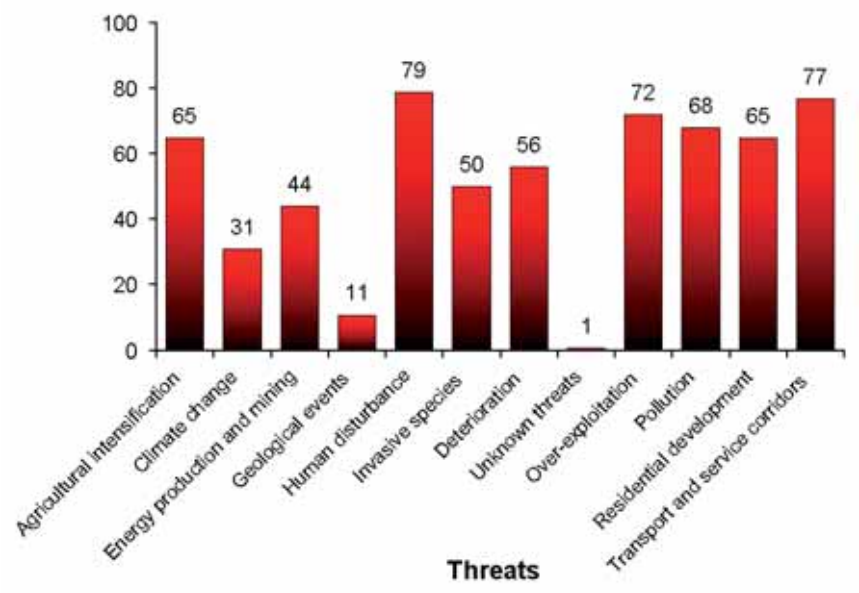
The most comprehensive information on threats posed to birds is compiled in the Red Book. For each one of the species, the experts indicate the main threats and the importance they have for each of the species assessed. Thanks to this work, we now know that destruction or loss of habitat, human disturbance, agricultural abandonment or intensification, competition and predation by introduced species and unsustainable or illegal hunting affect over half of the threatened species in Spain. Furthermore, linear infrastructure (basically power lines and roads) affects more than 30% of species.

There are three basic tools that should reduce these threats to birds: 1) environmental impact assessment, 2) recovery plans for threatened species and 3) protected area management plans. The first tool, despite its availability, is not implemented properly; in fact in practice it is totally inoperable. Only profound legal reform and enhanced awareness on the part of the public authorities will bring about a change in this situation. As for the species recovery and site management plans, despite their being legal obligations, they have in most cases not been approved. However, the Natural Heritage Law, passed in December 2007, establishes a deadline of December 2010 for the adoption of all of these plans.

Although there has been very limited progress in eliminating these threats over the last ten years, it is worth mentioning the Royal Decree passed in 2008 which requires the modification of dangerous power lines to significantly reduce bird mortality by electrocution.



Threats to birds included in the Red Book.



Threats in IBAs

© Marcelo Cabrera

© Jordi Prieto

Critically Endangered

Anser fabalis	*Fulica cristata*	*Puffinus mauretanicus*
Aythya nyroca	*Lanius minor*	*Tadorna ferruginea*
Botaurus stellaris	*Marmaronetta angustirostris*	*Turnix sylvatica*
Calandrella rufescens rufescens	*Neophron percnopterus majorensis*	*Uria aalge*
*Chlidonias niger**	*Numenius tenuirostris*	
Fringilla teydea polatzeki	*Pandion haliaetus*	

Endangered

Aquila adalberti	*Cursorius cursor*	*Numenius arquata*
Bucanetes githagineus amantum	*Cyanistes caeruleus degener*	*Oceanodroma castro*
Bulweria bulwerii	*Cyanistes caeruleus ombriosus*	*Oxyura leucocephala*
Burhinus oedicnemus distinctus	*Cyanistes caeruleus palmensis*	*Phalacrocorax aristotelis aristotelis*
Burhinus oedicnemus insularum	*Emberiza schoeniclus lusitanica*	*Puffinus assimilis*
Calandrella rufescens polatzeki	*Emberiza schoeniclus witherbyi*	*Puffinus puffinus*
Calonectris diomedea diomedea	*Falco pelegrinoides*	*Pyrrhocorax pyrrhocorax barbarus*
Cercotrichas galactotes	*Fringilla coelebs ombriosa*	*Saxicola dacotiae*
Charadrius morinellus	*Fringilla coelebs palmae*	*Tetrao urogallus*
Chersophilus duponti	*Gallinago gallinago*	*Tetrao urogallus*
Chlamydotis undulata fuertaventurae	*Gypaetus barbatus*	*Tyto alba gracilirostris*
Columba junoniae	*Hieraaetus fasciatus*	
Corvus corax canariensis	*Milvus milvus*	

Vulnerable

Accipiter nisus granti	*Dendrocopos leucotos*	*Otis tarda*
Acrocephalus melanopogon	*Dendrocopos major canariensis*	*Pelagodroma marina hypoleuca*
Acrocephalus paludicola	*Dendrocopos major thanneri*	*Perdix perdix*
Aegypius monachus	*Emberiza schoeniclus schoeniclus*	*Phalacrocorax aristotelis desmarestii*
Anas acuta	*Falco naumanni*	*Phoenicurus phoenicurus*
Anas crecca	*Falco peregrinus**	*Platalea leucorodia*
Anas querquedula	*Falco tinnunculus dacotiae*	*Plegadis falcinellus*
Apus caffer	*Fringilla teydea teydea*	*Pterocles alchata*
Calandrella brachydactyla	*Gavia immer*	*Pterocles orientalis*
Calonectris diomedea borealis	*Glareola pratincola*	*Rissa tridactyla*
Charadrius alexandrinus	*Hydrobates pelagicus*	*Sterna albifrons**
Chlidonias hybrida	*Lagopus muta*	*Sterna nilotica*
Ciconia nigra	*Larus audouinii*	*Sterna sandvicensis**
*Circus cyaneus**	*Larus genei **	*Streptopelia turtur*
Circus pygargus	*Limosa limosa*	*Tetrax tetrax*
Coracias garrulus	*Neophron percnopterus**	*Tringa totanus*
Corvus frugilegus	*Netta rufina*	

* New species in this category
** According to the revision of 2006, the species would leave this category

The declines recorded in many small birds, which, up to now, had no such information available, could extend the list of species in unfavourable conservation status by dozens.

Steep Decline (1998-2009)

Saxicola rubetra

Moderate Decline (1998-2009

Alauda arvensis	*Gallinula chloropus*	*Picus viridis*
Athene noctua	*Hirundo rustica*	*Podiceps cristatus*
Carduelis cannabina	*Lanius meridionalis*	*Pyrrhula pyrrhula*
Carduelis carduelis	*Lanius senator*	*Remiz pendulinus*
Corvus monedula	*Melanocorypha calandra*	*Saxicola torquatus*
Coturnix coturnix	*Milvus milvus*	*Serinus serinus*
Emberiza calandra	*Monticola solitarius*	*Sylvia communis*
Emberiza cirlus	*Motacilla alba*	*Sylvia undata*
Emberiza citrinella	*Oenanthe leucura*	*Tachybaptus ruficollis*
Falco subbuteo	*Passer domesticus*	
Galerida cristata	*Passer montanus*	

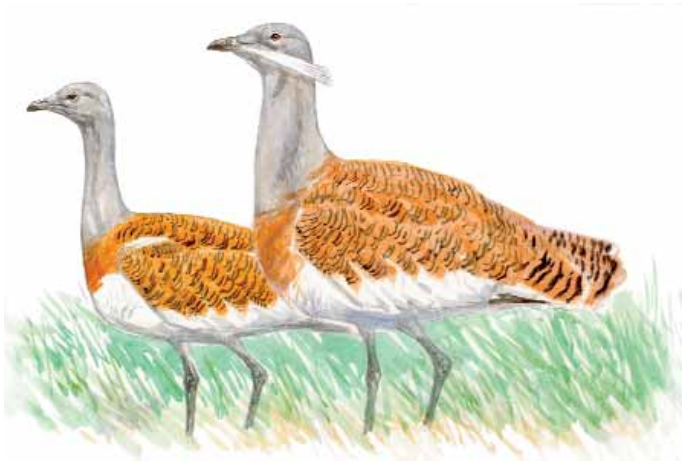
Emberiza calandra © Luis Barrón

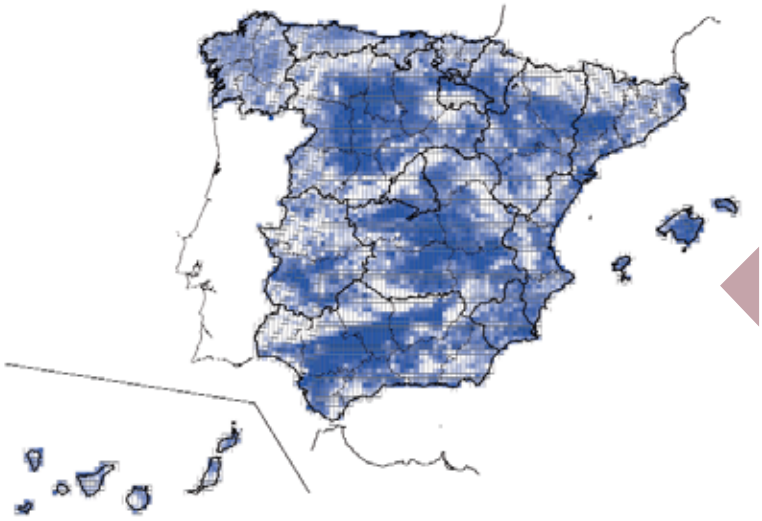
BIRDS IN FARMLAND HABITATS

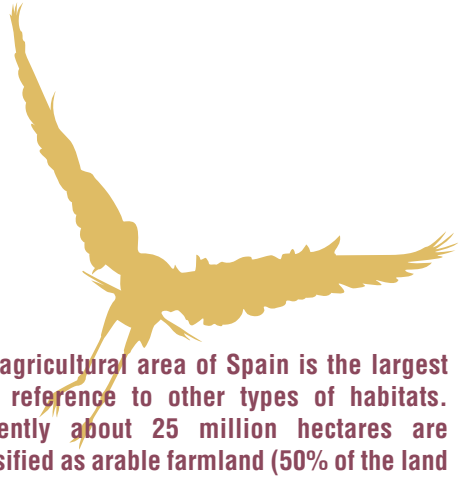
Modern farming methods are the cause of conservation problems for many birds in Spain.

Man's use of the land for arable and livestock farming is so long-established and it has been so closely associated with the distribution of the human population in Europe, that it is difficult to find a region, however small or remote, where this activity has never been developed. Even today, taking into account the seasonally grazed areas, almost 80% of the Spanish land surface has some kind of agricultural use, conditioning the characteristics of the habitat. However, the degree and type of agricultural use is highly variable and the dividing line between agricultural and natural is, in many cases, almost imperceptible.

In recent decades, technological advances, changes in social expectations, and, especially, the Common Agricultural Policy (CAP) have determined the development of agricultural activity in two opposite ways: intensification, in the most productive areas or those with the best transport links, and abandonment, in extensive, less fertile or more isolated areas.







The agricultural area of Spain is the largest with reference to other types of habitats. Currently about 25 million hectares are classified as arable farmland (50% of the land surface), concentrated in the two central plateaux, the Levante area (Eastern Spain, Valencia and Murcia) and the valleys of the large rivers. The rest is dominated by grassland or extensive livestock rearing.

These farming systems are a source of serious conservation problems, something especially alarming considering that, in the case of birds, nearly 60% of species regarded as of priority conservation concern in Europe depend partially or totally on these habitats. The main threat is continuing land use change, due to changes in crop and livestock management towards more productive systems, or the abandonment of farmland in favour of more profitable activities or industrialisation. In particular, agricultural intensification and the consequent homogeneisation of the landscape, the misuse of agrochemicals, the introduction of machinery, etc. have simplified the habitat and in consequence, the bird communities.

The list of species associated with this environment is long and highly variable depending on the three most widespread farmland types: hay pastures bordered by trees and bushes, frequent in the north; areas of cereal crops, prevailing in the central plateaux, Aragon and a large parte of Andalusia; and arboreal agricultural environments (olive groves in Andalusia and fruit and nut orchards on the Mediterranean coast and in Aragon). The different structure and characteristics of these environments also determine the very different bird communities.

Half of the common bird species which show negative population trends are particularly associated with farmland habitats.

In the sampling of the SACRE monitoring programme, from the 146 species of birds recorded by this census system, 46 have been detected with a high frequency of occurrence in farmland habitats. Only in one case has a sharp decline been registered: the Whinchat, associated with farmland in the north of Spain and which had not shown such a marked decline in previous years, although a moderate decrease had been noted since 2005.

Oenanthe hispanica © Francis Martín

Nevertheless, of the 31 species of common birds that currently show a moderate decline, 17 of them are linked to farmland; i.e., more than 50% of the most abundant birds with conservation problems have the common denominator of leading their life cycle in this environment, which clearly shows the relevant role of agricultural management. Birds like the Skylark, the Calandra Lark, the Zitting Cisticola, the Pied Wagtail, the Black-eared Wheatear, the Goldfinch, the Common Quail, the Yellowhammer, the Crested Lark, the Tree Sparrow and the Corn Bunting, etc. are very abundant, so a small decrease in their populations means the loss of many thousands of birds from our fields.

© Blas Molina

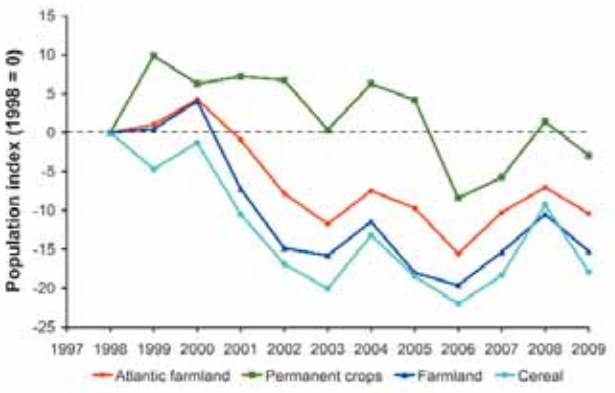
This decline within farmland habitats has been detected over many years, but currently the problem may be accelerating: the average annual decrease between the first year of the programme and 2008 was -0.6%, while in 2009 it reached -1.1%. The species affected are those with large populations. The decrease implies the loss of thousands of specimens in one of the most human-manipulated environments.

When considering the different types of farmland, the dryland systems show the greatest decline, followed by northern farmland, while the orchards and olive groves show a much lower decrease.

Tetrax tetrax © Quique Marcelo

Group	Average change (%)	Trend
Farmland birds	-1.1	Moderate decline
Birds associated with cereal systems	-1.4	Moderate decline
Birds associated with northern farmland	-1.3	Moderate decline
Birds associated with orchards and olive groves	-0.7	Moderate decline

Average annual changes and population trends of common birds associated with different farmland habitats, 1998-2009.



Changes in populations of common birds associated with different farmland habitats, 1998-2009.

The latest available results for the different bird groups in Europe correspond to the period 1980-2006, including data for Spain since 1996. The change at a European level for birds associated with farmland environments is -48%, which indicates a common point where all conservation organisations should focus their efforts: the Common Agricultural Policy.

Amongst all the changes arising from agricultural intensification, the disappearance of field boundaries and patches of natural vegetation is one of those with the greatest direct impact on biodiversity.

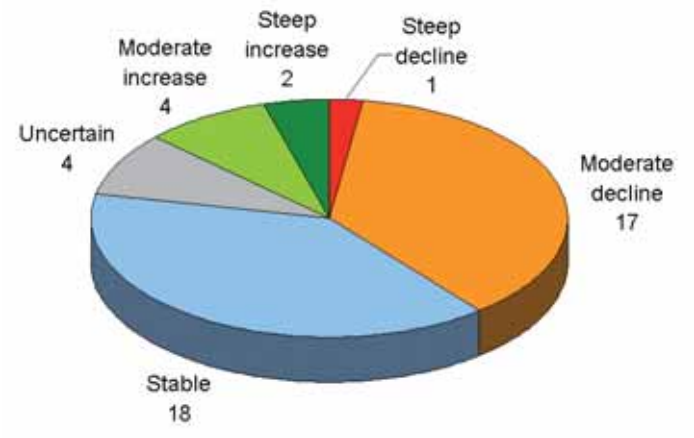
Saxicola torquata © Luis Barrón

Farmland birds in Spain as a whole also show a general decline throughout the country, although by **regions**, the eastern region shows some stability in the cereal systems and the central region in the orchards and olive groves.

Region	Groups	Average change (%)	Trend
North	Birds associated with northern farmland	-1.5	Moderate decline
Centre	Birds associated with cereal systems	-1.8	Moderate decline
Centre	Birds associated with orchards & olive groves	-0.6	Moderate decline
East	Birds of cereal systems	0.1	Stable
East	Birds associated with orchards & olive groves	-1.0	Moderate decline
South	Birds of cereal systems	-1.5	Moderate decline
South	Birds associated with orchards & olive groves	-1.7	Moderate decline

Average annual changes and population trends of common birds associated with different farmland habitats, by regions, 1998-2009.

By **species**, the ones associated with dryland systems, mainly cereals, have shown a continued decline over the last few years (Common Quail, Corn Bunting, Crested Lark, Calandra Lark and Skylark) and, in general terms, all those which are frequent in these kinds of crops.



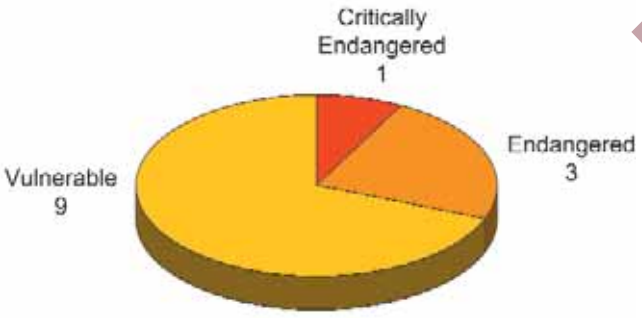
In the SACRE programme carried out by SEO/BirdLife, it has been shown that 46 common bird species spend most of their life cycle linked to farmland habitats. Of these, a high percentage are in decline (39%), while only a few show a positive trend.

© Alejandro Vicente

Species	Maximum	Minimum	Average change (%)	Trend
Alauda arvensis	-1.3	-3.3	-2.3	Moderate decline (p<0.01) **
Alectoris rufa	0.3	-1.2	-0.4	Stable
Anthus campestris	3.3	-2.1	0.6	Stable
Athene noctua	-1.1	-5.3	-3.2	Moderate decline (p<0.01) **
Burhinus oedicnemus	2.2	-1.4	0.4	Stable
Calandrella brachydactyla	1.8	-2.7	-0.4	Stable
Carduelis cannabina	-0.2	-2.1	-1.1	Moderate decline (p<0.05) *
Carduelis carduelis	-0.8	-2.4	-1.6	Moderate decline (p<0.01) **
Carduelis chloris	3.0	1.4	2.2	Moderate increase (p<0.01) **
Ciconia ciconia	5.5	2.6	4.1	Moderate increase (p<0.01) **
Circus cyaneus	7.4	-1.2	3.1	Uncertain
Circus pygargus	2.6	-0.3	1.1	Stable
Cisticola juncidis	0.4	-2.1	-0.8	Stable
Coracias garrulus	14.7	-1.7	6.5	Uncertain
Corvus monedula	-3.0	-6.3	-4.7	Moderate decline (p<0.01) **
Coturnix coturnix	-1.9	-4.1	-3.0	Moderate decline (p<0.01) **
Emberiza calandra	-0.3	-1.8	-1.1	Moderate decline (p<0.01) **
Emberiza cirlus	-0.4	-3.7	-2.1	Moderate decline (p<0.05) *
Emberiza citrinella	-2.3	-6.8	-4.6	Moderate decline (p<0.01) **
Emberiza hortulana	3.3	-2.9	0.2	Stable
Falco naumanni	13.8	7.1	10.5	Strong increase (p<0.01) **
Falco tinnunculus	0.4	-2.2	-0.9	Stable
Galerida cristata	-0.2	-1.7	-0.9	Moderate decline (p<0.05) *
Hirundo daurica	3.6	-0.9	1.4	Stable
Hirundo rustica	-0.7	-2.2	-1.5	Moderate decline (p<0.01) **
Lanius collurio	1.4	-2.9	-0.7	Stable
Lanius senator	-0.2	-2.9	-1.5	Moderate decline (p<0.05) *
Melanocorypha calandra	-2.7	-5.1	-3.9	Moderate decline (p<0.01) **
Merops apiaster	1.4	-0.9	0.2	Stable
Motacilla alba	-2.8	-5.3	-4.0	Moderate decline (p<0.01) **
Motacilla flava	3.1	-0.6	1.3	Stable
Oenanthe hispanica	0.0	-2.9	-1.4	Stable
Otis tarda	10.7	4.3	7.5	Moderate increase (p<0.01) **
Passer hispaniolensis	16.0	-8.8	3.6	Uncertain
Passer montanus	-1.9	-5.1	-3.5	Moderate decline (p<0.01) **
Petronia petronia	2.4	-0.8	0.8	Stable
Pica pica	0.2	-1.2	-0.5	Stable
Pterocles alchata	14.3	6.5	10.4	Strong increase (p<0.01) **
Pterocles orientalis	0.7	-7.3	-3.3	Uncertain
Saxicola rubetra	-7.8	-24.1	-16.0	Steep decline (p<0.01) **
Saxicola torquatus	-3.7	-5.5	-4.6	Moderate decline (p<0.01) **
Serinus serinus	-1.6	-2.8	-2.2	Moderate decline (p<0.01) **
Streptopelia turtur	0.4	-1.8	-0.7	Stable
Sturnus unicolor	2.2	0.6	1.4	Moderate increase (p<0.01) **
Tetrax tetrax	0.5	-3.3	-1.4	Stable
Upupa epops	0.7	-1.0	-0.2	Stable

Average annual changes and population trends of common birds associated with farmland habitats, 1998-2009

In recent years, censuses of less common birds have been carried out and, in general terms, their conservation status is unfavourable, due to small population size or negative population trends.



Lesser Grey Shrike
Common Raven (ssp. *canariensis*)
Barn Owl (ssp. *gracilirostris*)
Rufous-tailed Scrub Robin
Little Bustard
Great Bustard
Pin-tailed Sandgrouse
Montagu's Harrier
European Roller
Short-toed Lark
Common Kestrel (ssp. *dacotiae*)
Rook

The European Union's European Strategy for Sustainable Development, revised in 2006 from the Gothenburg 2001 original, aims to create an environment where resources are managed and used efficiently. The Farmland Bird Index, puts the success of this Strategy in some doubt.

The **Lesser Grey Shrike** is in an absolutely critical situation, although it is at the limit of its range and its population has never been large (35-40 pairs during the 1980s; in 2009 there were no more than four pairs left). Others, like the Canary Island subspecies of **Common Raven** and **Barn Owl** are still classified as 'Endangered', with new censuses awaited to confirm their current conservation status. In 2004 SEO/BirdLife carried out the first national census of the **Rufous-tailed Scrub Robin** and a larger population than expected was found, although with a wide margin of error (200,000-500,000 individuals). Since then, however, in areas where the species has been continuously monitored for some years, the drop in numbers is close to 50%, which means that this species is classified as 'Endangered'.

Cercotrichas galactotes © Luis Barrón

Pterocles orientalis © Juan Bécares

The remaining species, more characteristic of steppe environments, are also in a fragile state of conservation and all are classified in the 'Vulnerable' category, with very small populations which are in decline. The national censuses carried out in recent years have demonstrated the fall in these species' numbers. For example, the census of the **Little Bustard** established a figure of 41,500-86,000 males (among 71,000-150,000 individuals), which confirms its decline in recent decades. In addition, an important decline in habitat quality has been detected in a large part of the geographical range of the **Great Bustard**. Although the population is apparently numerous (around 24,000 individuals) and the main sub-populations seem to maintain their healthy state, it is still considered to be in a sensitive state of conservation.

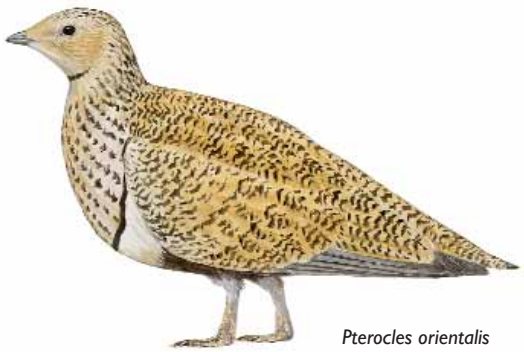
Coracias garrulus

At the European level, the value of birds as a measure of our quality of life is also recognised. Therefore, the European Union Statistics Agency (Eurostat) has included the "Farmland Birds Index", among its structural indicators. Since 2007 this index is also used to measure the sustainability of agricultural and rural development policy.

The latest censuses have laid the foundations for understanding better some birds for which we had no records of population trends or data which might indicate, with some degree of accuracy, their population size. In the 2005 national census of the **Black-bellied Sandgrouse**, a population estimate of 7,700-13,000 individuals was obtained, significantly lower than previously estimates. The 2006 census of **Montagu's Harrier** established a population size of 6,000-7,300 pairs, but its trends and conservation problems in its nesting areas suggest it should be included in the 'Vulnerable' category.

Circus pygargus

There is still not enough information available to assess the populations of some species and although they occupy a large area and their population size is assumed to be large, their actual numbers and population trends are completely unknown. Efforts must be made to focus on these species in future work: the Stone-curlew, the European Roller and the Short-toed Lark.



Pterocles orientalis

Furthermore, the two most frequent nocturnal birds of prey in these environments, the Little Owl and the Barn Owl, show uncertain trends according to the nocturnal bird monitoring programme, 'NOCTUA'. This shows considerable increases in some seasons, followed almost immediately by significant declines; however, the disappearance of these two species over large areas has been registered.

Species	Maximum	Minimum	Average change (%)	Trend
Athene noctua	4.1	-5.1	-0.5	Uncertain
Tyto alba	17.3	-5.7	5.8	Uncertain

Average annual changes and population trends of common nocturnal birds associated with farmland habitats, 2004-2009.

Calandrella rufescens © Quique Marcelo

BIRDS IN STEPPE HABITATS

This is the most neglected habitat in terms of conservation measures, and almost all bird species associated with it suffer conservation problems.

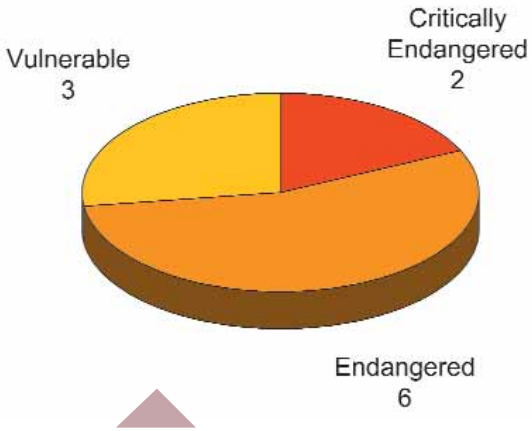
Although, strictly speaking, there are no pure or original steppes in Spain, there are certain areas, in general arid or semiarid, dominated by creeping vegetation with frequent bare and stony ground, that can be included in this habitat type. These areas have tradicionally only been used for low intensity livestock grazing, now in evident decline, but which, in many cases, contributes to the maintenance of the habitat. It includes salt flats, areas with thyme bushes, lavender and dry tussock grass, and semi-desert areas usually regarded as of little economic value, but possessing a unique ecological wealth and with bird species which find almost their only habitat here.

The most representative areas are located in the Ebro River valley, the high, dry plains of the northern plateau, wide areas in the south-east of the Peninsula, from Alicante to Almeria and Granada, in the south of Extremadura and last but not least, the Canary Island steppe habitats.

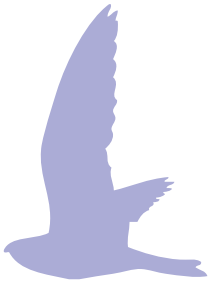
Being small areas, the bird populations most directly associated with this environment are similarly small, so they are not adequately detected by long-term monitoring systems; thus, specific censuses are needed to determine their population size, trends and conservation status. As a result, the available information is incomplete for some species such as the Stone-curlew, the Lesser Short-toed Lark, the Berthelot's Pipit, the Tawny Pipit, the Spectacled Warbler or the Trumpeter Finch.

Steppe habitats are under serious pressure. Because of their low economic returns, they have been left to marginal uses, such as rubbish dumps, stone and aggregate extraction, or reforestation, or else sacrificed in all kinds of infrastructure projects such as roads, railways or, more recently, renewable energy facilities. These are the reasons for the disappearance of large expanses of habitat for some highly endangered species, such as the Dupont's Lark and the Houbara Bustard.

Most of the species with specific censuses have in common their classification in one of the threatened categories.



Small Buttonquail
Lesser Short-toed Lark (*ssp. rufescens*)
Dupont's Lark
Houbara bustard
Cream-coloured Courser
Lesser Short-toed Lark (*ssp. polatzeki*).
Stone-curlew (*subsp. distinctus*)
Trumpeter Finch (*subsp. amantum*)
Pin-tailed Sandgrouse
Hen Harrier
Lesser Kestrel



In recent years there has not been any record of the **Small Buttonquail**, so it can be considered 'Extinct' and as such an urgent recovery effort is needed.

The Canary Island subspecies of **Lesser Short-toed Lark** (*Calandrella rufescens rufescens*) is almost in the same situation. Its population has fallen by 90% in recent decades and its area of distribution by 70%. Currently it is maintained almost entirely by birds in captivity, but with one or two pairs in the wild in the north of Tenerife.

The latest censuses of **Dupont's Lark** estimate that there are between 3,500-4,200 males, although the female-male ratio is still not known with sufficient accuracy to able to assess its total population size. It has a very restricted and fragmented population, occupying a limited area. A sharp decline has been confirmed in some areas, while in others the species has disappeared, especially due to land use change. The continuing loss of habitat prevents these sub-populations from recovering and reconnecting, a situation that must be reversed if its conservation in Spain is to be ensured.

Two species, only found in the Canary Islands, have more information available. The population of the **Houbara bustard** is estimated to number between 778-1,282 individuals. It is listed as 'Endangered' and, despite improving slightly, still faces two severe conservation problems: the destruction and degradation of its priority areas and the high mortality rate caused by collisions with power lines. If these threats remain in the future, along with others (roadkill, disturbance, overgrazing, predation, etc...) this risk of extinction could not only become consolidated but could even increase. In the early 1990s, the census of the **Cream-coloured Courser** population returned a total of around 2,000 individuals on three islands: Fuerteventura (around 1,700 birds), Lanzarote (some 300) and La Graciosa (less than ten individuals). Some 84% of the population is concentrated in 531 km^2, where it shares its territory with the Houbara Bustard.

In 2005 the Spanish population of the **Pin-tailed Sandgrouse** numbered 8,500-11,500 individuals, less than in previous estimates. Both its small population size and its downward trend, require a reconsideration of its status, at the European level, to 'Vulnerable'. In the same way, the regional governments should reclassify it and consider it as a priority species for conservation efforts.

The only common bird of prey in steppe habitats is the **Hen Harrier**, also frequent in the scrub habitats of Galicia and Asturias. Although there were previous population estimates available, it was not censused at national level until 2006, when 900-1,300 breeding pairs were recorded. The regions of Castilla y Leon (490-620 pairs) and the Basque Country (150-210) have the greatest responsibility for its conservation. Although its population seems stable, it is listed as 'Vulnerable' because of its small population size and its dependency on very unstable ecological systems.

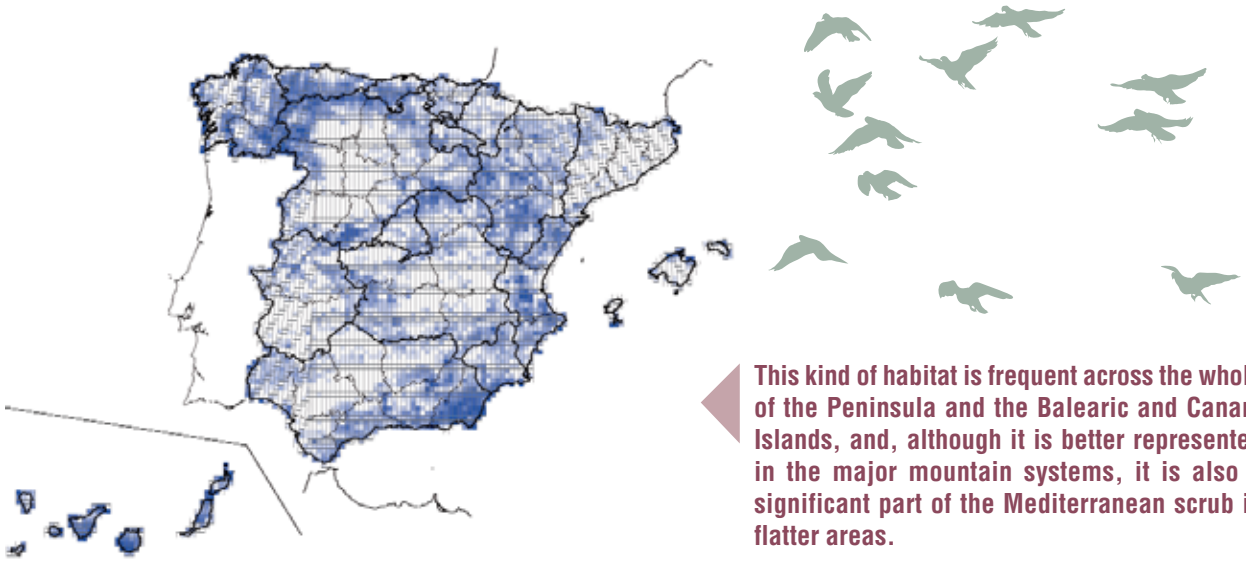
Chlamydotis undulata © Aurelio Martín

Hippolais polyglota © Luis Barrón

BIRDS IN SCRUB HABITATS

The Dartford Warbler and the Southern Grey Shrike are highlighted as the most endangered species of this environment.

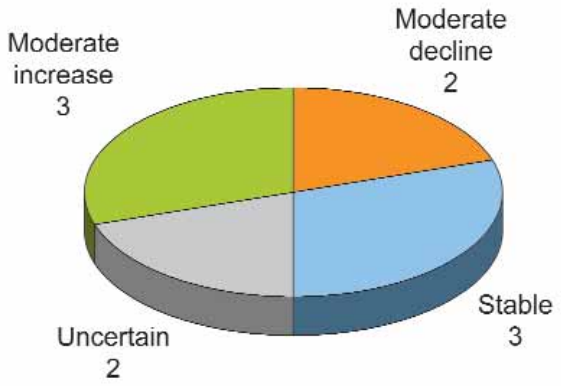
In Spain, the patches of scrubland habitat vary in their structure depending on their altitude. Above the treeline, there are both areas of thorny bushes (leguminous plants like gorse) and other non-thorny scrub (broom, heather, etc.). The sub-montane zone is usually formed by tall and medium-sized bushes (e.g. broom and rock rose), which create a very distinctive type of habitat. At mid and low altitudes there are also large expanses of scrub with highly varied vegetation depending on the substrate, humidity, etc. Formations of juniper, gorse, kermes oak, broom and rock rose, are all important, extending in many cases down to sea level.



This kind of habitat is frequent across the whole of the Peninsula and the Balearic and Canary Islands, and, although it is better represented in the major mountain systems, it is also a significant part of the Mediterranean scrub in flatter areas.

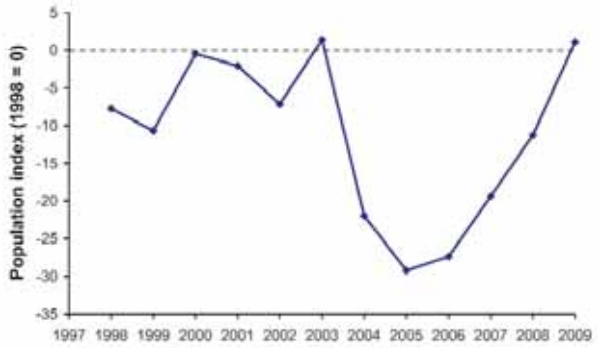
© Virgina Scandell

© Raul Fernández



In SEO/BirdLife's SACRE programme, ten species typical of this habitat have been recorded. None of them showed any signs of a strong increase or decline and their overall trend is stable. However, two species, the Southern Grey Shrike and the Dartford Warbler, show a negative trend, not only at national level, but also in the four main regions in which the country has been divided. Both species have shown this trend for several years and, although the decline is moderate (-6.1% and -4.8%), their conservation status should be examined.

Sylvia atricapilla © Luis Barrón



Changes in populations of common birds associated with scrub habitats, 1998-2009.

Region	Average change (%)	Trend
North	1,3	Moderate increase
Centre	-0,1	Stable
East	0,4	Stable
South	0,8	Moderate increase

According to the established, the analyses for the group of birds associated with scrub habitats show stable or positive trends.

Species	Maximum	Minimum	Average change (%)	Trend
Emberiza cia	1.8	-1.7	0.1	Stable
Galerida theklae	5.1	0.9	3.0	Moderate increase (p<0.01) **
Hippolais polyglotta	3.7	1.1	2.4	Moderate increase (p<0.01) **
Lanius meridionalis	-4.0	-8.2	-6.1	Moderate decline (p<0.01) **
Monticola saxatilis	1.1	-10.2	-4.6	Uncertain
Prunella modularis	1.0	-2.8	-0.9	Stable
Sylvia conspicillata	2.4	-8.3	-3.0	Uncertain
Sylvia hortensis	9.9	2.7	6.3	Moderate increase (p<0.01) **
Sylvia melanocephala	0.8	-1.2	-0.2	Stable
Sylvia undata	-2.9	-6.7	-4.8	Moderate decline (p<0.01) **

Average annual changes and population trends of common birds associated with scrub habitats, 1998-2009.

The censuses conducted in recent years for some less common species reveal the poor conservation status of some of them. The **Eurasian Curlew** is listed as 'Endangered', although in Spain it is at the limit of its range; its small population in Galicia could disappear through infrastructure development in its only known current breeding location. The **Canary Islands Stonechat** is classified as 'Endangered', although the latest estimated population is far superior to previous ones, possibly due to the change in census and analysis methods used for this species.

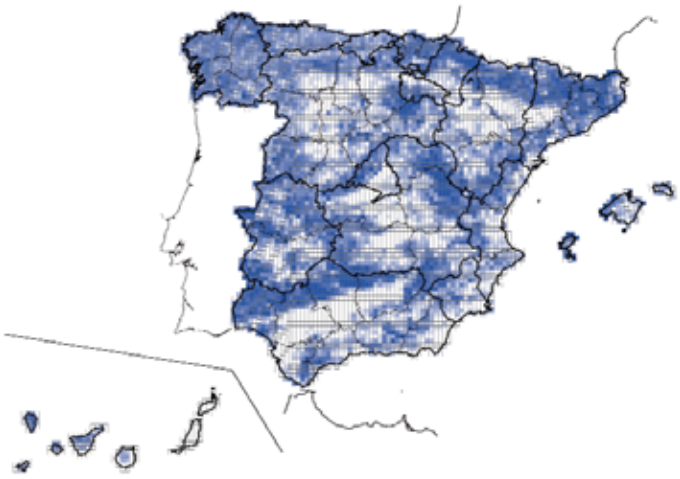
For other taxa, such as the **Grey Partridge**, there is no updated information, so a specific census - never before conducted in Spain - is urgently needed. The only estimates, based on very limited censuses, indicate a population of 2,000-6,000 individuals. Nevertheless, local monitoring has confirmed a severe decline in recent decades as a result of land use change and the fragmentation of its habitat.

BIRDS IN FOREST AND WOODLAND HABITATS

Although in general the conservation status of forest and woodland birds is better than that in other habitats, many species are still threatened.

The diversity of Spain's forests is a true reflection of its geographical location and the range of different climates, geology and soils. Three kinds of forest can be identified, with very different forest structure and species composition, corresponding to the three major biogeographic regions: the Atlantic 'Eurosiberian' region in the north; the Mediterranean, occupying the southern two thirds of the Iberian Peninsula; and the Macaronesian region in the Canary Islands.

Two forest types, almost exclusive to Spain and Portugal within the European Union, should be highlighted: the traditional agroforestry system called 'dehesa' (livestock pasture lands dotted with trees) so characteristic of the western and south-western mainland, and the laurel forests on the Canary Islands and in Cádiz Province.



According to the latest national inventory, the surface area covered by forest in Spain is around 15 million hectares, 29% of the land surface.

Although a very large part of the original native forest cover was lost in the past due to agricultural clearance and logging for firewood and timber, very extensive forested areas in good condition still remain. Most of them are located on the slopes of the Peninsula's mountain ranges and the two archipelagoes. Furthermore, the reforestation carried out by the public authorities during the 1960s, 70s and 80s has now matured sufficiently to host interesting bird populations.

Whilst the forest cover in Spain continues to improve in extent and maturity, its state of conservation is not as good as it should be. Various threats proliferate such as the opening of forest tracks, the clearing of large stands for livestock use, indiscriminate clearfelling which triggers an important loss of biodiversity, forest fires, etc. Likewise, the loss of connectivity between these wooded areas increases the risks for the most endangered species.

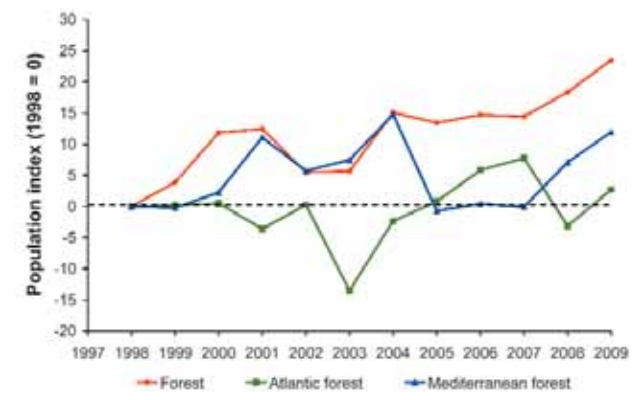
The birds associated with forests and woodlands are the only group which in general seem to be in good conservation status, although some species suffer major problems. Taken as a whole, the birds typical of these environments have shown an average annual increase of around 2.2%. However, recent trends are not as positive as in earlier years, which may mean bird numbers are approaching stability or even a future decline. Furthermore, not all forest and woodland species show this same trend, so there is a need to be vigilant and confirm whether this is a temporary occurrence or whether resources for conservation can really be dedicated to other priorities.

The birds exclusively associated with the forests of the 'Eurosiberian' region in the north of Spain, (Common Bulfinch, Song Thrush, Garden Warbler, Goldcrest and Firecrest, etc.) show a very slight increase. The increase is not very notable either in the case of the specialist birds of the Mediterranean forest (Azure-winged Magpie, Mistle Thrush or Bonelli's

Warbler). The more generalist birds (Common Chaffinch, Coal Tit, Blue Tit, etc.) are responsible for the most of the overall positive trend seen in this group and this may be due to their use of the small woodland patches, forest 'islands' in mosaics mixed with other habitats. Both the modest progress of specialist birds in pure forests and the stronger progress of the more generalist birds are good signs, so the task of improving the state of conservation of the large forests must continue.

Group	Average change (%)	Trend
Common forest birds	2.2	Moderate increase
Atlantic forest birds	0.4	Moderate increase
Mediterranean forest birds	1.0	Moderate increase

Average annual changes and population trends of common birds associated with forest and woodland habitats, 1998-2009.



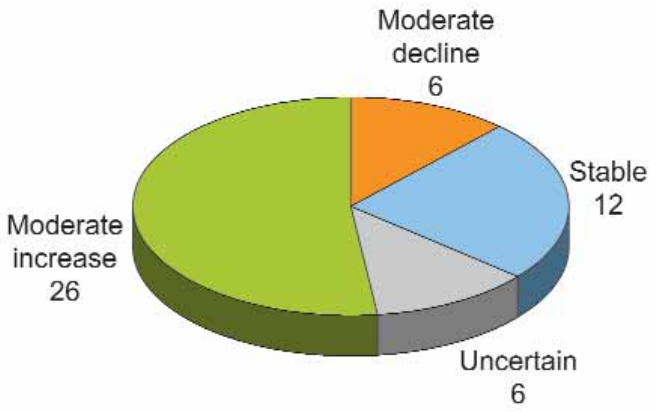
Changes in populations of common birds associated with different forest and woodland habitats, 1998-2009

By **region**, forest birds also show an overall increase in the whole country, although in the South, this trend seems to be more marked. The Northern region, the most extensive forested area, shows the slowest rate of progress, although it still remains positive.

Region	Group	Average change (%)	Trend
North	Atlantic forest birds	0.3	Moderate increase
Centre	Mediterranean forest birds	1.3	Moderate increase
East	Mediterranean forest birds	1.4	Moderate increase
South	Mediterranean forest birds	1.7	Moderate increase

Average annual changes and population trends of common birds associated with forest and woodland habitats, by regions, 1998-2009.

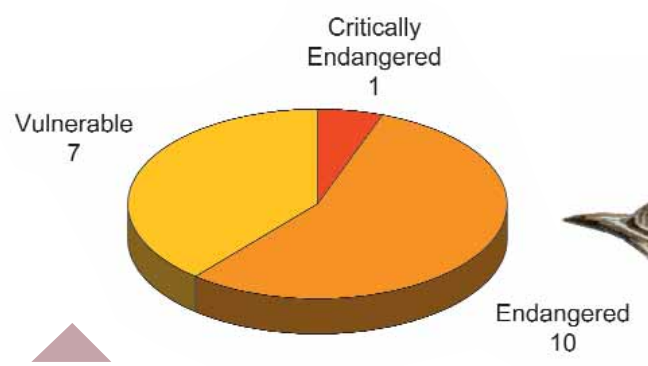
Out of the 50 most common species in our forests, 52% of them show a moderate population increase and 24% of them are stable. However, in six of them a moderate decline has been detected.

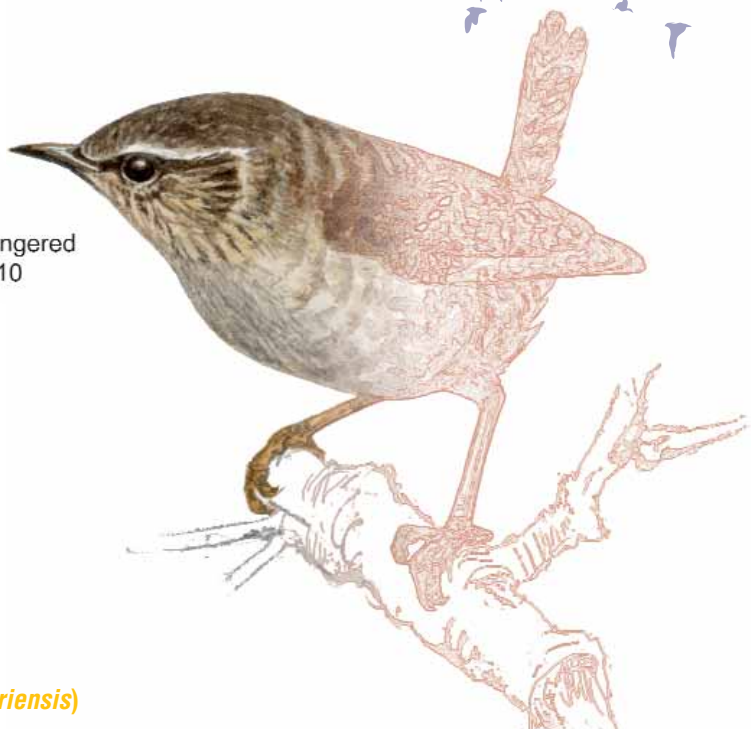


Species	Maximum	Minimum	Average change (%)	Trend
Accipiter gentilis	17.3	-3.4	6.9	Uncertain
Accipiter nisus	10.0	-1.6	4.2	Uncertain
Aegithalos caudatus	0.8	-2.7	-1.0	Stable
Aegypius monachus	17.4	2.1	9.7	Moderate increase (p<0.05) *
Anthus trivialis	4.8	0.4	2.6	Moderate increase (p<0.05) *
Buteo buteo	1.4	-1.5	0.0	Stable
Certhia brachydactyla	3.4	0.4	1.9	Moderate increase (p<0.05) *
Circaetus gallicus	5.5	-1.7	1.9	Uncertain
Coccothraustes coccothraustes	11.1	-1.5	4.8	Uncertain
Columba palumbus	2.8	1.1	2.0	Moderate increase (p<0.01) **
Corvus corax	2.4	-1.3	0.6	Stable
Corvus corone	0.8	-1.0	-0.1	Stable
Cyanistes caeruleus	3.6	1.7	2.6	Moderate increase (p<0.01) **
Cyanopica cyanus	6.8	3.0	4.9	Moderate increase (p<0.01) **
Dendrocopos major	6.2	3.0	4.6	Moderate increase (p<0.01) **
Dendrocopos minor	26.8	2.9	14.9	Moderate increase (p<0.05) *
Erithacus rubecula	2.1	0.3	1.2	Moderate increase (p<0.01) **
Falco subbuteo	-4.3	-15.2	-9.7	Moderate decline (p<0.01) **
Ficedula hypoleuca	3.8	-10.9	-3.5	Uncertain
Fringilla coelebs	4.4	3.0	3.7	Moderate increase (p<0.01) **
Garrulus glandarius	3.8	1.1	2.4	Moderate increase (p<0.01) **
Hieraaetus pennatus	8.3	2.0	5.2	Moderate increase (p<0.01) **
Jynx torquilla	2.2	-4.2	-1.0	Stable
Lophophanes cristatus	1.8	-2.2	-0.2	Stable
Loxia curvirostra	10.9	2.6	6.8	Moderate increase (p<0.01) **
Lullula arborea	2.0	-0.3	0.8	Stable
Luscinia megarhynchos	3.1	1.7	2.4	Moderate increase (p<0.01) **
Milvus migrans	4.5	1.1	2.8	Moderate increase (p<0.01) **
Milvus milvus	-1.2	-6.6	-3.9	Declive moderado (p<0.01) **
Muscicapa striata	1.9	-3.8	-0.9	Stable
Oriolus oriolus	5.5	3.6	4.6	Moderate increase (p<0.01) **
Parus major	2.1	0.8	1.4	Moderate increase (p<0.01) **
Periparus ater	3.4	0.8	2.1	Moderate increase (p<0.01) **
Phasianus colchicus	14.3	1.9	8.1	Moderate increase (p<0.05) *
Phoenicurus phoenicurus	10.4	0.7	5.6	Moderate increase (p<0.05) *
Phylloscopus bonelli	6.1	3.2	4.7	Moderate increase (p<0.01) **
Picus viridis	-0.9	-3.0	-2.0	Moderate decline (p<0.01) **
Pyrrhula pyrrhula	-0.9	-7.2	-4.0	Moderate decline (p<0.05) *
Regulus ignicapilla	2.8	-0.9	1.0	Stable
Regulus regulus	4.6	-8.8	-2.1	Uncertain
Sitta europaea	6.5	2.2	4.4	Moderate increase (p<0.01) **
Sylvia atricapilla	5.1	3.1	4.1	Moderate increase (p<0.01) **
Sylvia borin	1.2	-3.7	-1.2	Stable
Sylvia cantillans	5.4	1.5	3.5	Moderate increase (p<0.01) **
Sylvia communis	-0.3	-4.0	-2.2	Moderate decline (p<0.05) *
Troglodytes troglodytes	1.8	0.0	0.9	Moderate increase (p<0.05) *
Turdus merula	1.3	0.2	0.7	Moderate increase (p<0.05) *
Turdus philomelos	3.2	-0.3	1.5	Stable
Turdus viscivorus	1.5	-2.4	-0.4	Stable

Average annual changes and population trends of common birds associated with forest and woodland habitats, 1998-2009.

As well as the overall indicator provided by common birds, detailed information also exists on particular species. Some of these taxa reflect serious problems that could even lead to their extinction in a few years.





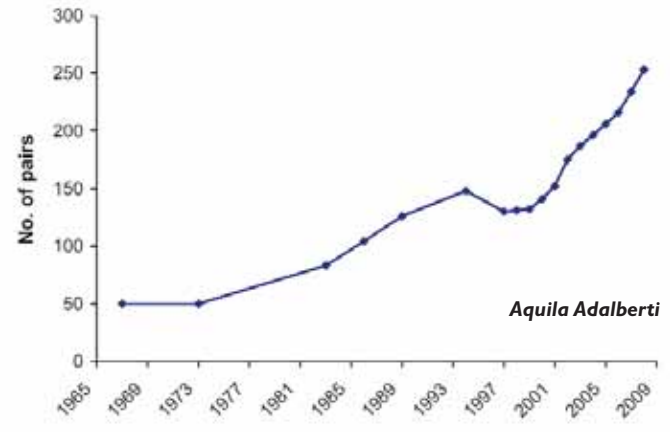
Blue Chaffinch (ssp. *polatzeki*)
Spanish Imperial Eagle
Red Kite
Laurel Pigeon
Capercaillie (ssp. *cantabricus & aquitanicus*)
Blue tit (ssp. *depener, palmensis & ombriosus*)
Common Chaffinch (ssp. *palmae & ombriosa*)
Black Vulture
Black Stork
White-backed Woodpecker
Blue Chaffinch (ssp. *teydea*)
Common Kestrel (ssp. *dacotiae*)
Great Spotted Woodpecker (ssp. *thaneri & canariensis*)

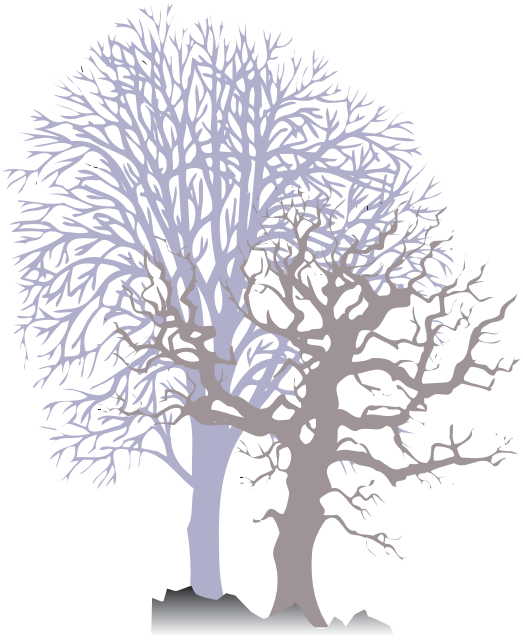

Fringilla teydea © Julio González

Sitta europaea © Luis Barrón

The Canary Island subspecies of the **Blue Chaffinch** (*Fringilla teydea polatzeki*) is the most endangered species of this group of habitats ('Critically Endangered'). Its population has been reduced to a few individuals, found in small patches of woodland and around the original forest, after the 2007 fire. Moreover, the two Canary Island subspecies of **Common Chaffinch**, *F. coelebs palmae* and *F. c. ombriosa*, remain listed as 'Endangered', since the whole population is found in one single location. The same is true for *F. t. teydea*, which continues in its 'Vulnerable' state.

There is more detailed information available for the **Spanish Imperial Eagle** than in the previous case and there are currently 253 breeding pairs.

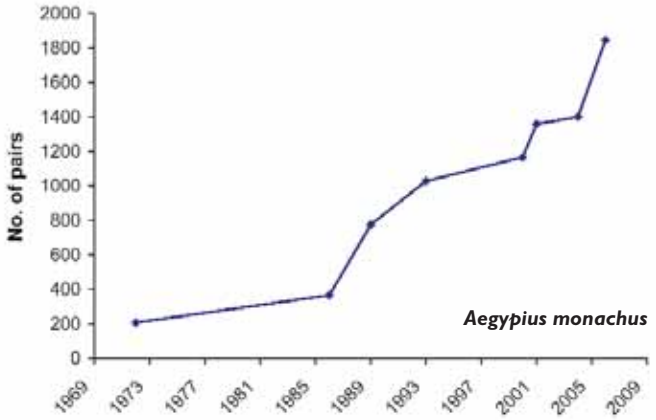




The Spanish Imperial Eagle population is slowly recovering, but we cannot forget that this increase is the result of the major investment made annually for this species. These measures should not be abandoned since, even today, the number of specimens is still very low and the species is classified as 'Endangered'.

The **Red Kite** has also been the object of several national censuses and its population size and decline are well documented. In 2004 there was a wintering population of 35,523-36,233 individuals, whilst in 1994, the overwintering estimate was 66,235-72,165, representing a decline of close to 50% in 10 years. The reduction among the breeding population is also large: the 3,333-4,054 pairs calculated in 1994, dropped to 2,167 in 2004, justifying the species' listing as 'Endangered'.

For the **Black Vulture** there are several approximate population estimates and some full censuses. In the most recent, in 2006, 35 colonies and 5 isolated pairs were located, together amounting to 1,845 pairs; after corrections for census dates and the coverage of certain colonies, the population was finally estimated at 2,442 pairs. Thus, its progress in recent decades has been very positive and seems to have been maintained or even accelerated over the last few years.



New threats have been identified that could alter this trend. In some autonomous communities, measures of breeding success have fallen in recent years and, likewise, the deaths by poisoning have not stopped. These aspects could limit the growth of the population or trigger a negative trend in a few years time. Currently the species is included in the 'Near Threatened' category.


Luscinia megarhynchos © Antonio Pestana

© Jaime G. Puente

The situation with regard to the **Black Stork** is somewhat worse than the previous cases. In addition to having a scarce population (less than 500 pairs), no specific censuses have been carried out to determine its general trend. Nevertheless, the monitoring studies carried out in some regions, such as Castilla y Leon and Madrid, do show a slight decline, the reason for its 'Vulnerable' classification.

The **Capercaillie** presents an alarming case with respect to forest environments, with two populations, very different in distribution and conservation status. The Pyrenean population is estimated at 562-573 males, 80% of the 1980s figure. However, the Cantabrian population, apart from being smaller, shows a much more worrying decline, being the only subspecies considered globally threatened by the Tetraonidae Specialist Group of the International Union for the Conservation of Nature. Both subspecies, the Cantabrian and the Pyrenean, are included in the 'Endangered' category in the latest *Red Book of Birds of Spain*.

Forest species are also threatened in the Canary archipelago. The **Laurel Pigeon** is the worst case and it is included in the 'Endangered' category because of its small population (2,000 individuals) and its negative trend, caused by the disappearance of its warm forest habitat. The **Bolle's Pigeon** population numbers several thousand individuals, but no accurate censuses exist to provide a more precise population estimate. Despite this, its population has partially recovered in recent years and it is now considered as 'Near Threatened'.

The first census in Spain for the **Black Kite** was carried out in 2006 with an estimated result of about 10,300 pairs (9,500-10,900). Two autonomous regions are especially important for its population: Castilla y León (3,700 pairs; 3,300-4,100) and Extremadura (3,000 pairs; 2,700-3,400). As the previous estimates are based on regional surveys and calculations, not comparable with the latest census, it is not possible to assess its trend. Still, it can be concluded that, in general, its population is healthier than previously thought and at present the Black Kite should not be listed in any of the most important IUCN threat categories.

There are numerous forest species without an adequate quantitative baseline from which to calculate their population trends. SEO/BirdLife is conducting a census in 2009 and 2010, for forest and woodland birds of prey and this could be the starting point in obtaining an indicator for a wider group of species found in this environment.

Troglodytes troglodytes © Antonio Pestana

BIRDS IN ALPINE HABITATS

Currently this is one of the habitats with the least information on bird populations.

A habitat is considered as alpine in Spain when it is located over 1,500 metres above sea level. The harsh conditions, extreme winds, low temperatures and snow cover that lasts for six to eight months a year in some locations, limit the existence of vegetation to large areas of grasslands and creeping shrubs, with large expanses of rock and scree and, on occasion, slopes which reach the vertical.


© Jaime G. Puente

Livestock grazing is the most widespread land use and, with the exceptions of ski stations, the alpine zones are relatively undisturbed.

Only a few bird species are considered as alpine in Spain, but even so, their population sizes and trends are unknown. The only detailed information available regarding their range comes from the atlases of breeding birds. Of the eleven species associated with this environment - Water Pipit, Dunnock, Alpine Accentor, Bluethroat, Northern Wheatear, Rufous-tailed Rock Thrush, Wallcreeper, Yellow-billed Chough, Snowfinch, Dotterel and Ptarmigan - only the latter two qualify under the main IUCN threat criteria. The Dotterel is classified as 'Endangered' and the Ptarmigan as 'Vulnerable'.

The **Ptarmigan** population is estimated at between 442 and 738 breeding pairs, based on its density and available favourable habitat, but a general reduction in its range and a certain population decline has been observed, more accentuated in the peripheral populations of its breeding core group in the Pyrenees above 1,200 m. The scarce breeding pairs of the **Dotterel** in the Pyrenees breed more on the northern French side of the mountains and in fact, no evidence of their breeding has been registered in Spain in recent years.


Lagopus muta © Juan Bécares

Gyps fulvus © Javier Milla

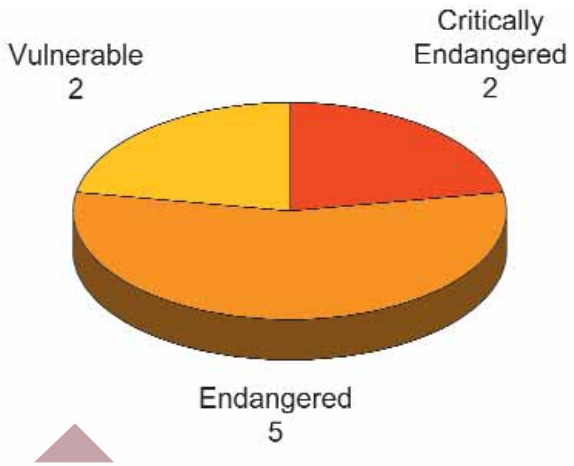
BIRDS IN ROCK FACE HABITATS

Although most birds of prey associated with this environment show positive population trends, they are still threatened.

There are many large expanses of rock face in Spain; by way of example, in the latest census of the Griffon Vulture more than 1,500 rock walls were found to be occupied by this species.

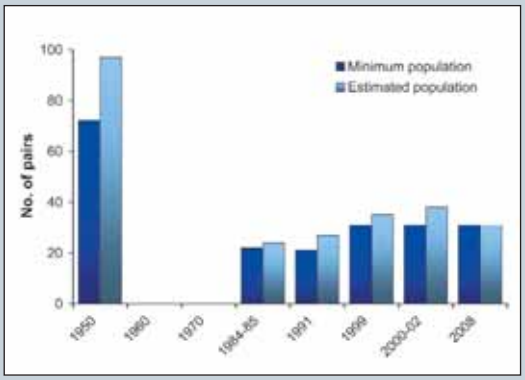
In this case, the threats from human activities are not as important as they are in farmland and forest habitats, where human influence is permanent. Conservation problems arise from sport and leisure activities which can, however, be regulated in the most important places.

Although the availability of rock faces is high, only a few species use them as the habitat in which to complete most of their biological cycle (breeding, feeding, etc.). In general, most of the species within this group use these places to build their nests and to roost, while they usually move to other habitats to feed and spend the rest of their life cycle. When speaking about birds of steep rock faces, what first come to mind are the birds of prey and scavenging species: Golden Eagle, Bonelli's Eagle, Osprey, Peregrine Falcon, Griffon Vulture, Egyptian Vulture and Lammergeier. Very up-to-date information exists for all of these species and their conservation status is well known. However, there are other small bird species, which do indeed lead almost their entire life cycle in this habitat. There is currently a lack of two essential pieces of information - population size and trend - to determine the conservation status of these species, such as the Alpine Swift, Eurasian Crag-Martin, Black Redstart, Blue Rock-Thrush and Wallcreeper. Other small birds such as the Stock Dove, Yellow-billed and Red-billed Choughs and Eurasian Jackdaw also breed in these rock faces, but feed in other habitats. In these cases too, we lack the information on their population size and trends required to assess their conservation status with any precision.

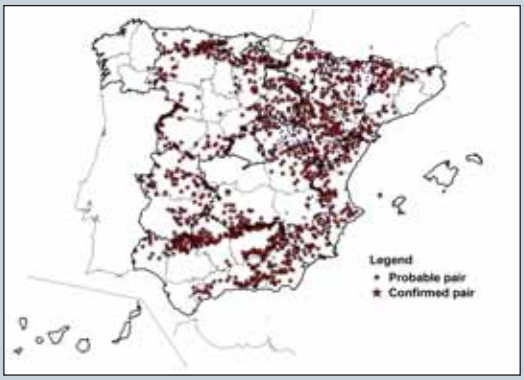


Osprey
Egyptian Vulture (ssp. *majorensis*)
Lammergeier
Egyptian Vulture (ssp. *percnopterus*)
Bonelli's Eagle
Barbary Falcon (ssp. *pelegrinoides*)
Red-billed Chough (ssp. *barbarus*)
White-rumped Swift
Peregrine Falcon (ssp. *brookei*)

The 2008 **Osprey** census detected 31 pairs: 15 in the Balearic Islands, 14 in the Canary Islands, 1 in the Chafarinas Islands and 1 in Andalusia. In 1950 there were estimated to be 72-97 pairs, but the species suffered a major decline up until 1980. During the 1980s and 1990s it made a slight recovery, but since then it has remained stable. The Osprey has the smallest number of pairs of all the threatened birds of prey in Spain and it is 'Critically Endangered'.

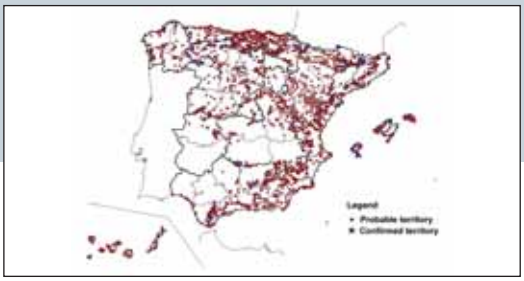


The **Golden Eagle**, according to the 2008 census, has a population in Spain of 1,554-1,769 pairs. When comparing figures from this and the previous census, the result is a strongly positive trend. The detailed regional censuses (interim censuses between the two national ones) also point to an upward trend, at least in recent decades, that could be around 20%. However, the small size of its population means that is is considered as 'Near Threatened'.



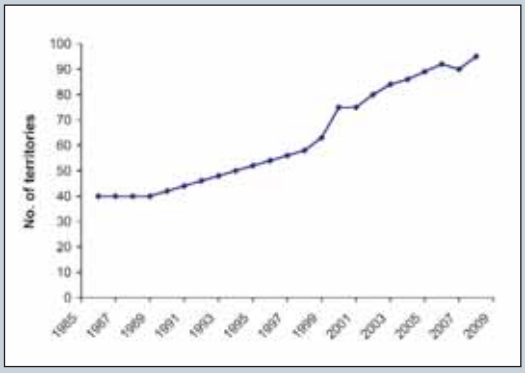
The 2005 population of **Bonelli's Eagle** in Spain was 733-768 pairs (70-80% of the European population). From the early 1980s to the present it has disappeared from 8 provinces and there have been important declines (possibly of about 50%) in another 20. In the northern half of the Peninsula and in certain areas in the East, a much more negative trend has been observed than in the southern provinces. These declines could lead to its demise in the northern third of the Peninsula in the short term. It is considered to be in the 'Endangered' category.

In 2008, the census of the **Peregrine Falcon** recorded a population of 2,453-2,795 pairs. Many more pairs have been detected since the first national estimate, but this may be due to the difference in census coverage. There was a recovery of the species in the 1980s and 1990s. The population appears to be quite stable with reference to the 2002 estimate, but there is a clear decline in 13 provinces, while there are increases in another 15. It is possible that between the increases and decreases there is a certain amount of stability over the last decade. The subspecies *brookei* should be listed as 'Vulnerable' and *pelegrinoides* as 'Endangered'.

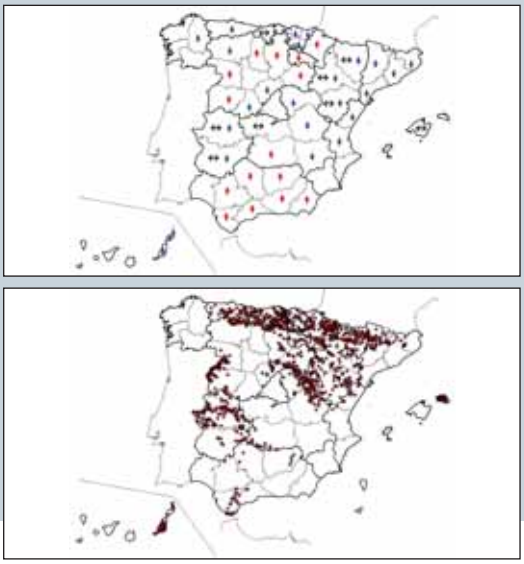


Aquila chrysaetos © José Val Molina

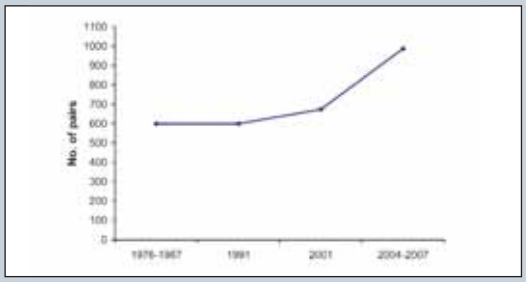
The **Lammergeier** is currently confined in Spain to the Pyrenees, but its range could be extended by a reintroduction programme in Andalusia and the reintroduction project in Picos de Europa (Northern Spain). In 2009, 70 breeding territories were counted, which signifies a modest average annual increase of 4,5%. However, the species has not yet fully recovered from the dramatic decline suffered during the 20th century, neither does it yet have a sufficiently large population, so it remains a threatened species, listed as 'Endangered'.

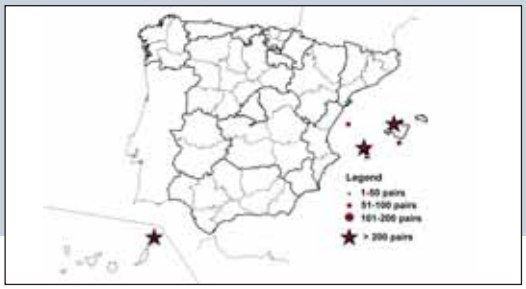


In 2008, the population of the **Egyptian Vulture** in Spain was 1,452-1,556 pairs. There have been confirmed increases in some regions together with declines in others. It may be reasonable to assume a stable overall population, or even a very slight increase. The nominal subspecies of Egyptian Vulture in Spain (Peninsula and the Balearic Islands) should possibly be reclassified as 'Vulnerable', but new censuses are needed for confirmation. The subspecies *majorensis* classifies as 'Endangered' as a result of its small population size.

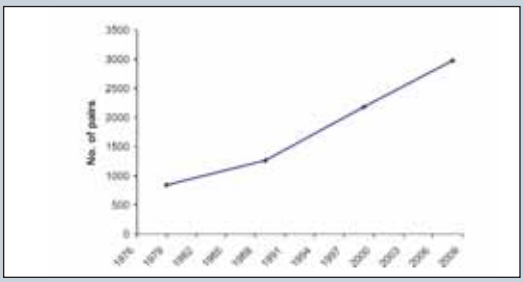


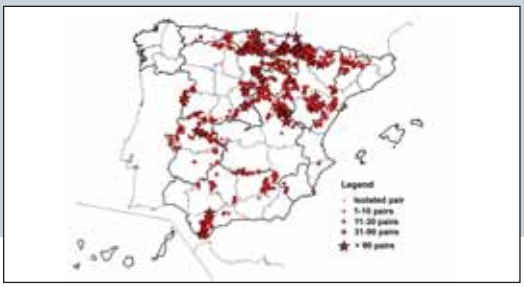
The population in Spain of **Eleonora's Falcon** was estimated at 957-1,170 pairs in the years 2004-2007, approximately 8% of the European population. Since this species was recorded in Spain, a positive trend has been noticed in all regions and also in recent years, with more comprehensive censuses than previously. This increase could be around 67% at a national level over the last three decades. Despite its positive trend, this species is included in the 'Near Threatened' category





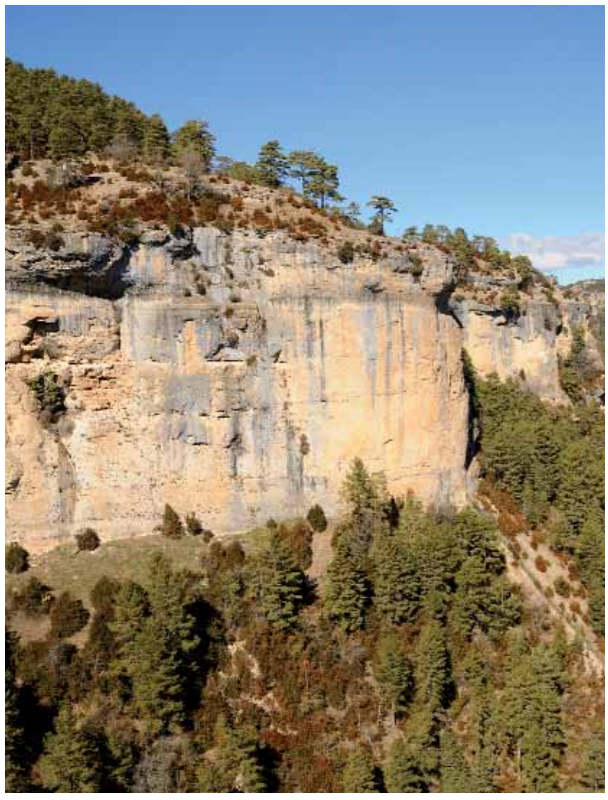
In the 2008 census of the **Griffon Vulture**, 24,609-25,541 pairs were located (1,560 colonies and 225 isolated pairs). The total population is estimated at around 76,288-79,177 individuals. The trend in the last decade clearly reflects positive progress, with 7,272 more pairs than in 1999; this suggests a growth of 42% over the last nine years. An expansion in the area it occupies has also been confirmed. This species is not listed in any threat category.





Another species frequently using rock face habitats, although it can also nest in other environments, is the **Eagle Owl.** In this case there is no specific census, but the NOCTUA programme and the detailed monitoring of several regional populations, show a major increase, both in its population size and in its range.

Falco peregrinus © Nicolas Gallego Rojas



© Guillermo Doval

Anas clypeata © Félix Fernández

BIRDS IN WETLAND HABITATS

After years of working to conserve Spanish wetlands, the situation for most of the associated bird species has not improved and many are still seriously threatened.

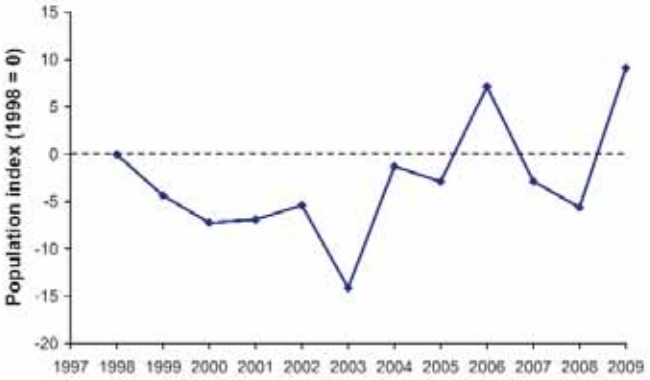
The biogeographical and climatic variety of Spain makes it one of the most diverse and complex countries in Europe in terms of its aquatic environments. The variety of wetland types is enormous, from lakes of glacial origin and high mountain rivers, through the endorrheic lakes and large rivers of the mainland interior, to the seasonal watercourses of the Mediterranean and the Canary Island ravines, and salt marshes, deltas, estuaries, fens and beaches.

There is no up-to-date national information available regarding the total wetland surface, but according to official figures and in terms of the original surface, in the early 1990s Spain had already lost 80% of its floodplains, 69% of its inland lakes and 59% of its coastal wetlands. Although there are some examples of restored natural wetlands, these are isolated cases and have not slowed down the rate of loss caused by urban development and 20th century drainage projects. However, historical human intervention has also created new artificial aquatic environments such as reservoirs, ponds, salt-pans, rice-fields, gravel pits, etc., which eventually acquire some biological interest.

These habitats play a key role in the conservation of many species of birds, whether in their periods of reproduction, overwintering or migration, and constitute, in many cases, the greatest areas of concentration of birds in the Peninsula.

The main threats in these habitats arise from poor water management. The excessive drying out of wetlands or sudden changes in water levels are incompatible with the conservation of aquatic birds. Furthermore, there are currently several other problems which must be addressed, such as sewage or industrial discharges, pollution from agriculture, urban development around wetland margins, removal of the natural vegetation, etc.

In Spain the censuses of overwintering waterbirds are conducted on about 3,000 wetlands.



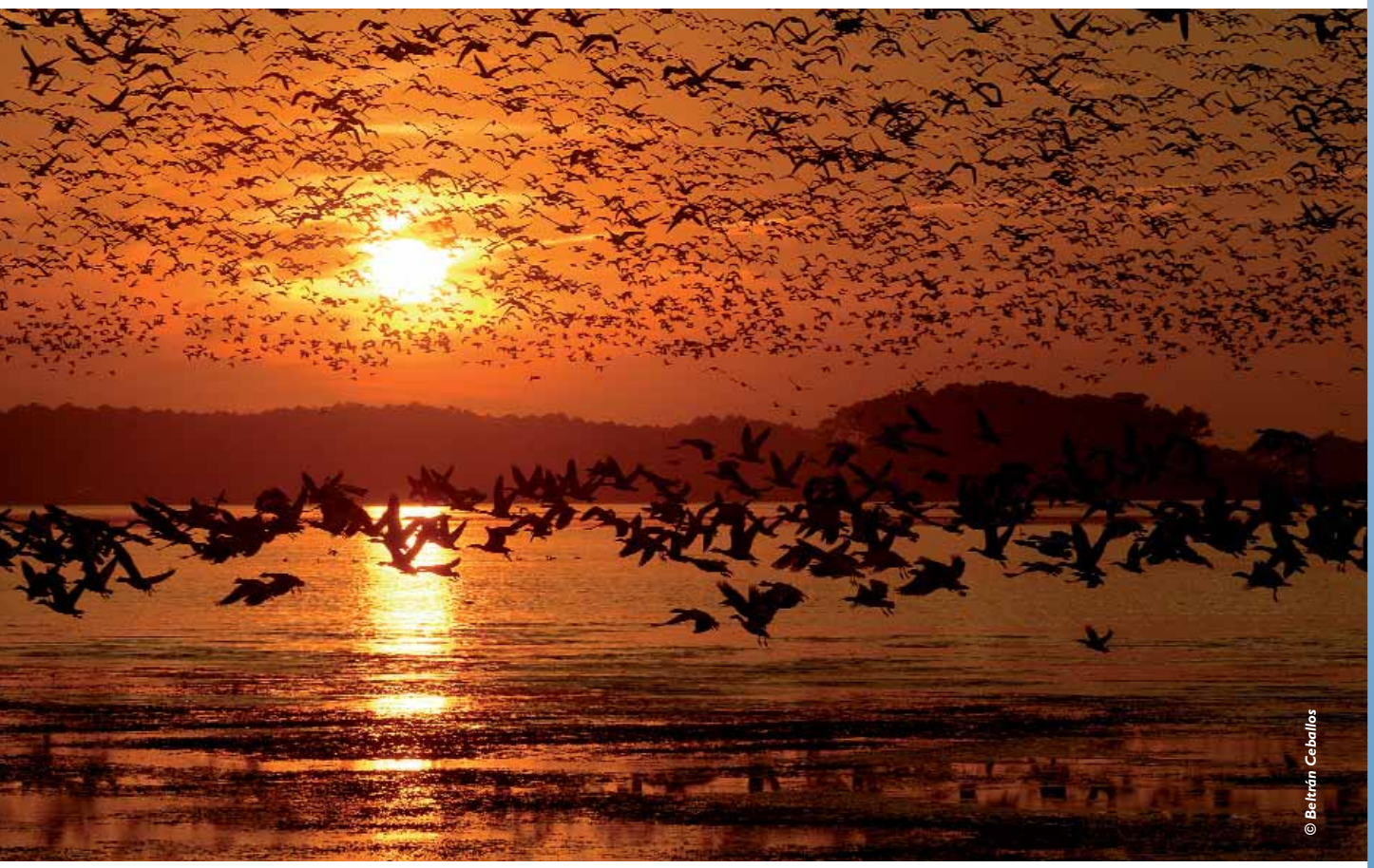
Trends in populations of common birds associated with wetland habitats, 1998-2009

The monitoring of common birds in aquatic habitats points to an overall positive trend during the period 1998-2009, although with fluctuations that seem to be closely tied to water levels in each period.

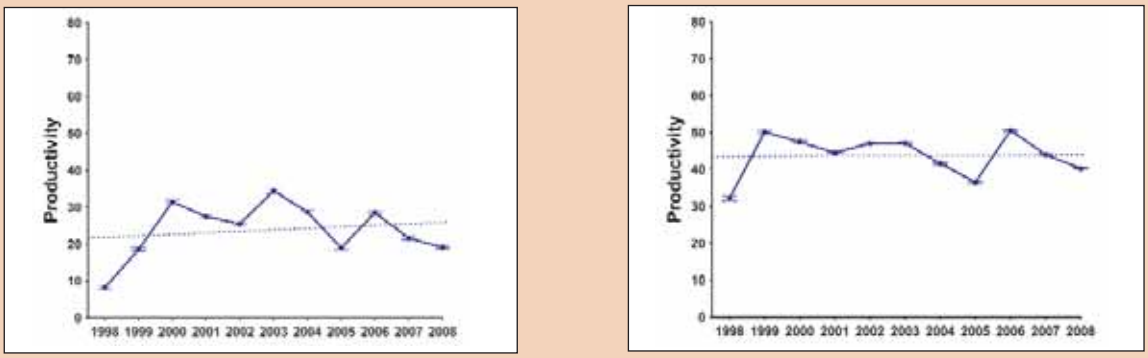
The general increase detected for wetland birds is largely due to population growth of one of the most common birds, the **Reed Warbler**, which, given the size of its population, has a much stronger influence on the trend of the whole group than the other species recorded. The **Penduline Tit** is one of the common species with the largest population decline.

Common name	Maximum	Minimum	Average change (%)	Trend
Acrocephalus arundinaceus	1.1	-4.6	-1.8	Stable
Acrocephalus scirpaceus	6.1	0.9	3.5	Moderate increase (p<0.01) **
Alcedo atthis	14.5	-10.9	1.8	Uncertain
Cettia cetti	0.6	-1.4	-0.4	Stable
Cinclus cinclus	5.4	-7.4	-1.0	Uncertain
Motacilla cinerea	0.3	-5.1	-2.4	Uncertain
Remiz pendulinus	-1.1	-12.2	-6.6	Moderate decline (p<0.05) *
Riparia riparia	0.1	-9.3	-4.6	Uncertain

Average annual changes and population trends of common birds associated with wetland habitats, 1998-2009.



On the other hand, a slight increase or stability has been detected in the measures of breeding success of small wetland birds.



Changes in productivity index for species associated with reeds (left) and river banks (right) according to the common bird ringing programme ('PASER'), 1998-2008.

The overall increase observed in common wetland birds has not been recorded in all regions; a positive change has been noticed in the southern area and stability in the east and centre, while decline has been detected in the northern Peninsula.

Region	Average change (%)	Trend
North	-1.3	Moderate decline
Centre	-0.5	Stable
East	-0.1	Stable
South	6.9	Moderate increase

Average annual changes and population trends of common birds associated with wetland habitats, by regions, 1998-2009.

Among the passerine birds associated with wetlands there are some scarcer taxa which are not recorded by the annual monitoring system but whose decline has been very well documented. The **Moustached Warbler** has suffered a population decrease of at least 50% and only 1,017 pairs remain, according to the census conducted in 2005. More serious is the case of the **Reed Bunting**, as its population is also highly fragmented and numbers only 319-431 pairs; moreover, in some localities the decline is over 70%. Both species are listed as 'Endangered' in the latest Red Book.

In the Spring of 2007, during the breeding season, a census was carried out for all uncommon wetland birds and new information for 52 species was obtained. In many cases this was the first estimate based on a direct census: **Mallard, Gadwall, Northern Shoveler, Common Pochard, Great Crested Grebe, Little Grebe** and **Black-necked Grebe**, but for others there was prior information, so their trends can be established. A positive trend has been observed in almost all the gulls and terns. Other species have begun to breed in Spain very recently, such as the Great Cormorant, the Ruddy Shelduck or the Glossy Ibis (which has bred in Spain since the 1990s after more than 30 years extinct). Other wetland birds with very small populations and at the edge of their range do not show a definite trend; breeding usually occurs in good conditions of wetland flooding and in isolated very specific cases (**Tufted Duck, Black-Tailed Godwit**, etc.).

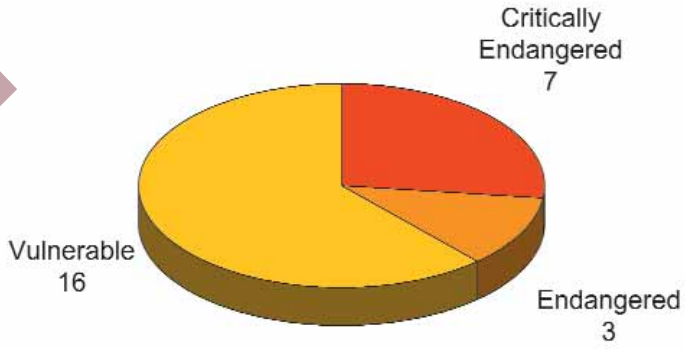
Emberiza schoeniclus © Quique Marcelo

Phoenicopterus ruber © Luis Barrón

Species	Trend
Actitis hypoleucos	Uncertain
Alcedo atthis	Uncertain
Anas acuta	Uncertain
Anas clypeata	Increase
Anas crecca	Uncertain
Anas platyrhynchos	Uncertain
Anas querquedula	Uncertain
Anas strepera	Uncertain
Anser anser	Increase
Aythya ferina	Uncertain
Aythya fuligula	Uncertain
Aythya niroca	Uncertain
Charadrius alexandrinus	Stable/Decline
Charadrius dubius	Uncertain
Chlidonias hybrida	Stable
Chlidonias niger	Decline
Fulica atra	Uncertain
Fulica cristata	Stable
Gallinula chloropus	Uncertain
Haematopus ostralegus	Stable
Himantopus himantopus	Uncertain
Ixobrychus minutus	Uncertain
Larus audouinii	Increase
Larus fuscus	Increase
Larus genei	Stable
Larus marinus	Increase
Larus melanocephalus	Increase
Larus micahellis	Increase
Larus ridibundus	Increase
Limosa limosa	Uncertain
Marmaronetta angustirostris	Decline
Netta rufina	Increase
Numenius arquata	Uncertain
Oxyura leucocephala	Stable
Phalacrocorax carbo	Increase
Phoenicopterus roseus	Stable
Platalea leucorodia	Increase
Plegadis falcinellus	Increase
Podiceps cristatus	Uncertain
Podiceps nigricollis	Uncertain
Porphyrio porphyrio	Decline
Recurvirostra avosetta	Increase
Rissa tridactyla	Decline
Sterna albifrons	Uncertain
Sterna hirundo	Decline
Sterna nilotica	Increase
Sterna sandvicensis	Increase
Tachybaptus ruficollis	Uncertain
Tadorna ferruginea	Increase
Tadorna tadorna	Increase
Tringa totanus	Stable
Uria aalge	Decline

Trends in wetland breeding birds in Spain.

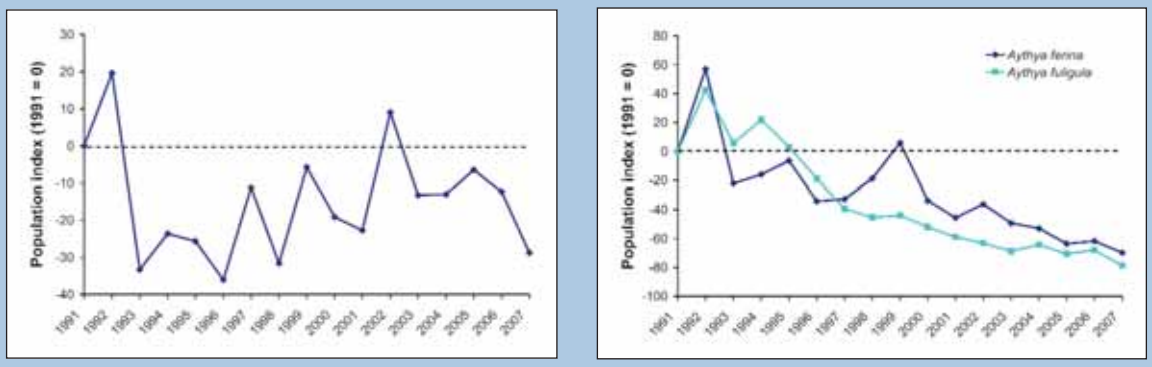
Amongst the wetland breeding birds, the unfavourable status of the Marbled Teal, the Ferruginous Duck, the Ruddy Shelduck, the Taiga Bean Goose and the Red-knobbed Coot must be highlighted and it has been confirmed that they should be classified as 'Critically Endangered'. The White-headed Duck, and the Black Tern also experience serious conservation threats and are considered as 'Endangered'.



Outside the breeding season, the country's wetlands make Spain a very important region for overwintering and as a key stopping-place on the migration route for significant numbers of aquatic birds. Winter censuses for these species have been carried out since the 1980s and every year they improve in coverage and quality. The analysis of such censuses for the period 1991-2007 shows a stable situation, with an average of 1,625,106 wintering individuals (2,202,932 maximum, 1,285,308 minimum). Of these, 727,934 are Anatidae and coots (471,023 minimum and maximum 1,007,310).

In the period 1991-2007, 10 wetlands accounted for 35% of overwintering wetland birds, all of them in Ramsar sites, with the exception of the Sierra Brava Reservoir (Cáceres) and the El Porcal Gravel Pits (Madrid).

The two overwintering species most notable for their negative trends are the **Common Pochard** and the **Tufted Duck**; in both cases their numbers have fallen in both the long and the short term.



Trends in common overwintering wetland birds (left) and Common Pochard and Tufted Duck (right); 1991-2007

Wetland name			Average	Average %	Cumulative average %
Doñana (Huelva-Sevilla)	168,950	642,964	336.804	14.32	14.32
River Ebro Delta (Tarragona)	97,144	332,951	166.552	7.08	21.41
Albufera of Valencia (Valencia)	38,606	96,486	65.143	2.77	24.18
Sierra Brava Reservoir (Cáceres)	312	101,814	58.613	2.49	26.67
Bay of Cádiz Marshes Natural Park (Cádiz)	10,111	117,742	49.625	2.11	28.78
El Porcal Gravel Pits (Madrid)	573	107,385	41.688	1.77	30.56
Villafáfila Lakes (Zamora)	17,337	48,303	32.067	1.36	31.92
Ría of Arosa (Pontevedra)	7,224	45,566	31.772	1.35	33.27
Aiguamolls de l´Emporda (Girona)	15,265	40,484	27.900	1.19	34.46
El Hondo Natural Park (Alicante)	13,562	41,859	20.983	0.89	35.35

The 10 wetlands with the greatest number of overwintering birds during the period 1991-2007.

Species				
Anas acuta	+3.53 (2.39; 4.67)**	?	+3.78 (1.08; 6.48)**	?
Anas clypeata	+0.59 (-0.08; 1.26)	?	-1.08 (-2.51; 0.35)*	?
Anas crecca	+0.87 (0.03; 1.71)*	?	+1.15 (0.20; 2.50)	?
Anas penelope	-5.47 (-6.12; -4.82)**	?	-2.02 (-4.69; 0.65)	?
Anas platyrhynchos	+2.42 (1.91; 2.93)**	?	+2.84 (1.74; 3.94)**	?
Anas strepera	+2.26 (1.42; 3.10)**	?	-2.19 (-4.45; -0.03)*	?
Anser anser	+0.76 (0.23; 1.29)**	?	-4.67(-5.98; -3.36)**	?
Aythya ferina	-7.1 (-8.43; -5.77)**	??	-10.86 (-13.00; -8.72)**	??
Aythya fuligula	-10.37 (-11.51; -9.23)**	??	-8.16 (-10.69; -5.63)**	??
Fulica atra	+0.29 (-0.53; 1.11)	?	-0.74 (-2.27; 0.79)	?
Netta rufina	-1.46(-2.97; 0.05)	?	-8.26 (-11.53; -4.99)**	?
Oxyura leucocephala	+10.48 (7.13; 13.83)**	??	-8.1(-12.80; -3.40)**	?
Tadorna tadorna	+3.89 (2.58; 5.20)**	?	+20.02 (16.69; 23.35)**	??
Anatidae and coots	-0.2 (-0.39; 0.35)	?	-0.85 (-1.87; 0.17)	?

Long-term and short-term trends for the most common overwintering Anatidae and coots. Statistically significant trends are highlighted (* $p < 0.05$; ** $p < 0.01$).

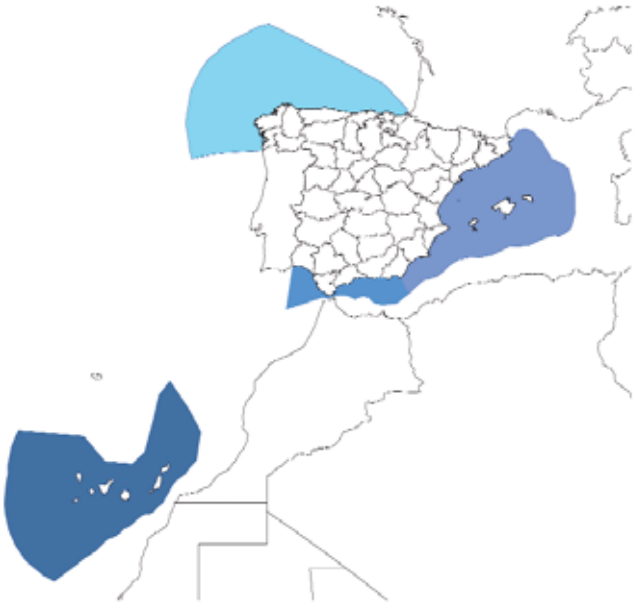
Motacilla cinerea © *Javier Milla*

BIRDS IN MARINE HABITATS

Calonectris diomedea © Juan Bécares

This group includes many species which have been very little studied; moreover, there are numerous threats which mean that many seabirds are endangered.

Spain is probably the European country with the highest marine diversity, since it comprises such different biogeographic regions as the Canary Islands, the Bay of Biscay, Galicia and the Mediterranean. Together these areas cover more than one million square kilometres of water and they lie adjacent to almost 8,000 km of coastline.

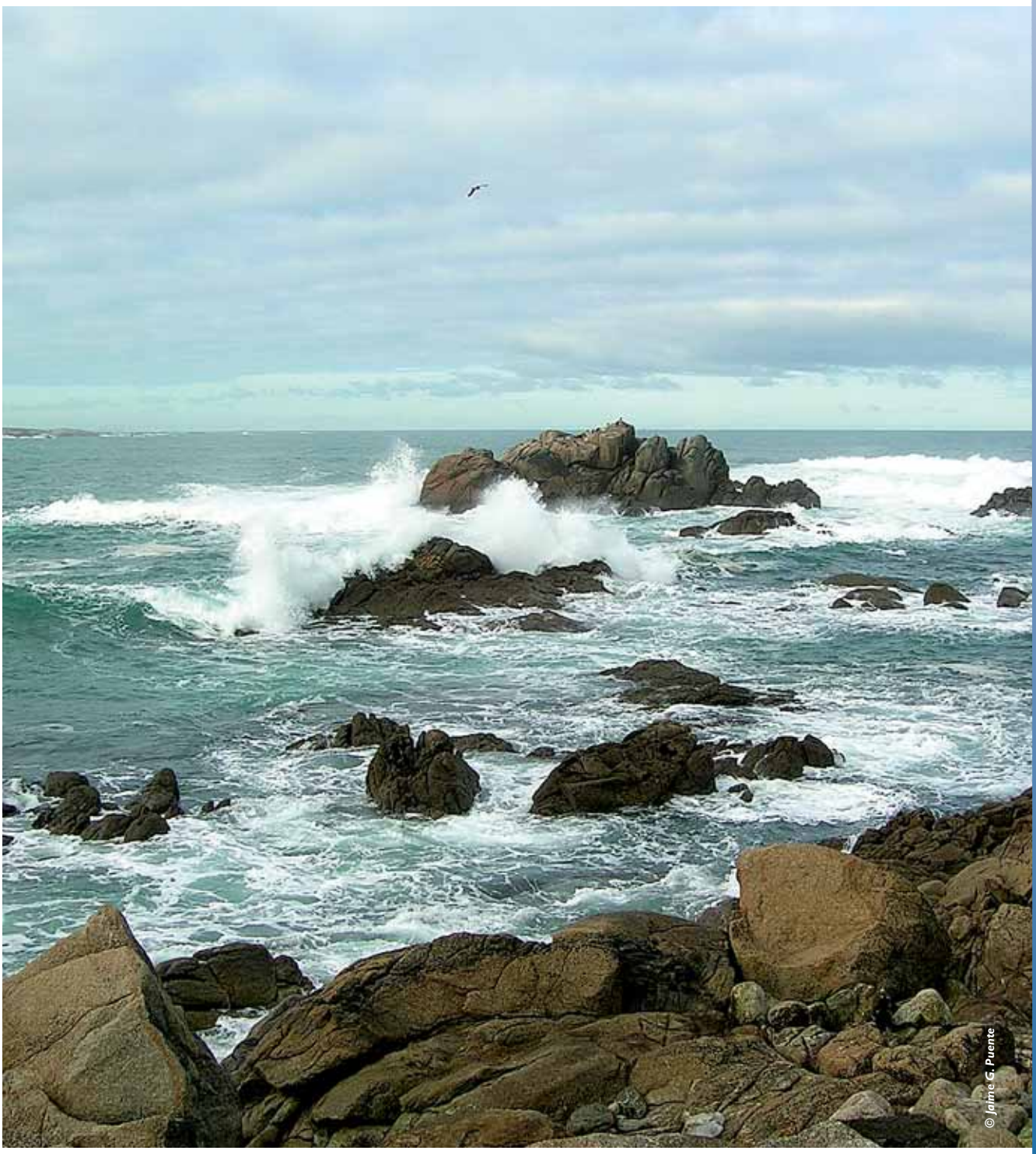


According to their geographic, oceanographic and environmental characteristics, four regions can be clearly distinguished: the Canary Islands, Galicia and the Cantabrian Sea, the Alborán Sea and the Gulf of Cádiz, and the Mediterranean.

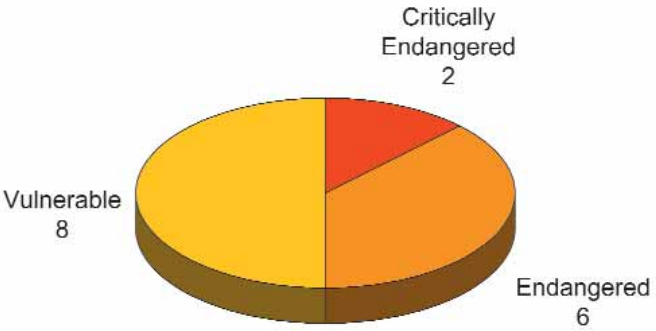
© Pep Arcos

Fishing pressure represents the principal problem for the marine environment, through overfishing, alteration of biological communities and habitat degradation - and this is no exception in the case of birds. Accidental mortality is particularly important, caused by certain fishing techniques (mainly long line hooks and gill nets), but also indirect effects, like overfishing of the species which form the prey of seabirds. Pollution is also a major problem for birds, which manifests itself in several ways: direct mortality, sub-lethal physiological effects, habitat degradation and alteration of prey communities. Likewise, other more localized, and/or less studied threats must also be considered such as disturbance caused by nautical recreational activities (especially around breeding colonies). Finally, the wide-ranging effects associated with climate change may cause a major impact on the marine environment, which could affect seabirds in many different ways.

Seabirds are increasingly threatened, and at a faster rate than other bird groups, as a result of the growing intensity and diversity of the threats they face, both on land and at sea. On land, the presence of exotic species, the degradation and destruction of their nesting habitat, human disturbance and the appearance of emerging wildlife diseases inhibit the recovery of these species.



More than 20 species of seabirds reproduce in Spain and several of them have their main breeding populations here. In addition, Spanish waters host significant numbers of overwintering and migrating birds arriving from other regions, mainly northern Europe. In total, more than 40 species of seabirds can be seen regularly in Spanish waters, 27 of which have contributed to the identification of the 42 Spanish Important marine Bird Areas (marine IBAs).



Balearic Shearwater
Common Guillemot
Bulwer's Petrel
Cory's Shearwater (ssp. *diomedea*)
Manx Shearwater
Little Shearwater (ssp. *baroli*)
Madeiran Storm-petrel
Shag (ssp. *aristotelis*)
Cory's Shearwater (ssp. *borealas*)
White-faced Storm-Petrel
European Storm Petrel
Shag (ssp *desmarestii*)
Slender-billed Gull
Audouin's Gull
Kittiwake
Sandwich Tern

Sterna sandvicensis © Pep Arcos

Phalacrocorax aristotelis © Pep Arcos

Puffinus mauretanicus © Pep Arcos

The **Balearic Shearwater** and the Iberian population of Common Guillemot are in a critical situation. The Balearic Shearwater has the dubious privilege of being the most threatened seabird species in Europe. Its breeding population, confined to the Balearic Islands, amounts to little more than 2,000 pairs and is in serious decline, which, at current rates, would lead to its extinction in about 40 years. In the case of the **Common Guillemot**, in the review undertaken in 2006-2007, only 2 pairs and 4 isolated individuals were located: just 8 specimens of the 3,000 estimated in the 1970s on Spanish coasts. The dramatic decline of both species is largely due to mortality caused by fishing practices.

Fishing is also one of the factors explaining the decline of the populations of the **Cory's Shearwater,** especially in the Mediterranean (ssp. *diomedea*), where the Spanish population is estimated at a few thousand pairs.

The situation represented by the Canary Island Procellariiformes is also worrying, especially the **Bulwer's Petrel**, the **Little Shearwater**, the **Manx Shearwater** and the **Madeiran Storm-petrel**. In these cases, it seems that the most serious problems are predation by introduced species in the breeding colonies and the mortality rate caused by light pollution.

Also 'Endangered' is the **Shag**, which has two subspecies in Spain. In the Cantabrian Sea and Galician waters, *P. a. aristotelis* has a relatively small population (1,667 pairs in 2007) and has undergone a major decline in the last decade, exceeding 50% in some regions. In the Mediterranean, *P. a. desmarestii* is more stable and currently totals 3,764 pairs.

Among the species in the 'Vulnerable' category, the **Audouin's Gull** merits a special mention, as more than 90% of its global breeding population is concentrated in Spain and it currently shows a slow increase, with 19,461 pairs shared between 23 colonies in 2007. Despite this recovery, the species remains equally under threat. In the same threat category, the **Kittiwake** is in an increasingly delicate situation, because only 21 pairs remain of the 200 that constituted the Spanish population in 1982.

However, other species have improved their conservation status, like the **Slender-billed Gull**, whose population in 2007 was estimated at 1,220 breeding pairs and has now been removed from the 'Vulnerable' category as it does not qualify under any category of threat, due to its positive trend and expanded distribution. The **Sandwich Tern** is also expanding in Spain since its colonization in the middle of last century and it continues to establish new breeding sites. Today its population is concentrated in 5 colonies and was estimated at 3,796 pairs in 2007; however, it continues to be classified as 'Vulnerable'.

Calonectris diomedea © Benjaharo Rodríguez

Larus audouinii © Pep Arcos

© Juan Bécares

Passer domesticus © Quique Marcelo

BIRDS IN URBAN HABITATS

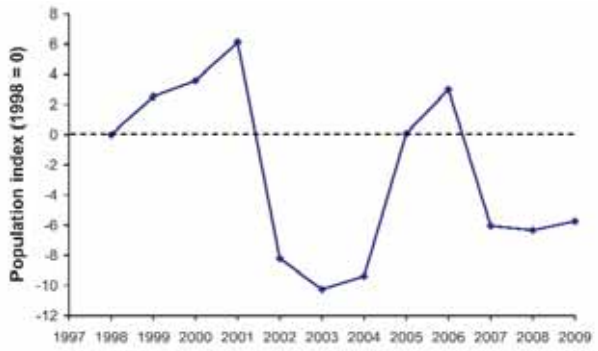
Although the overall population of the bird species found in our cities is huge, some of them show worrying population declines.

Urban habitats exhibit a huge environmental variability in terms of their vegetation cover, typology of buildings, extent, altitude, presence of rivers or coasts, etc. Thus, not only neighbouring towns, but also adjacent neighbourhoods in the same city, may differ greatly in the bird community they host, depending on the abundance and maturity of gardens, the age and density of buildings, the prevailing human activities and many other variables.

These habitats usually host a superabundance of a few species, so well-adapted to breed in buildings that they have virtually disappeared from other less artificial habitats. The clearest examples are the House Sparrow, the Rock Dove (in its domestic variety), the Common Swift or the House Martin, which reach urban densities that are truly exceptional in the overall context of the Iberian bird fauna.

Thanks to the common bird monitoring programme carried out by SEO/BirdLife, information is available on 7 species that are particularly related to urban environments, out of the 142 recorded species.

There are large areas within Spain with very few towns, while in the outskirts of the big cities, including Madrid, Barcelona, Valencia and Seville, the density of these population centres is much greater.



Trends in the populations of common birds associated with urban habitats, 1998-2009.

To summarise the overall trend of these seven species, their urban populations appear to be stable over the 12-year period (only an average annual decline of -0.5% with respect to 1998), although there have been marked fluctuations during this period.

Only the House Sparrow, the most abundant species, shows a decline in its population. Currently it is estimated that there are about 150 million House Sparrows in Spain. A decline, such as that detected (annual average of -0.6%) means about seven and a half million birds less than in the late 1990s. If this trend continues, will we have sparrows for many more years or will we see its extinction, as has happened in other cities like London or Prague?

Common name	Maximum	Minimum	Average change (%)	Trend
Apus apus	1.3	-0.5	0.4	Stable
Apus pallidus	7.5	-2.3	2.6	Uncertain
Columba livia	1.0	-1.9	-0.4	Stable
Delichon urbica	2.6	0.2	1.4	Moderate increase (p<0.05) *
Passer domesticus	-0.1	-1.2	-0.6	Moderate decline (p<0.05) *
Streptopelia decaocto	19.5	15.7	17.6	Strong increase (p<0.01) **
Sturnus vulgaris	7.6	0.0	3.8	Uncertain

Average annual changes and trends of common birds associated with urban habitats.

Turning to the main regional divisions of Spain established for the analyses, urban bird populations appear to have remained stable for the centre and north of the Peninsula, but there was a slight negative trend for the south and east.

Region	Average change (%)	Trend
North	-0.6	Stable
Centre	0.2	Stable
East	-2.0	Moderate decline
South	-0.9	Moderate decline

Average annual changes and population trends of common birds associated with urban habitats, by regions, 1998-2009.

On the other hand, in recent decades, the large towns and cities have also experienced a notable increase in the abundance of some generalist species that were previously rare there, like the Magpie, Common Woodpigeon and, in the more agricultural settlements, the Eurasian Collared-Dove.

In the case of smaller villages, some of their most characteristic species, such as the Barn Swallow and the Eurasian Jackdaw, are actually highly dependent on the nearby farmland habitats, so they cannot be characterized so strictly as urban species. However, during the coldest months of the year, many of these villages and small housing developments can constitute important winter refuges for some species, like the Pied Wagtail, the Robin, or the Black Redstart.

Indirectly related to urban environments in the true sense, waste tips attract certain species in huge numbers, such as the Black-headed Gull and Black Kite. It is also very important to remember that urban habitats are, together with marshland, amongst the most susceptible to the settlement and expansion of exotic bird species, as is the case of the Monk and Rose-ringed Parakeets.

However, urban centres may also offer great opportunities for conservation, since they are environments where it is possible to carry out very specific measures to promote bird diversity, through the design and management of sustainable urban development plans, and they are also the perfect setting for large-scale education and awareness campaigns. It is also worth noting that, in some cases, these areas shelter significant proportions of the populations of protected species, such as the White Stork, Peregrine Falcon or Lesser Kestrel.

Some of these species are not in a very healthy state and, sometimes, building refurbishment leads to the loss of nesting sites, something especially important for 'Vulnerable' species like the Lesser Kestrel. For this species, in addition, there are other factors constraining its population, such as the agricultural land-use change associated with the switch from dryland cultivation systems to irrigation, or excessive agrochemical use.

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CONSERVATION STATUS OF IMPORTANT BIRD AREAS IN SPAIN

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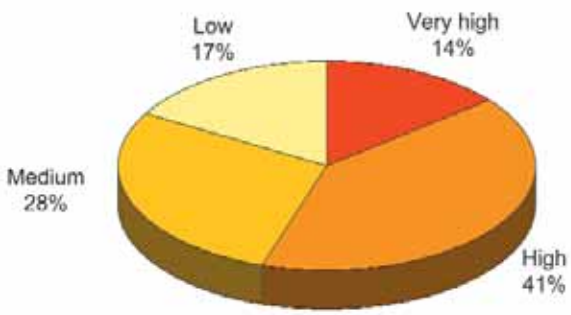
The network of important areas for bird conservation has been completed thanks to the identification of marine IBAs.

During 2008, an analysis of the conservation status of over 100 Important Bird Areas (IBA) was conducted in Spain, with the help of volunteers who take charge of monitoring individual IBAs. This analysis suggests that over 55% of these areas are at high risk of suffering from some of the various threats which have been detected.

The most frequently detected threats are those from human disturbance, transport networks and overexploitation.



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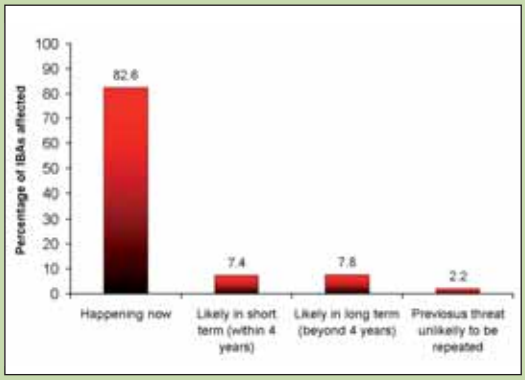
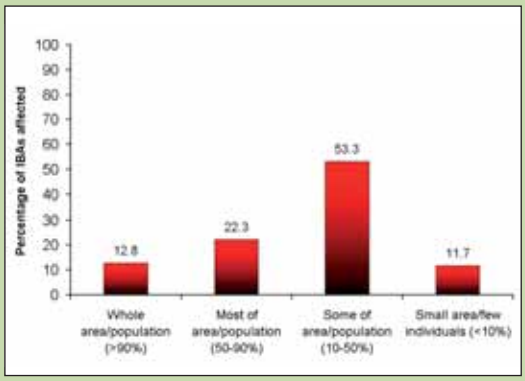
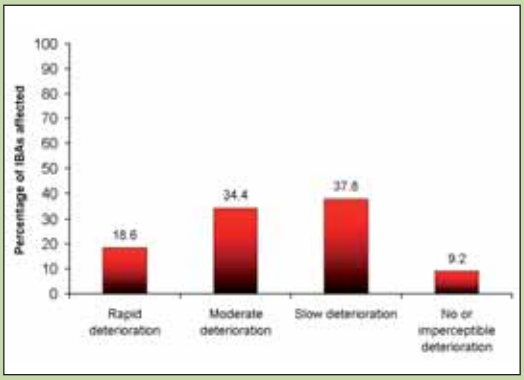
Solutions for the IBAs should be sought quickly, because the threats are associated with activities taking place now, or which are expected to occur in the short to medium term.



Serious threats were detected in a large part of the IBA in almost 40% of the areas where the study was carried out, and in over 50% of the areas studied the threat was detected in at least part of the site.



In only 9% of cases was it difficult to detect any deterioration. In over 90% of the remaining areas, it has been demonstrated that the obligations under the EU Birds Directive are not being fulfilled and that deterioration is taking place.



By following the methodology developed by BirdLife International to monitor the conservation status of IBAs, it has been possible to verify the timing, the extent and the severity of the different threats in the various areas.

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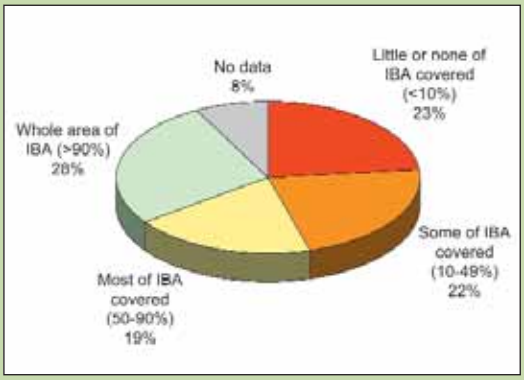
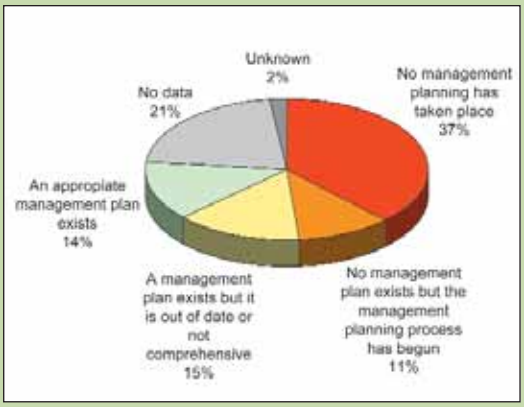
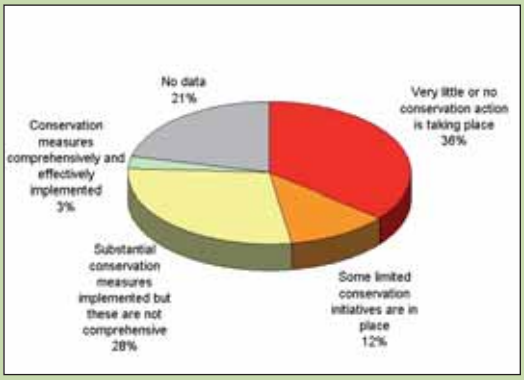
The Important Bird Areas are not a form of legal protection, but the inventories compiled by BirdLife International have been crucial in the designation of SPAs and other protected areas. Currently, 28% of the Spanish IBAs reviewed here are fully covered by some form of official protection.



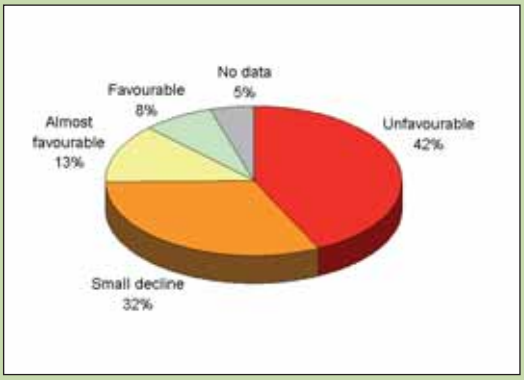
The adoption and implementation of management plans is essential to fulfil the non-deterioration obligations for the SPAs. However, 37% of IBAs do not currently have any management plan.

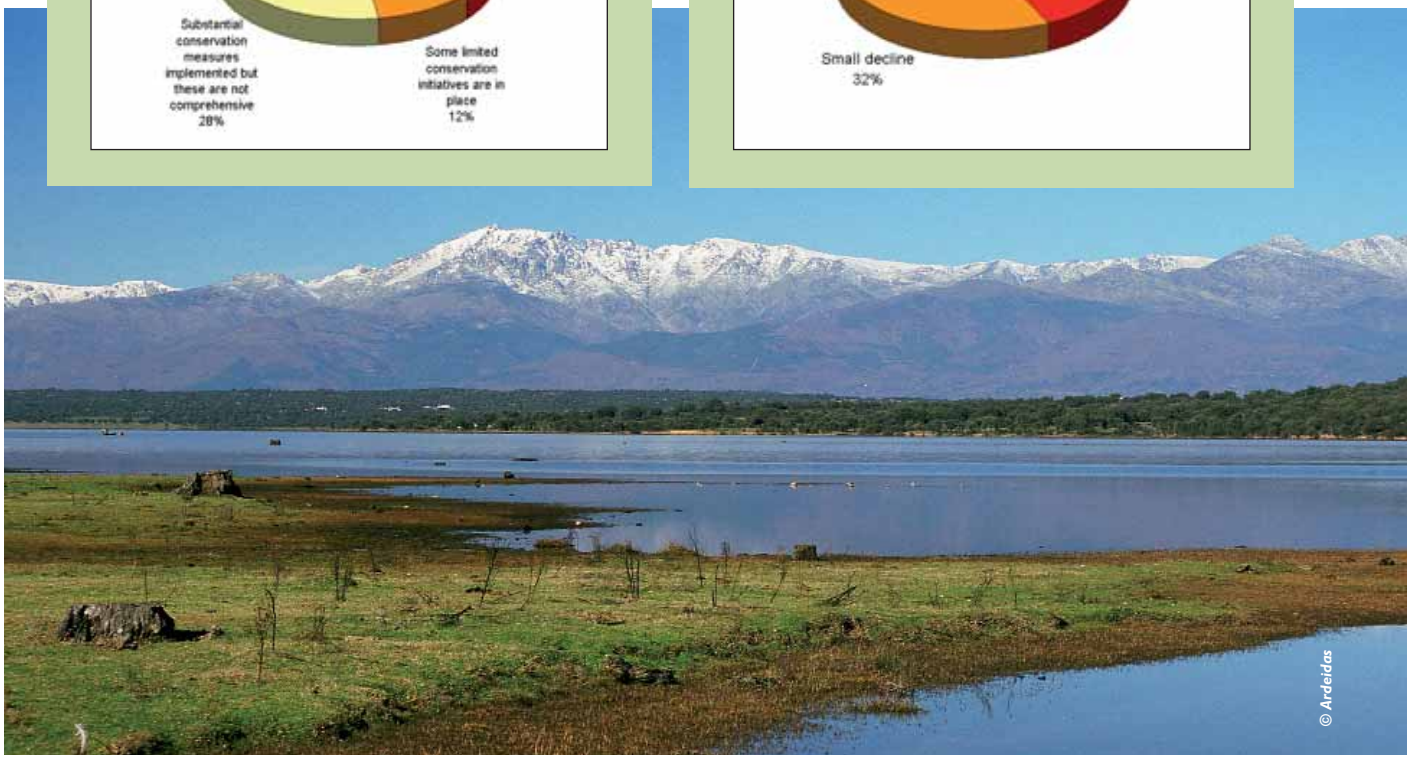


Only 3% of IBAs are considered to be implementing the necessary measures to maintain their conservation status. In 36% of IBAs these measures are inadequate, do not exist at all or, very often, they exist but are considered to be inefficient.



Conservation status has been assessed through examining trends in those birds with regular monitoring data in the Important Bird Areas. In more than 42% of IBAs, conservation problems exist among the species examined.

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In 2004, SEO/BirdLife took the initiative to extend the IBA concept to the marine environment through the EU Life Project: Important Areas for Marine Birds (IBA) in Spain. The serious deterioration suffered by the seas and the organisms which live there, the requirement to extend the Natura 2000 network to the sea and the existence of new technologies increasingly appropriate for the study of seabirds provided the impetus for this initiative.

The principal objectives of the project were:

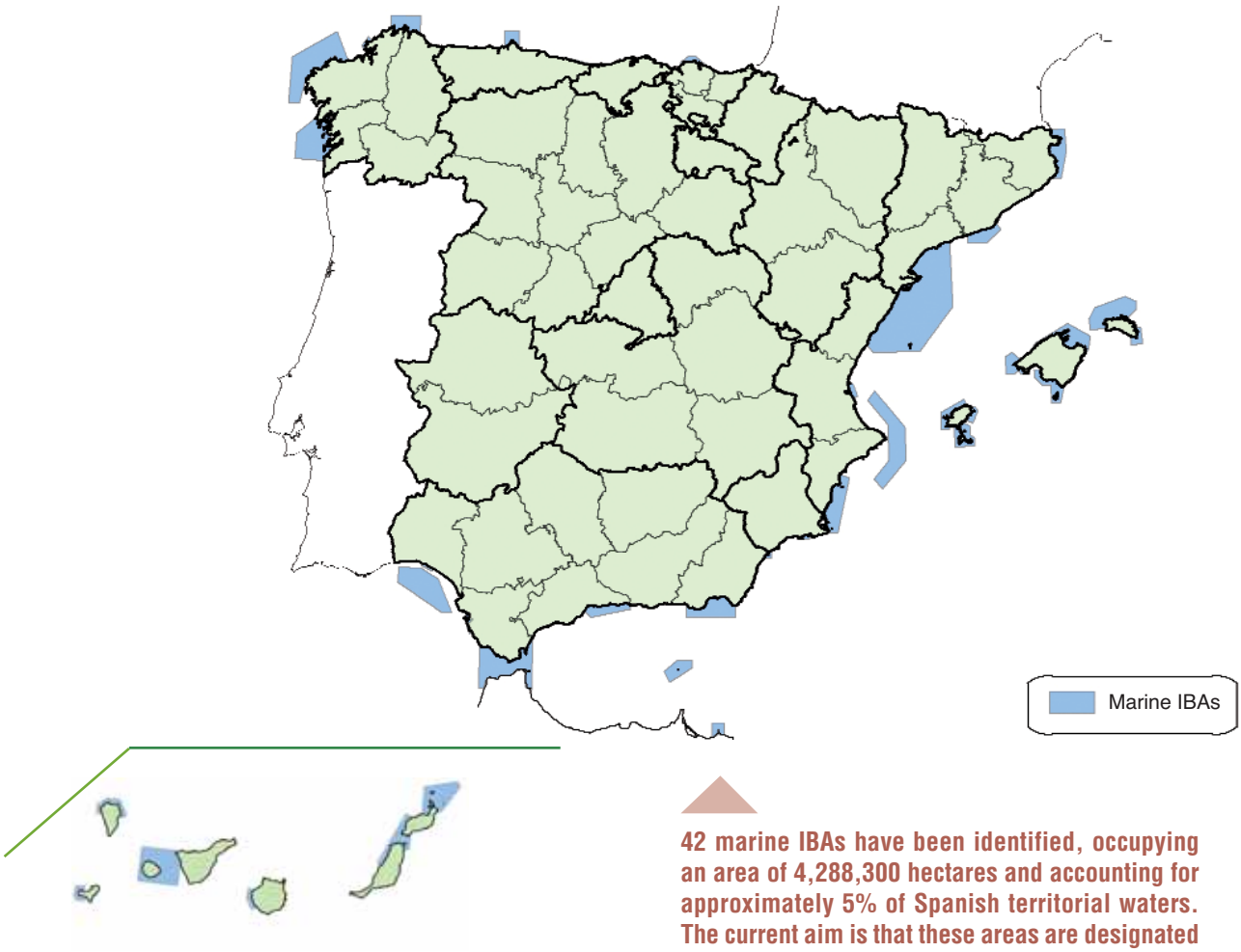
a) To establish a reference methodology for the identification of marine IBAs, especially in the open sea.

b) To produce an inventory of marine IBAs which would serve as a guide for the designation of the Natura 2000 network in the marine environment.

This initiative, shared with the Sociedade Portuguesa para o Estudio das Aves (SPEA, BirdLife Portugal) is pioneering on a world scale.

42 marine IBAs have been identified, divided into three types considered in the process of site identification:

- Areas of seabird concentration at sea
- Extensions to seabird breeding colonies
- Key seabird migration areas



42 marine IBAs have been identified, occupying an area of 4,288,300 hectares and accounting for approximately 5% of Spanish territorial waters. The current aim is that these areas are designated as SPAs.

ACKNOWLEDGEMENTS

First and foremost, SEO/BirdLife wishes to thank the thousands of volunteer participants in all the monitoring programmes carried out for the organisation (SACRE, NOCTUA and PASER programmes, Birds and Climate, IBAs, Atlas of Wintering Birds in Spain and specific bird censuses), all of whom made it possible to gather the information presented in this publication. The work carried out by all the regional coordinators is of incalculable value for SEO/BirdLife. It is thanks to the time they have devoted to organising these tasks that we have been able to collect and present the results included in this publication. Without their volunteer work, time and dedication, it would not be possible to develop this system of bird monitoring and IBAs with its current scope and coverage.

We very much appreciate the funding from the Ministry of Environment and Rural and Marine Affairs (MARM, by its initials in Spanish) for the coordination of some of this work at a national level, and we express special thanks to José Jiménez García-Herrero and Ricardo Gómez Calmaestra, for their assistance and effort which enables all of this information to be used as a tool to manage our natural environment. We are also very grateful for the support provided by the Regional Governments for several of these studies, whether through contributing information or funding regional censuses directly. Furthermore, all of them provided the information on winter censuses of waterbirds for the national compilation undertaken by SEO/BirdLife for the MARM, within the management of the Office for Migratory Species, whose information is summarised here.

Numerous scientists have also participated in the gathering of information and evaluation of bird conservation status and we thank them all for their collaboration.

BirdLife IBA ÁREA IMPORTANTE PARA LA CONSERVACIÓN DE LAS AVES

SACRE

NOCTUA

PASER