

## **Ducks flock to Extremadura thanks to its ricefields**

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This image shows the Northern Pintail (Anas acuta). Credit: Doviende

Four new reservoirs linked to rice cultivation built in the middle basin of the Guadiana river in the middle of the 1990's have allowed various migratory dabbling duck species to significantly increase in number during the winter. Researchers at the University of Extremadura propose that Vegas Altas del Guadiana is turned into a new Special Protection Area for Birds.

Many aquatic migratory bird populations are in decline and the loss of natural wetland is one of the main causes. A study at the University of Extremadura financed by the Guadiana Hydrographic Confederation has analysed the migratory patterns of this type of bird both before and after the construction of these reservoirs in the area of Vegas Altas del Guadiana.



"Between 1991 and 1994 around 25,277 ducks spent the winter in the large reservoirs of Guadiana. This number increased to 46,163 between 2007 and 2010 and the vast majority was to be found in the four new reservoirs that are a lot smaller than those in the Guadiana middle basin. On the other hand, the large reservoirs saw an overall decline in their populations during the same two periods," as explained to SINC by Juan G. Navedo, lead researcher of the study published in the 'Bird Conservation International' journal.

According to the scientists, the development of ricefields (also considered as wetlands) is key to the study since the presence of this crop nearby probably ensures that these <u>birds</u> do not experience significant changes in their winter <u>migration patterns</u>.

The researcher emphasises that "the birds only rest on the reservoirs during the day and then flee in mass at dusk to feed in the nearby ricefields. Seeing the ducks take flight is a true spectacle."

Biogeographic populations of these species show a general downward trend. It is estimated that the birds that now spend their winter in Extremadura are probably from Southwest Europe (mainly the Doñana Nature Reserve) or Northwest Africa, where the population of migratory dabbling ducks has also been in decline in recent decades.

## Natural versus manmade wetlands

In the 1960's, various large reservoirs were construction for crop irrigation in Extremadura. Then, the relatively small reservoirs were built from the 1990's onwards near the ricefields.

For the purposes of the study, the team first designed and carried out monthly boat trips at specific times with the help of the Guadiana Hydrographic Confederation. In the case of the medium and small sized



reservoirs, the birds were counted from the land at places were the whole wetland could be seen.

"We are by no means advocating the construction of new reservoirs to conserve migratory dabbling duck populations. Natural wetlands, in this case the tributary headwaters of the Guadiana River and its flood lands, are vital for biodiversity conservation. They also play a key role in the conservation of aquatic flora and fauna, especially some plants and invertebrate species as well as other aquatic bird species dependent on the marsh habitats of lake and damns," outlines the researcher.

The area making up these four 'new' reservoirs (Sierra Brava, Gargáligas, Cubilar and Ruecas, along with the associated ricefields) is home to an average of more than 1% of Western Europe's biogeographic populations of dabbling duck species such as the Northern Shoveller (*Anas clypeata*), the Northern Pintail (*Anas acuta*) and the smallest duck in Europe, the Common Teal (*Anas crecca*).

"According to numerical criteria established by the Ramsar Convention and adopted by the EU Birds Directive regarding the nomination of Wetland of International Importance (a place that regularly shelters at least 1% of the different biogeographic population), the four reservoirs and the nearby ricefields should become a new Special Conservation Area for Birds (ZEPA), named Vegas Altas del Guadiana," conclude the researchers.

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