

## Recorded distribution of sturgeon (*Acipenser sturio* L., 1758) in the Iberian Peninsula and actual status in Spanish waters

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With 1 figure and 2 tables in the text

### Abstract

We have assessed the geographical distribution of sturgeon (*Acipenser sturio* L., 1758) in the Iberian Peninsula, based on a critical analysis of the literature published in the XIXth and XXth centuries, and a review of the fish collections housed in Spanish institutions. Captures and records of sturgeon have been reported in the Cantabrian, Atlantic and Mediterranean Iberian coasts, and in the Balearic Islands. Concerning running freshwaters, sturgeon has been reported from the rivers Urumea (Cantabrian Sea); Miño, Duero, Guadiana and Guadalquivir (Atlantic Ocean), and Júcar, Turia and Ebro (Mediterranean Sea). In the early eighties, sturgeon still survived in the rivers Duero and Guadiana (Portugal) but its presence has not been further reported. If occurrence could be confirmed, they would actually represent the unique river populations of sturgeon in the Iberian Peninsula. Last sturgeon known to be fished in Spanish waters was in 1975. Sturgeon in Spain was protected by law in 1983 and was considered "endangered" in 1986.

ALMAÇA (1988) made a very valuable overview of the presence of sturgeon (*Acipenser sturio* L., 1758) in Portugal. We present here a general survey of the known data from Spain to complete the present knowledge of Iberian records, with some further comments about the actual status of Spanish populations.

### Iberian Peninsula

Known records of sturgeon in Spanish freshwaters and seas are gathered in Table 1. Likewise, Fig. 1 presents a map with the Spanish localities listed in Table 1, together with those belonging to Portugal (ALMAÇA 1988).

Sturgeon seemed to be rather common in the Iberian rivers and seas, and it was quite abundant at less in the rivers Ebro, Duero and Guadalquivir. Never-

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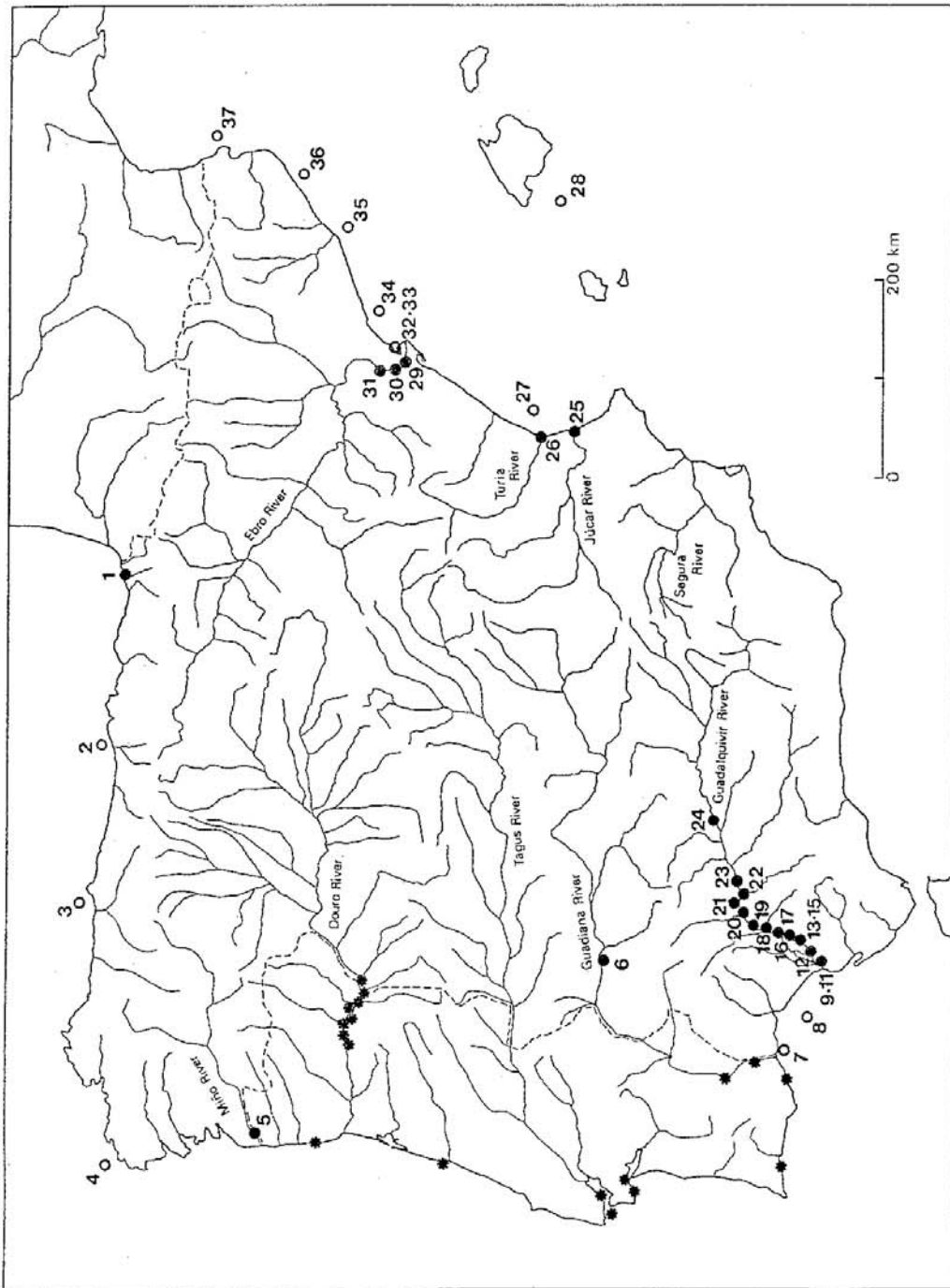


Fig. 1. Distribution of sturgeon in the Iberian waters. Spain: White points (sea records), black points (river records) (see numbers in Table 1). Portugal: Black stars (after ALMAÇA 1988).

theless, after the decline affecting to its reproductive populations along this century, the last known records of sturgeon in the Iberian rivers are:

River Duero: Solitary adult (1983 and 1984) and juvenile (1972) specimens reported from Portuguese waters by ALMAÇA (1988).

Table 1. List of localities of known records and reports of sturgeon in Spanish waters.

No.	Locality	Reference	Specimens	Date of capture
1.	San Sebastián	BUEN (1936)		
	River Urumea	LOZANO-CABO (1964)		
2.	Santander	LOZANO-CABO (1964)		
3.	Asturias	LOZANO-CABO (1964)		
		ORTEA & HOZ (1979)		last catch: 1976
4.	Galicia	LOZANO-CABO (1964)		
5.	River Miño	SPICZAKOW & CLASSEN (1942)		
6.	River Guadiana, Mérida	STEINDACHNER (1866 b)		
7.	Ayamonte	CLASSEN (1944)	1 ex.	1. II. 1943
8.	Gulf of Cádiz	MACHADO (1837)		
	River Guadalquivir (without locality):	MACHADO (1837)		
		STEINDACHNER (1866 b)		
		GUTIÉRREZ (1962)		
	River Guadalquivir (9–24):			
9.	Sanlúcar de Barrameda	CLASSEN (1944)	2 ex.	1933–34
10.	Figuerola	CLASSEN (1944)	481 ex.	1934–43
11.	El Puntal & Caño de la Nueva	CLASSEN (1944)	618 ex.	1933–43
12.	Trebujena	CLASSEN (1944)	6 ex.	1932–34
13.	Tarfia	CLASSEN (1944)	12 ex.	1934
14.	Isla Mayor	CLASSEN (1944)	2 ex.	1932
15.	La Mata	CLASSEN (1944)	225 ex.	1933–43
16.	Isla Menor & Isla Mínima	CLASSEN (1944)	87 ex.	1933–42
17.	Coria del Río	CLASSEN (1944)	19 ex.	1932–35
18.	Sevilla	STEINDACHNER (1866 b)	1 ex.	I. 1865
		CLASSEN (1936)	1 ex.	1934
19.	La Algaba	CLASSEN (1944)	35 ex.	1932–41
20.	Alcalá del Río	CLASSEN (1944)	264 ex.	1932–43
		HERNANDO (1975)	1 ex.	26. IV. 1974
			1 ex.	11. IV. 1975
21.	Cantillana	CLASSEN (1944)		last catch: 1931
22.	Villanueva del Río & Alcolea del Río	CLASSEN (1944)		last catch: 1931
23.	Lora del Río	CLASSEN (1944)		last catch: 1931
24.	Córdoba	STEINDACHNER (1866 b)		
25.	River Júcar	CISTERNAS (1877)		
26.	River Turia	CISTERNAS (1877)		
27.	Gulf of Valencia	LOZANO-CABO (1964)		
28.	Balearic Islands	FAGÉ (1907)		
	River Ebro (without locality):	STEINDACHNER (1866 a)		
29.	River Ebro, Amposta	GIBERT (1911, 1913)		
		LOZANO-REY (1919)	4 ex.	no date
		ANONYMOUS (1952)	1 ex.	9. XII. 1951
30.	River Ebro, Tortosa	GIBERT (1911, 1913)		
		LOZANO-REY (1919)	1 ex.	no date
		DOLZ (1983)	5 ex.	VI. 1935
31.	River Ebro, Xerta	GIBERT (1911, 1913)		
32.	Fangar	GIBERT (1911, 1913)		
33.	Ampolla	GIBERT (1911, 1913)		
34.	Gulf of Tarragona	LOZANO-CABO (1964)		
35.	Barcelona	SÁNCHEZ-COMENDADOR (1904)		
36.	Blanes	ARTÉ (1949)	1 ex.	VII. 1949
37.	Cape Creus	GIBERT (1911, 1913)		

River Guadiana: Adult (1970s) and juvenile (1980s) specimens reported from Portuguese waters by ALMAÇA (1988).

River Guadalquivir: Adult specimens (one from 1974 and one from 1975) reported by HERNANDO (1975).

River Ebro: After SOSTOA & LOBON-CERVIA (1989) the last adult specimens were fished during 1940s–1950s, while the last juvenile known to be captured was in 1951 (ANONYMOUS 1952).

## Spain

With regard to the Spanish collections, only ten preserved specimens of sturgeon are known to be housed in four Institutions (Table 2).

Sturgeon has never been an abundant species in Spain, although it was commonly captured in the rivers Ebro and Guadalquivir. Sturgeon population from Guadalquivir was exploited for caviar and smoked flesh production from 1930s to 1960s (ELVIRA et al. in press). Nevertheless, this population is now exhausted (see ELVIRA et al. in press, for the causes of decline). Sturgeon fishery was forbidden by law in Spain in 1983. And later on, ICONA (1986) included sturgeon in the Red List of Spanish Vertebrates, where it was considered as “endangered” (“E” after the I.U.C.N. categories).

Table 2. List of preserved specimens of sturgeon housed in Spanish Collections. MNCN: National Museum of Natural Sciences, C.S.I.C., Madrid; UZA (IFIE): Autonomous Community of Madrid, Madrid; EBD: Biological Station of Doñana, C.S.I.C., Sevilla; ICMB(LB): Institute of Marine Sciences, Laboratory of Blanes, C.S.I.C., Barcelona.

Museum	Specimens	Locality	Date	Reference
MNCN	3 ex.	River Ebro Amposta (Tarragona)	no date	LOZANO-REY (1919) MATALLANAS et al. (1981)
MNCN	1 ex.	River Ebro Amposta (Tarragona)	no date	LOZANO-REY (1919)
MNCN	1 ex.	River Ebro Tortosa (Tarragona)	no date	LOZANO-REY (1919) MATALLANAS et al. (1981)
MNCN	1 ex.	River Guadalquivir	no date	MATALLANAS et al. (1981)
UZA(IFIE)	1 ex.	River Ebro Amposta (Tarragona)	9. XII. 1951	ANONYMOUS (1952)
EBD	1 ex.	River Guadalquivir Alcalá del Río (Sevilla)	26. IV. 1974	HERNANDO (1975)
EBD	1 ex.	River Guadalquivir Alcalá del Río (Sevilla)	11. V. 1975	HERNANDO (1975)
ICMB(LB)	1 ex.	Mediterranean Sea near Blanes (Gerona)	VII. 1949	ARTÉ (1949)

A restoration programme for sturgeon in Spain has been recently proposed (ICONA 1986, ELVIRA et al. in press). Otherwise, sturgeon survival is highly unlikely.

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