



# INTERNATIONAL WATERBIRD CENSUS REPORT

SPAIN · 2009-2016





# LIST OF PARTICIPATING STRUCTURES / INDIVIDUALS

The International Waterbird Census (IWC) reports represent the longest coordinated monitoring program in Spain. SEO/Birdlife started the coordination, realisation and compilation of survey data collected through volunteers in the 1960s. Since then, monitoring has grown in participation and commitment by the administration; to the point that now there are autonomous communities who systematically carry out surveys every year. For some years it has been the role of the Ministry of the Environment to coordinate this work on a national level, and the independent communities who carry out censuses within their territories. It is SEO/BirdLife who annually compiles all the information into a database, along with any other data collected by volunteers. SEO/BirdLife also acts as the international coordinator, to ensure that all the data are included in the World Compilation of Wintering Waterbirds; within the framework of Wetlands International. We would like to thank the various organisations and local SEO/BirdLife groups for their collaboration and participation which has provided good census coverage across the wetlands, as well as the autonomous communities that have contributed information on their individual territories. The list of collaborators, volunteers and local groups would be very long as there are more than 2,300 people who have participated in these censuses.

**Some we would like to mention are:** EBD-CSIC (Doñana's Singular Scientific-Technical Infrastructure-ICTS-RBD), especially Manuel Mánuez; Parc Natural del Delta de l'Ebre, especially Antoni Curcó and Frances Vidal, Parque Natural de L'Albufera, AMAYA (Agente de Medio Ambiente y Agua), Ángel Pérez Mechero, ANSE, Antonio Fernández-Caro Gómez/ANSE, Coordinadora Ornitológica de Asturias, David García, David Miguélez, Eloy Fernández de Montoya, Enrique Gómez Crespo, Enrique Pelayo Zueco, Esteban Cardona, Felipe González, Francisco Hernández (Aragón), GIA-León, GOB (Balears), Grupo Naumann, Héctor González, IAN, lhobe, Inmaculada Santos, Javier Prieta, Javier Sampietro Latorre, Javier Sanz Sánchez, Jesús Mari Lekuona, Jesús Palacios, José Ángel Nuevo, José Luis Rivas González, José María Fernández García, Jose Rafael Garrido López, Juan Carlos del Moral, Juan Jiménez Pérez, Juan Picazo Talavera, Luis Fernando Estefano, Luis Lopo (La Rioja), Luis Mario Arce, Manuel Suárez, Mariano Rodríguez, Mario Jiménez, Pablo Vera, Parque Nacional de las Tablas de Daimiel, Parque Natural de L'Albufera, Pere Vicens, Ricard Gutiérrez, SEO-Aranjuez, SEO-Asturias, SEO-Ávila, SEO-Cáceres, SEO-Cantabria, SEO-Castro, SEO-Córdoba, SEO-Málaga, SEO-Monticola, SEO-Salamanca, SEO-Sierra de Guadarrama, SEO-Soria, SEO-Vanellus, Serafín González Prieto, Teresa Sánchez Corominas, Tomás Velasco, Víctor Salvador and Xavier Méndez.

**Apologies to those whose names do not appear on the list; we would like to thank very much everyone who contributed. There are so many people whose hard work and information have been invaluable to this project, it is impossible to mention you all here.**

\\ **AUTHORS:** Blas Molina - SEO BirdLife

# A HUGE NUMBER OF PEOPLE PARTICIPATING IN THE INTERNATIONAL WATERBIRD CENSUS

On average, in Spain, there are more than 1,000 sites, although annual coverage is dependent on the resources available to the autonomous communities who monitor them. In some of these regions, surveys have not been conducted for several winters. Therefore, the average number of sites surveyed varies: for the 2009-2016 period it was 1,034, and for 17 census years (1990-2016) it was 1,088.

## NUMBER OF VOLUNTEERS:

AT LEAST **2,300** VOLUNTEER COUNTERS



## NUMBER OF WETLANDS COUNTED:

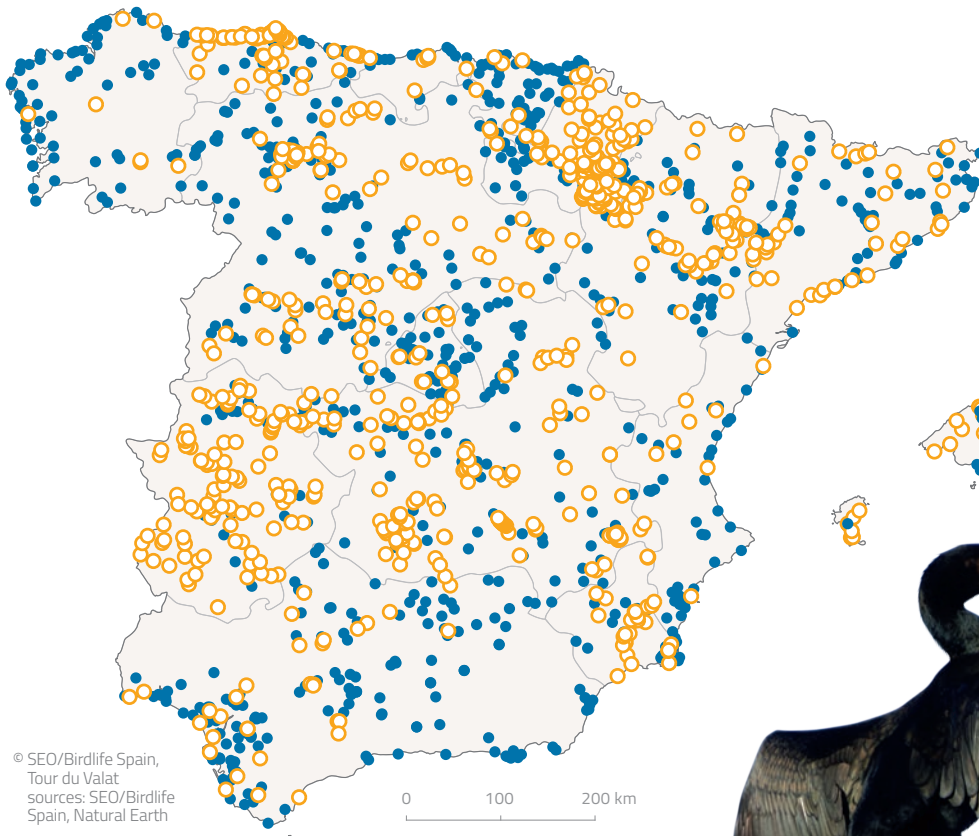
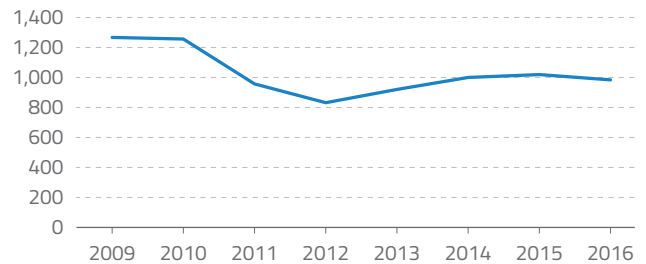
MORE THAN **1,000** WETLANDS COUNTED ANNUAL AVERAGE



► For the winters 2017 and 2018 the data are not yet complete at the time of preparing this information, due to delays in the compilation process.

Each year, new wetlands with local or provincial interest have been incorporated into the census, but it is the wetlands of international importance that host the highest national percentage of waterbird. Thus, certain wetlands can exceed 50% of the waterbirds that are counted in a given year, depending on various factors, such as the state of flooding of the wetland. Three wetlands in particular stand out: Doñana, Delta del Ebro, and Albufera de Valencia. Doñana can exceed 600,000 waterbirds in the best winters, and the Ebro Delta can exceed 300,000 individuals.

## NUMBER OF FUNCTIONAL SITES counted from 2009 to 2016

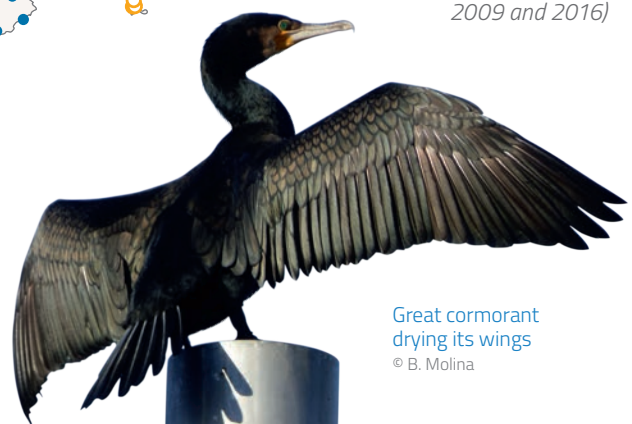


## WETLANDS COUNTED in Spain from 2009 to 2016

### National census network

- Sites irregularly counted (less than 5 of the years between 2009 and 2016)
- Sites regularly counted (at least 5 of the years between 2009 and 2016)

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Great cormorant drying its wings  
© B. Molina



# THE GREYLAG GOOSE DECREASES DRAMATICALLY WHEREAS THE GLOSSY IBIS INCREASES STEADILY

The figures shown correspond to the year 2016, the last year in which a survey of the wintering waterbirds populations was carried out. A trend analysis was performed using Trim, over the long-term (1991-2016), and the short-term (2000-2016).



In Spain, a long-term negative evolution is seen in populations of Tufted Duck, Common Pochard and Eurasian Wigeon, which is also evident in the short-term analysis, although the Eurasian Wigeon has shown stability in recent years. In the short-term, the data shows a negative trend for the Greylag Goose, Red-knobbed Coot and the White-headed Duck.

For the Greylag Goose, 2000-2009 was when the highest numbers of wintering specimens were observed in Spain, with an average of 100,225 individuals. The trend changed dramatically from 2010, when a decline in wintering numbers began; the numerical changes of the common goose can be observed on the Guadalquivir Marshes and in Castilla y León; sites on which more than 90% of the Spanish population are concentrated.

The Common Shelduck stands out with a very positive trend, over both the long and short term. Other species of waterbird, in general, show positive trends. However, there

has been a negative evolution of the Purple Sandpiper, as well as the Cattle Egret which has been an abundant species of heron up until now. Western Swamphen continues to show decline, with a significant decrease in the number of specimens observed on its principal sites on the Guadalquivir marshes.

The wintering populations of the Kentish Plover show negative values in the short term, and over the last 17 years its decline in wintering populations are parallel to that seen in the breeding population. However, there has been a significant positive evolution of the Great Egret, Glossy Ibis, Eurasian Spoonbill, Green Sandpiper and Common Ringed Plover.

The Glossy Ibis has gone from being a rare species in some wetlands, such as the Ebro Delta, to becoming one of the most abundant birds in rice fields, and registers high numbers in the Guadalquivir marshes, the wetland that hosts the largest population.

Glossy Ibis in Albufera of Valencia - © P. Vera





**\\ SPECIES IN DECLINE,**  
ACCORDING TO CALCULATIONS  
MADE DURING THE PERIOD 2009-2016

ORDER		Mid-January 2016	
English Name	Scientific Name	Total	N° sites
Greylag Goose	<i>Anser anser</i>	66,432	52
Taiga Bean Goose	<i>Anser fabalis</i>	N/A	N/A
Common Pochard	<i>Aythya ferina</i>	16,563	172
Tufted Duck	<i>Aythya fuligula</i>	1,170	70
White-headed Duck	<i>Oxyura leucocephala</i>	2,182	32
Red-knobbed Coot	<i>Fulica cristata</i>	30	7
Western Swamphen	<i>Porphyrio porphyrio</i>	1,355	72
Western Cattle Egret	<i>Bubulcus ibis</i>	17,130	120
Kentish Plover	<i>Charadrius alexandrinus</i>	3,540	48
Purple sandpiper	<i>Calidris maritima</i>	62	9
Little Stint	<i>Calidris minuta</i>	8,259	34



Northern Pintails - © R. Elosegui



**\\ SPECIES CONSIDERED AS STABLE**  
ACCORDING TO CALCULATIONS  
MADE DURING THE PERIOD 2009-2016

ORDER		Mid-January 2016	
English Name	Scientific Name	Total	N° sites
Eurasian Wigeon	<i>Mareca penelope</i>	16,323	85
Mallard	<i>Anas platyrhynchos</i>	166,303	712
Little Grebe	<i>Tachybaptus ruficollis</i>	5,499	373
Black-necked Grebe	<i>Podiceps nigricollis</i>	7,607	98
Eurasian Oystercatcher	<i>Haematopus ostralegus</i>	1,744	25
Eurasian Curlew	<i>Numenius arquata</i>	2,835	43
Black-tailed Godwit	<i>Limosa limosa</i>	32,750	35
Common Sandpiper	<i>Actitis hypoleucos</i>	1,595	169
Common Redshank	<i>Tringa totanus</i>	6,065	54
Common Snipe	<i>Gallinago gallinago</i>	3,598	124
Little Ringed Plover	<i>Charadrius dubius</i>	256	36



**\\ SPECIES ON THE RISE**  
ACCORDING TO CALCULATIONS  
MADE DURING THE PERIOD 2009-2016

ORDER		Mid-January 2016	
English Name	Scientific Name	Total	N° sites
Brant Goose	<i>Branta bernicla bernicla</i>	25	7
Common Shelduck	<i>Tadorna tadorna</i>	15,335	112
Red-crested Pochard	<i>Netta rufina</i>	20,618	63
Ferruginous Duck	<i>Aythya nyroca</i>	98	27
Northern Shoveler	<i>Spatula clypeata</i>	140,206	247
Gadwall	<i>Mareca strepera</i>	13,458	154
Northern Pintail	<i>Anas acuta</i>	65,531	67
Eurasian Teal	<i>Anas crecca</i>	52,360	246
Great Crested Grebe	<i>Podiceps cristatus</i>	7,571	204
Greater Flamingo	<i>Phoenicopterus roseus</i>	83,914	71
Eurasian Coot	<i>Fulica atra</i>	85,732	369
Common Crane	<i>Grus grus</i>	38,642	58
Eurasian Spoonbill	<i>Platalea leucorodia</i>	3,465	46
Glossy Ibis	<i>Plegadis falcinellus</i>	28,102	25
Grey Heron	<i>Ardea cinerea</i>	10,838	469
Great Egret	<i>Ardea alba</i>	1,977	128
Little Egret	<i>Egretta garzetta</i>	12,087	188
Pied Avocet	<i>Recurvirostra avosetta</i>	12,795	23
Sanderling	<i>Calidris alba</i>	3,087	40
Dunlin	<i>Calidris alpina</i>	85,243	66
Green Sandpiper	<i>Tringa ochropus</i>	1,333	138
Spotted Redshank	<i>Tringa erythropus</i>	635	19
Common Greenshank	<i>Tringa nebularia</i>	2,219	87



Volunteers during the waterbird census - © B. Molina

**\\ 2016 COUNTS AND 8 YEAR TRENDS OF THE NUMBERS OF WATERBIRD SPECIES**  
recorded in Spain in mid-January



# THE FLOOD SITUATION INFLUENCES THE WINTERING WATERBIRDS

The number of wintering waterbirds in Spain each winter depends on the flood situation of the main wetlands. The average is around 1,900,000 individuals (1,982,481 during 2009-2016, and 1,828,422 during 2014-2016).



Gadwall in Salburua marshes, Vitoria-Gasteiz - © R. Elosegui

The main Doñana wetland exerts a very important influence on the results, with very low figures when winter comes with severe drought. The harsher winters in central and northern Europe also increase the number of specimens that come to the Spanish wetlands. However, recent mild winters have seen significant declines in geese numbers. The best years can exceed two million waterbirds, and during years with unfavourable conditions, the number barely exceeds one and a half million.

Ducks and waders are the groups of birds with the highest numbers of observed individuals. Gull numbers are certainly underrepresented in the data, as it would require a greater effort to survey in appropriate places and a greater number of coastal transects.

Flamingos in Albufera of Valencia - © P. Vera



GROUPS	MEAN 2009-2016	MEAN 2014-2016
Ducks	665,283	626,711
Gulls and Terns	380,414	381,825
Waders	410,933	379,353
Coots, rails and crakes	126,628	100,899
Flamingos	81,749	85,594
Geese	100,017	69,518
Hérons	59,071	47,731
Cranes	54,565	38,636
Cormorants	43,515	36,299
Storks, ibis & spoonbills	29,249	33,540
Grebes	21,253	20,748
Woodcocks and Snipes	6,450	4,675
Sea ducks	3,080	2,630
Swans	136	175
Loons	75	88
Pelicans	0	1
<b>TOTAL WATERBIRDS</b>	<b>1,982,418</b>	<b>1,828,423</b>

## MEAN NUMBERS OF WATERBIRDS

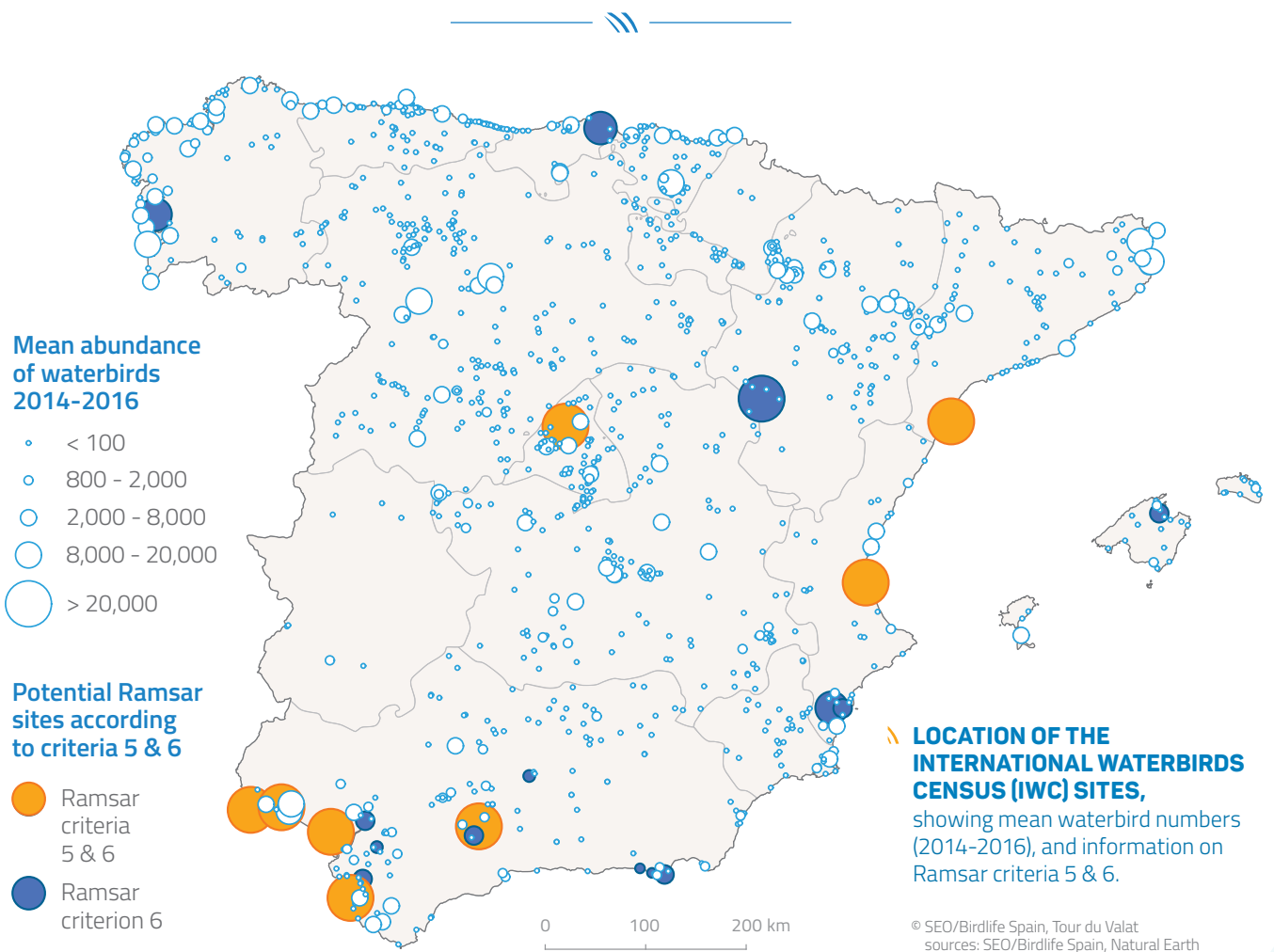
counted during the mid-January census, 2009-2016 and 2014-2016



# WETLANDS OF INTERNATIONAL IMPORTANCE IN SPAIN (2014-2016)

SITES OF INTERNATIONAL IMPORTANCE	Ramsar Site	> 20,000 waterbirds	Black Stork	Black-crowned Night-heron	Black-tailed Godwit	Black-winged Stilt	Caspian Tern	Common Coot	Common Crane	Common Ringed Plover	Common Shelduck	Common Teal	Dunlin	Eurasian Spoonbill	Eurasian Wigeon	Gadwall	Glossy Ibis	Great White Egret	Greater Flamingo	Greylag Goose	Grey Plover	Kentish Plover	Lesser Black-backed Gull	Little Egret	Little Stint	Mallard	Marbled Teal	Northern Pintail	Northern Shoveler	Pied Avocet	Purple Swamphen	Red-crested Pochard	White-headed Duck	Yellow-legged Gull		
	Number of sites		2	2	3	1	1	1	1	1	1	2	3	5	2	2	4	1	7	1	1	2	4	3	1	3	1	1	3	3	4	3	18	1		
<b>GALICIA</b>																																				
Complejo intermareal Umia-Grove	(R)													○																						
<b>ISLES BALEARES</b>																																				
S'Albufera de Mallorca	(R)																																○			
<b>MADRID</b>																																				
Embalse de Santillana		○																					○													
<b>VALENCIANA</b>																																				
L'Albufera	(R)	○	○														○						○	○			○						○			
Depuradora de Cartagena																																			○	
Laguna de la Depuradora de Campotejar																																			○	
Parque Natural de El Hondo	(R)																																		○	
Salinas de Santa Pola	(R)																		○																	

## WETLANDS OF INTERNATIONAL IMPORTANCE FOR WATERBIRDS (followed on from previous page)

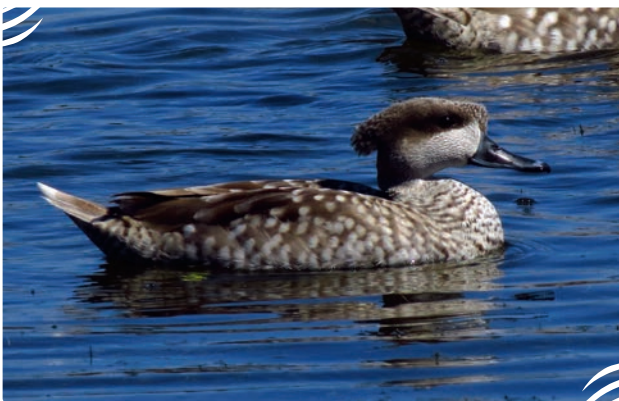




# FOCUS ON "KEY" SPECIES IN SPAIN

## MARBLED TEAL *MARMARONETTA ANGUSTIROSTRIS*

The distribution of the wintering population of the Marbled Teal broadly coincides with its distribution during the nesting season, concentrating in the wetlands of the littoral provinces, especially Andalusia (Guadalquivir marshes) and the Valencian Community (El Hondo). Some individuals have been recorded in other smaller wetlands, such as the Mallorca Albufera (Balearic Islands), and in some wetlands of Murcia.

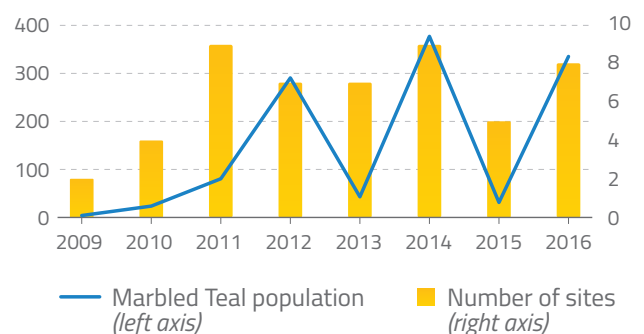


Marbled Teal - © O. Aldeguer

The number of specimens in winter has been variable over the last years, probably reflecting movements made which depend on changes in habitat availability, as well as movements to North Africa after breeding. The mean value of the size of the wintering population, in Spain, over the last decade is not a good indicator, since its numbers over this time have been highly variable, ranging between 3 and 379 specimens in the 2009–2016 period, and 247 between 2014–2016. The minimum value was in 2009, when only three individuals were recorded. Some birds ringed in Doñana have been recovered in Algeria and Morocco, showing that there is a connection between the North African populations with those on the main site of Doñana.

The most important threat is the destruction of their preferred habitat (shallow and seasonal wetlands). Due to the characteristic of their late reproduction, years with little precipitation and spring droughts can be very detrimental. The shortening of the hydrological cycle in the Guadalquivir Marshes makes it very difficult, in recent times, for the species to reproduce successfully in the Doñana Natural Reserve. In this enclave, the marsh dries out quickly in June and July.

### EVOLUTION OF THE POPULATION OF MARBLED TEAL in Spain, on the monitored sites



As a consequence, nesting pairs are concentrated in the fish ponds of Veta la Palma (Natural Park) and in the Brazo del Este, where the transformation of the habitat has continued in recent years. In very dry years, the species practically disappears from Doñana, where even the Veta la Palma fish ponds reach salinity levels too high for the nesting of these ducks.

After taking into account the current population size, the sharp fluctuations in population numbers, with separate, very small sub-populations occurring in a small number of wetlands with various conservation problems, the Marbled Teal should now be rated as "Critically Endangered" under the IUCN criteria. According to the Spanish Catalogue of Threatened Species, it is considered in the category of "Critically Endangered".



Marbled Teal  
© A. J. G. López

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Sunset on the site Aiguamolls de l'Empordà  
© S. S. Soriano



# CONCLUSIONS AND RECOMMENDATIONS FOR SPAIN

The data obtained in these census reports have previously been very complete and have served to obtain information at the level of the wetland, province, independent community or state. However, it has been increasingly difficult to have complete national compilations because lack of dedicated resources has increasingly led to a reduced coverage for some prominent wetlands and some entire autonomous communities. Spain has an important role to play in the conservation of waterbirds, as it is a prominent place for the migratory passage and wintering of this group of birds in the western Palaearctic. Thousands of birds, of numerous species, some of which are threatened, link their life cycle to our country, even if they do not nest in Spain. Additional pressure is put on those wintering waterbird which are considered as game, so their proper management is essential. Successful management relies on having up-to-date information. This information is also necessary to comply with certain commitments and obligations such as the Birds Directive (six-year reports) or the AEWA Agreement of the Bonn Convention (Agreement for the Conservation of Migratory Aquatic Birds of Africa-Eurasian).



The monitoring of common bird species in aquatic habitats points to an overall positive general trend, although with fluctuations that seem to be closely linked 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 waterbirds, however species such as the Marbled Teal, Crested Coot and White-headed duck are still in a critical situation, despite efforts being made to conserve them.

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 area calculated in the early 1990s, Spain has 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 by 20th century drainage projects. However, historical human intervention has also created new artificial aquatic environments, such as reservoirs, ponds, salt-pans, ricefields, gravel pits, etc., which eventually acquire some biological interest.

These habitats play a key role in the conservation of many species of birds, whether during their periods of reproduction, overwintering or migration. In many cases, they constitute the greatest areas of concentration of birds on the Peninsula Iberica. The main threats to 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 or removal of the natural vegetation, etc.

Volunteers during the International Waterbird  
Census in Tablas de Daimiel National Park

© A. Carretero



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Landscape of El Hondo Natural Park - © J. Marco



Mediterranean coordination:



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