

## New record of the Blue bream (*Abramis ballerus*) in the Elbe River in the Czech Republic

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**Abstract.** A single specimen of blue bream (*Abramis ballerus* (Linnaeus, 1758)) was caught on June 16<sup>th</sup>, 2003 in the Elbe River, under a weir in the village Střekov. It is the first record of this species in the Czech part of the Elbe River or its drainage after 77 years. This specimen was a five years old female of the total length 370 mm. Basic meristic and morphometric characteristics are given.

**Distribution, new record, blue bream, Pisces, *Abramis ballerus*, Elbe River, Palaearctic region**

### INTRODUCTION

Blue bream *Abramis ballerus* (Linnaeus, 1758) is distributed in rivers belonging to the northern parts of the Black Sea, Sea of Azov and Caspian Sea basins, further in the Baltic Sea and its inflows and in the rivers flowing to the south eastern part of the Northern Sea including the Elbe River basin (Bănărescu 1964).

In the Czech Republic, the distribution of this species is recently limited to the lower stretches of the rivers Morava and Dyje (Lusk et al. 2002). However, there are old records of this species from the Elbe drainage. First specimen was caught on January 26<sup>th</sup>, 1904 in the Vltava River at Kralupy nad Vltavou (Frič & Vávra 1904). This specimen is deposited in the ichthyologic collection of the National Museum in Prague. Further three specimens (two males and one female) were found on October 31<sup>st</sup>, 1926 in a pool close to the Vltava River near the village Kozárovice (Schäferna 1928). Unfortunately, these specimens have been lost (Oliva 1951). Oliva (1951) provided information about other four specimens from the Schäferna's collection, and he assumed that they could originate from the lower Vltava. However, the origin of this material is uncertain. Thus, only four specimens of blue bream have been surely caught in the Elbe River drainage in the Czech Republic and the species has not been recorded for the last 77 years from this area.

### RESULTS

On June 16<sup>th</sup>, 2003, one specimen of blue bream was caught from a boat by electrofishing using pulsed DC (600V/4A) in the Elbe River, under a weir at the village Střekov, 40.4 km from the German state border. Geographic coordinates of the locality are N 50°38.327', E 14°02.791'. The specimen was immediately measured using calliper with accuracy to the nearest mm, and weighed on balances WEDO Accurat 5000 with accuracy to 1 g. Several meristic and morphometric characteristics were measured (following Holčík (1989)) on the left side of the fresh specimen before preservation.

The specimen was a female of the total length 370 mm, body length 306 mm and weight 305 g. Meristic characteristics are as follows: D III, 8; A III, 36; P I, 14; V II, 8; C 18; lateral line scales 67, scale rows above the lateral line 17, scale rows below the lateral line 9.

Morphometric measurements in mm are as follows: maximum body depth 87.4, minimum body depth 20, body width 29.3, length of head 58, head width 34, head depth 52, preorbital distance 12.9, postorbital distance 32, interorbital distance 23.3, diameter of eye 16, upper jaw length 24.4, predorsal distance 150.1, preventral distance 122.5, preanal distance 177, length of caudal peduncle 47.2, distance between pectoral and ventral fin 54.9, distance between ventral and anal fin 51, length of dorsal fin base 30.05, length of anal fin base 96, length of pectoral fin base 54.9, length of ventral fin base 47.2, length of caudal fin 76.

The age of the specimen was determined from scales. The age was five years (4+). The ovaries of the female were empty and numerous small wounds were visible on the body surface. This indicates that the female spawned.

This specimen is deposited in the ichthyologic collection of the National Museum in Prague under the catalogue number NMP6V 80726.

#### DISCUSSION

The occurrence of the blue bream in the Elbe River in the Czech Republic shifts again the east boundary of the distribution area of this species in the Elbe drainage. In Germany, blue bream is common in lower and middle parts of the Elbe River up to Dresden (Füllner et al. 1996). Several factors could have influenced the occurrence of this species in the Czech part of the Elbe river: increasing water quality during the last decade, building of functional fish ways in the German part of the river, and probably also the extreme floods in summer 2002, which significantly modified the river bottom structure over large areas.

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