

## THE DEMOISELLE CRANE *ANTHROPOIDES VIRGO* IN THE IBERIAN PENINSULA, A SUMMARY OF HISTORICAL AND SUBFOSSIL DATA

LA GRULLA DAMISELA *ANTHROPOIDES VIRGO* EN LA PENINSULA IBERICA,  
UN RESUMEN DE LOS DATOS HISTORICOS Y SUBFOSILES

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The Demoiselle Crane *Anthropoides virgo* became extinct in Western Europe early in the twentieth century, Spain apparently being the last (if not the only) country in the area supporting a breeding population (Cramp & Simmons, 1980; Johnsgaard, 1983). The literature sources indicating breeding have however been judged differently by later authors, as some have accepted the account while others have maintained a certain degree of scepticism (Gil Lletget, 1945; Valverde, 1960; Bernis, 1966; ICONA, 1986; Blanco & González, 1992; Finlayson, 1992; Díaz *et al.*, 1996). This paper is an attempt to summarise the available information, both published and subfossil, on the past occurrence of the Demoiselle Crane in Iberia.

### *Historical records from Iberia*

According to Valverde (1992), there exists a thirteenth century illustration of Demoiselle Cranes in the *Cantigas de Alfonso X* and, according to the same source, the species is also mentioned in the eighteenth century from the Madrid area. Saunders (1871) said that the Demoiselle Crane «though less abundant than the [Common Crane], it is by no means rare in winter, but it takes its departure early in April, and, so far as I know, has never been known to breed in any part of Andalusia, beyond which province it is almost unknown». In his papers on the avifauna of Gibraltar, Irby (1875; 1895)

mentioned that specimens had been collected in the vicinity of Sevilla and that the species possibly bred in the Marismas del Guadalquivir and Laguna de la Janda. He also suggested that the species bred in localities further north based on its regular occurrence in the Marismas during migration. Arévalo (1887) stated that the Demoiselle Crane was not common in Spain, although it was usually present in the Sevilla area during winter in small numbers. The only site referred to is the Marismas de Sevilla. Sharpe (1894) mentioned the presence in the British Museum of two skins (male and female, both adult birds) collected in April near Sevilla, presumably in the Marismas del Guadalquivir. Whitaker (1905) remarked in his paper on the birds of Tunisia that the Demoiselle Crane is a regular visitor in some parts of southern Spain, although it did not breed there. In 1893, Dr. Paulino, in a letter to W. C. Tait cited by Tait (1924), mentioned the presence of a Demoiselle Crane in the collection of the king of Portugal in Lisboa. This is the only record of the species for Portugal. Unfortunately, there is no information about the place where the bird was captured. The Demoiselle Crane is mentioned in ICONA (1986) as a breeding species in Extremadura at the beginning of the twentieth century, on the basis of the local tradition as well as from references cited in the hunting literature. The species was also mentioned as a probable breeder in the Marismas del Guadalquivir in the past. Valverde (1992) reported that one Demoiselle Crane was captured in the Guadiana

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de Alemtejo in 1893, and that a hunter took two chicks from a nest at the Los Rostros estate, on the present site of the Talavera La Real airport about 10 km east of Badajoz in 1923-24. This was reportedly the only nesting site in the area at that time. One of these birds reportedly survived in captivity until 1937, at which time it may well have been the last Iberian Demoiselle Crane. Finally «small cranes» are mentioned from Mallorca in 1575 (Valverde, 1992), where two specimens were captured during the late eighteenth century, one at Albufera and one at Santa Ponsa, Porrassa (Gil Lletget, 1945). Strictly speaking, these records are outside the area treated in this paper, though. According to the references above, the Demoiselle Crane may have bred during the nineteenth and the early twentieth century in two areas of the Iberian Peninsula: the Extremadura region, and the Marismas del Guadalquivir, including the Laguna de la Janda in southwestern Cádiz (Fig. 1).

### *Subfossil records from Iberia*

Remains of Demoiselle Cranes have been found so far at three sites in the Iberian Peninsula, all of Holocene age (Fig. 1).

(1) *La Mota* (Medina del Campo, Valladolid). This site is archeologically dated to the transition between Hierro (Iron Age) I and II, and therefore from the fifth or sixth century BC (unpublished data). There is only one bone of Demoiselle Crane, a coracoideus, with a cut mark indicating that the bird was eaten by men.

(2) *Cava Baja* (Madrid). A medieval midden in the street Cava Baja dated to the beginning of the twelfth century AC (Hernández, 1993). This site is by far the richest with twelve bones from the same individual. The bird was eaten since the remains are burned and shown cut marks.

(3) *El Acequión* (Albacete). A Bronze-age village situated in the (now dry) lagoon with

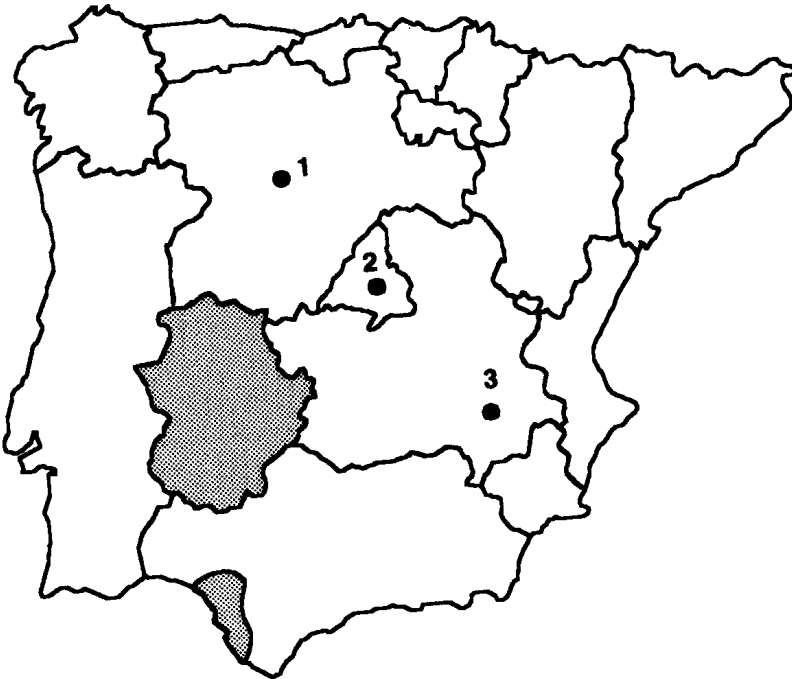


FIG. 1.—Former distribution of Demoiselle Crane in Spain. Dotted area : historical data. Dots: archaeological sites (1: La Mota, 2: Cava Baja, 3: El Acequión).

[Distribución pasada de la Grulla Damisela en España. Área punteada: referencias históricas. Puntos: yacimientos arqueológicos (1: La Mota, 2: Cava Baja, 3: El Acequión).]

the same name. This site has been dated with the  $C^{14}$  method to  $3680 \pm 80$  BC (UGRA 266) and  $3600 \pm 50$  BC (CSIC 736) (uncorrected dates) (unpublished data). The bones, a scapula and a tarsometatarsus, belong to the same individual. The presence in this site of a chick of Great Bustard and another of Common Crane would suggest that these birds were hunted during the breeding season.

The species of birds found together with the Demoiselle Crane at these three sites are listed in Table 1. The paleoenvironment reconstruction indicated by these associations agrees with the habitat requirements of Demoiselle Crane, since steppe and aquatic species predominate. It is worth noting that in two out of three sites Demoiselle Crane and Common Crane are found together. The Demoiselle Crane has also been reported from the Mid-Würmian of Gorham's Cave, Gibraltar (layer M; Eastham, 1968). However, this record is an error, and it is doubtful whether the remains (a humerus) even

belonged to a crane (Joanne H. Cooper, pers. com.).

### Conclusions

The subfossil records of the Demoiselle Crane considerably extend the range of the species in the Iberian Peninsula. Taken together with the other available sources of information, they seem to indicate that the species had a rather extensive distribution in the past, and probably occurred in the vicinity of water in most steppe areas in Spain.

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TABLE 1

Number of remains of the species occurring together with the Demoiselle Crane at three archaeological sites in Spain.

[Número de restos de las especies acompañantes a la *Grulla Damisela* en tres yacimientos arqueológicos españoles.]

Species	La Mota	Cava Baja	El Acequión
<i>Ardea cinerea</i>	1		
<i>Platalea leucorodia</i>		5	
<i>Anser anser</i>			1
<i>Anas platyrhynchos</i>			3
<i>Tadorna ferruginea</i>		3	
<i>Aquila chrysaetos/adalberti</i>			1
<i>Falco tinnunculus</i>			3
<i>Alectoris rufa</i>	6	10	2
<i>Gallus gallus</i>		1	
<i>Grus grus</i>		1	2
<i>Otis tarda</i>		18	7
<i>Tetrax tetrax</i>	4	40	
<i>Numenius arquata</i>		14	
<i>Numenius phaeopus</i>		9	
<i>Columba livia/oenas</i>			2
<i>Athene noctua</i>			2
<i>Coracias garrulus</i>	1		
<i>Corvus corax</i>			2
<i>Corvus monedula</i>			1
<i>Corvus corone</i>			1

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