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FIRST RECORD OF *VIMBA VIMBA* (LINNAEUS,1758) (PISCES: CYPRINIDAE)
IN THE NETHERLANDS

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#### **ABSTRACT**

For the first time a specimen of *Vimba vimba*, a cyprinid fish from eastern European and western Asian rivers, has been recorded from the Netherlands part of the river Rhine.

#### DESCRIPTION

On January 24, 1989, Mr. W. Bunt caught during seine net fisheries in the river Neder-Rijn an "unknown" cyprinid fish amongst a catch of roach *Rutilus rutilus* (Linnaeus, 1758) and bream *Abramis brama* (Linnaeus, 1758).

The fish was identified as *Vimba vimba* (Linnaeus, 1758) at the Netherlands Institute for Fishery Investigations (RIVO) and deposited at the Institute of Taxonomic Zoology (Amsterdam) under number ZMA 120.347 (fig. 1).

The identification was reconfirmed by Dr. H. Nijssen.

Total length of the specimen was 19.9 cm and its weight was 76.6 g; most probably the age was 3 years, according to the growth pattern on its scales. The species was easily recognized as a cyprinid. Because of its marked projecting and rounded snout without barbels it resembles *Chondrostoma nasus* 

(Linnaeus, 1758). The opening of the mouth of *V. vimba* however is semi-circular with rather soft lips, where as in *C. nasus* the mouth has a straight, transverse opening with horny lips. *V. vimba* has 17-20 soft rays in the anal fin against only 10-12 in *C. nasus* (Bauch, 1963).

The colour is described as usually greyish-blue on the snout, head and back. The fins are pale yellow. The sides and abdomen are silvery. At the breeding season towards the end of May or beginning of June, the colours change in both sexes. The entire upper surface, down to below the lateral line, is covered with a deep black pigment.

The ventral side from lips to tail becomes richly orange-red coloured. The males develop tubercles (Seeley, 1886; Heuschmann, 1957).

## Key-data for identification

Some key-data for identification (Bauch, 1963; Heusch-

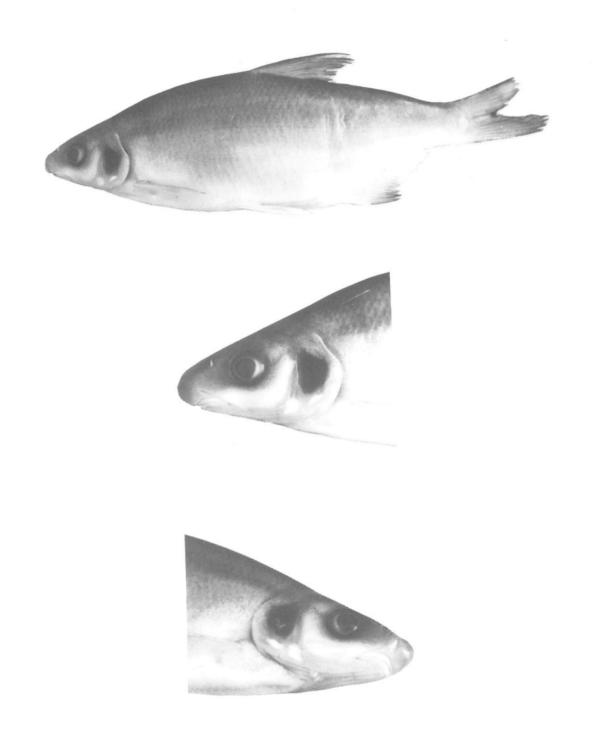


Fig. 1. The specimen of Vimba vimba caught in a sand pit in connection with the river Neder-Rijn near Heteren (The Netherlands).



Map. 1. Distribution of Vimba vimba (from Ladiges & Vogt, 1965; modified).



Map 2. Location of catch of Vimba vimba (arrow).

mann, 1957; Muus & Dahlstrøm, 1968; Seeley, 1886) are the following:

- cyprinid fish with elongated head and semi-circular mouth opening on the ventral side of the head, without barbels.
- dorsal fin: 8 soft rays.
- anal fin: 17-20 soft rays.
- scales of lateral line: 56-63.
- pharyngeal teeth: 5-5.
- -maximum total length: about 55 cm.

Vimba vimba is found in the lower regions of rivers discharging into the North Sea (Weser, Elbe) and Baltic Sea (southern Sweden and Finland, GDR, Poland, Russia). Subspecies live in the (rivers of) the Black Sea and the Caspian Sea (Blanc et al., 1971; Ladiges & Vogt, 1965; Muus & Dahlstrøm, 1968; Nikolski, 1957), see map 1.

Recently the species has been recorded from the Lippe and the Dhünn, tributaries of the river Rhine in the FRG (Borchard et al., 1986).

Fish from the German part of the Rhine can migrate without any obstructions into Dutch waters.

The Dutch specimen was caught in a 20 m deep sand pit, very close to and in connection with the river Neder-Rijn (km 895), near the village of Heteren (see map 2).

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