

Endangerment and Conservation Status of Zingel (*Zingel zingel* L.1766, Percidae, PISCES)

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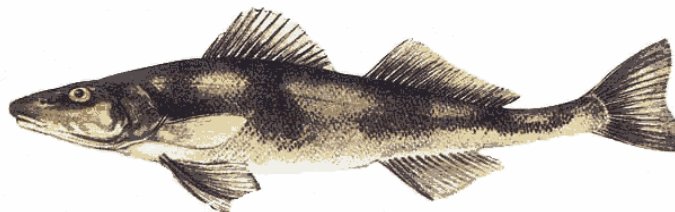
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Abstract: *Zingel (Zingel zingel)* is a species of the *Percidae* family (PISCES, Osteichthyes). The species is assigned to rarely occurring endemics of Southeast European watercourses. The zingel conservation status in Serbia is designated as Lower Risk – Near Threatened LR(nt) but it may be transferred to a higher category.

Key words: *Zingel zingel*, endangerment, ecology, protection.

Common names: zingel (En), chop (R), zingel (D), veliki vretenar (Srb) pietrar (Ro), kolok velky (Cz), kolok velký (Sk), nagy bucó (Hu), veliki vretenac (Cro), uretenarka (Bg)...

Meristic characters and identification : D₁ I 13-15, D₂ I 17-20, A I-II 11-13, scales in lateral line 83-95, scale rows above lateral line 8-9, scale rows beneath lateral line 14-19, vertebrae number 47-49 (Banareescu 1964). Body shape elongated, cylindrical in cross-section. Pelvic fins up to 50% longer than pectoral ones. Dorsal fins separated, the second one greater in length at base. Caudal peduncle shorter than the base of the second dorsal fin. Dorsal side of fish brownish to brown-yellowish, flanks with the dark oblique marks of irregular shape (Wheeler 1978). The diploid chromosome number is 2n = 48 throughout the distribution area. In the Morava river (Czech Republic), the chromosome number in males is 2n = 47 (Halačka *et al.* 2007).

Zingel (*Zingel zingel*)

Distribution and abundance: Central and Southeastern Europe – endemic species for the Danube and Dniester River basins (Banarescu 1964). In Serbia, this fish inhabits the Danube River and its main tributaries – the Sava, Tisa, Drina, Velika Morava, Zapadna Morava, etc. Rare throughout the whole dispersal range. Abundance decreasing, except in the lower Dniester (Puchkov and Chepurnova 2006) and the upper Danube (IUCN 2009).

Ecology: Demersal, nocturnal species. Dwells in rivers with fast-running water. Feeds on benthic macroinvertebrates and fish (Vuković and Ivanović 1971). Spawns in March-April (Danube River) or mid April – early May (Dniester River), in large spawning groups (a single female spawning with several males) on a gravel or sand bottom. Single females spawn with a few males in a dense spawning group. Maximum fecundity is 18,500 sticky eggs (Puchkov and Chepurnova 2006).

Conservation status: Least concern – the IUCN Red List of Threatened Species (2009); Critically endangered (CR) in the Czech Republic (Lusk et al. 2004); Vulnerable (VU) in Germany (Freyhof and Brunken 2004) and Croatia (Mrakovčić et al. 2006); Lower Risk – Near Threatened LR(nt) in Serbia (Simonović 2006).

Threats: Water pollution, river bed regulation and dam construction. Conservation actions include pollution reduction, construction of fish passage facilities at dams, limitation of catch landing. A total ban on catch landing has been recently introduced in Serbia (Anonymous 2009).

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UGROŽENOST I STATUS ZAŠTITE VELIKOG VREtenARA (*Zingel zingel* L.1766, *Percidae*, PISCES)

- kratko saopštenje -

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Rezime

Veliki vretenar (*Zingel zingel*) pripada porodici *Percidae* (PISCES, Osteichthyes). Vrsta je retka i endemična u vodotocima jugoistočne Evrope. Prema statusu zaštite u Srbiji, ima status nižeg rizika iščeznuća – skoro ugrožene vrste, ali može preći u višu kategoriju.