

The distribution of *Carassius gibelio* (Bloch, 1782) (Teleostei: Cyprinidae) in Thrace (Turkey)

by Müfit Özuluğ, Nurettin Meriç and Jörg Freyhof

Abstract. The Prussian Carp, *Carassius gibelio* (Bloch, 1782), was first reported from the European part of Turkey in 1988. Today, it seems to be widespread and may occur in all larger water bodies. The authors discuss whether this species has really invaded Thrace during the last 10–15 years. It might previously have been confused with *C. carassius*.

Kurzfassung. Aus der europäischen Türkei wurde der Gibel oder die Silberkarausche, *Carassius gibelio* (Bloch, 1782), erstmals 1988 gemeldet, ist aber heute weit verbreitet und kommt wohl in allen größeren Gewässern vor. Es wird diskutiert, wie weit die Ausbreitung der Art tatsächlich erst in den letzten 10–15 Jahren erfolgt ist, da die Art zuvor aufgrund von Verwechslungen mit *C. carassius* offenbar teilweise auch nur nicht erkannt worden war.

Key words. Invasive species, alien species, stocking, *Carassius carassius*, range extension.

Introduction

Increasing globalisation and river basin connections have facilitated one of the least reversible human-induced global changes: the homogenisation of the Earth's biota through the establishment and spread of non-indigenous species. Given the numerous detrimental impacts which often accompany the invasion of alien species into ecosystems, there are only very limited possibilities for predicting and studying the potential impact, and mostly no possibilities of preventing the establishment, of alien species.

For the territory of Thrace, the main route for alien freshwater fish immigration seems to lead from Greece and Bulgaria via the River Meriç, but also by the stocking of foreign fish. *Lepomis gibbosus* (Linnaeus, 1758) and *Pseudorasbora parva* (Temminck and Schlegel, 1842) are such exotic species recently reported from Thrace (ERKAKAN 1983, 1984).

In Europe, three species of the genus *Carassius* Nilsson, 1832 are known: the Goldfish, *Carassius auratus* (Linnaeus, 1758), the Crucian Carp, *C. carassius* (Linnaeus, 1758), and the Prussian (Gibel) Carp, *C. gibelio* (Bloch, 1782). Only *C. carassius* is definitely native to European waters. The natural distribution of *C. gibelio* is still under discussion and it might be native to northern Europe (KOTTELAT 1997). It is widespread in Central and Eastern Europe and the Balkans (SZCZERBOWSKI 2001) but was not recorded from Thrace until recently: It has been found by BARAN & ONGAN (1988) at Lake Gala, and one specimen by ÖZULUĞ (1999) at Büyükçekmece Dam Lake. *Carassius gibelio* has also been recorded in Anatolia at Topçam Dam Lake in the Büyük Menderes River Basin (ŞASI & BALIK 2003) and at Lake Eğirdir (İZCI 2004). In comparison, *C. carassius* has been reported from many places in Thrace (e.g. BALIK 1985, BLANC et al. 1971, ERKAKAN 1983, GELDIAY & BALIK 1996), but most records are not based on careful identifications. *C. carassius* was also obtained by ÖZULUĞ (2003) from Durusu (Terkos) Lake, 60 km northwest of Istanbul.