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Notice about the survival of sturgeon (*Acipenser sturio* L., 1758) in the Guadalquivir estuary (S.W. Spain)

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Abstract

An adult female of sturgeon (*Acipenser sturio* L., 1758) was fished in the Gulf of Cádiz, near the Guadalquivir River mouth on 14 September 1992. The specimen weighted 55 kg with a total length of 2.10 m; maximum diameter of body was about 0.35 m. Former known record of the species in the area was in 1975.

Introduction

Historical distribution of sturgeon (*Acipenser sturio* L., 1758) in the Iberian Peninsula was recently reviewed by Almaça (1988) and Elvira et al. (1991 a). Last known records of the species in Iberian waters come from early 1980s. Elvira et al. (1991 b) commented on the causes of decline and near extinction in the River Guadalquivir. Present report deals with the finding of an adult specimen in the estuary of the River Guadalquivir on September 1992.

Material

The sturgeon was fished by a small purse seiner in the early morning of September 14th, 1992. The fishing took place near the coast in front of "Casa del Inglesillo", in the area of the National Park of Doñana (Huelva, S.W. Spain); 36° 50′ N, 6° 26′ W; UTM 29SQA2979. The fish was caught at a depth of less than 10 m, over a sandy bottom, about 7 km off the Guadalquivir River mouth. The dead specimen was landed in the nearby port of Sanlúcar de Barrameda (Cádiz) at about 15.00 o'clock at the same day.

It was an ungravid female of 55 kg, with a total length of 2.10 m and a maximum body diameter of 0.35 m. The fish was bought by a local restaurant at a price of 120,000 ptas. (US$ 900). No remains were saved for scientific purposes, except some colour photographs.

Discussion

Sturgeon was usually captured in the River Guadalquivir until the 1960s (Elvira et al. 1991 b). A factory for caviar and flesh production existed be-

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tween the years 1932 and 1967 in the Guadalquivir margin. The total known catches of this period reached 3693 specimens (2900 females and 793 males) (ELVIRA 1990).

Last known records of sturgeon in the River Guadalquivir were an adult female (45 kg, 1.754 m) (April 26th, 1974) and an adult male (32 kg, 1.520 m) (April 11th, 1975). They were caught downstream the Alcalá del Río dam, placed at about 100 km up the river mouth (HERNANDO 1975).

According to its weight and length, the female caught in 1992, is assumed to be 20–24 years old (CLASSEN 1944). That means that it could be born approximately between 1968 and 1972. Reproduction of sturgeon in the area would then be confirmed until the early 1970s, but the success of current breeding has to be tested further on. Anyway, since the oldest female sturgeon found in the River Guadalquivir by CLASSEN (1944) was 26 years old, we may infer that natural survival of a reproductive population in the Gulf of Cádiz is still possible.

Sturgeon was protected by Spanish laws since 1983 and considered endangered in the National Red Lists (ICONA 1986, DOADRIO et al. 1991, BLANCO & GONZALEZ 1992). The world population is also threatened by extinction (HOLCIK et al. 1989, ROCHARD et al. 1990).

A restoration programme of sturgeon is in progress in the Gironde Estuary (France) since 1981 (CASTELNAUD et al. 1991). Meanwhile, the start of a similar project in Spain (ELVIRA et al. 1991 b) is still waiting for official funds. Firstly, it would be necessary to study the present environmental conditions of the River Guadalquivir, including water analyses and research of the actual characteristics of the available spawning areas. A second step would include the experimental restocking of sturgeon juveniles in the estuary.

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