

Labeo victorinus Boulenger, 1901



Lake Victoria, Kenya. © D. O. Okeyo/Kenya Marine Fisheries Research Institute.

Synonyms

None

FAO names

Ningu

Local names

English: Victoria labeo (Kenya, Rwanda)

Lango: Apok (Uganda)

Luhya: Eningu (Kenya)

Luo: Ningu (Kenya)

Nyoro: Nsuku (Uganda)

Kinyarwanda: Ikiraba (Rwanda), Impiryi (Rwanda), Iningu (Rwanda), Umuraba (Rwanda)

Swahili: Ningu (Uganda, Tanzania)

Geographical distribution

Endemic to the Lake Victoria drainage, where it is present in Lake Victoria and its affluent rivers, the Victoria Nile and Lake Kyoga (Greenwood 1966; Reid 1985; De Vos 1991; van Oijen 1995; De Vos et al 2001; Seegers et al 2003).

Habitat and Biology

Anadromous species; ascending both large rivers and streams during floods and spawning in floodwater pools or inundated grasses at margins of rivers (Fryer & Whitehead 1959). Upstream migration at beginning of rains (Copley 1958) in fairly compact shoals (Whitehead 1959). Permanent river populations exist (Whitehead 1959). Lake Victoria: in shallow, inshore waters and influent rivers (Witte & de Winter 1995). Lake Kyoga: in open waters away from water-lily zone (Greenwood 1966). Specialized feeder on epilithic and epiphytic algae (Corbet 1961). Also feeds on rotifers growing on the body of other fishes (Witte & de Winter 1995). Caught with weirs and in baskets (Eccles 1992). IUCN red list status least concern (Tweddle & Bragança 2023).

Key features

Lateral line running along middle of flank and caudal peduncle; flap of skin in front of upper lip; jaws with horny cutting ridges; barbels hidden; olivaceous dorsally, light or creamy ventrally; dorsal, anal and pelvic fins often orange-tipped (van Oijen 1995).

Interest to fisheries

FAO (2024) does not hold catch statistics for this species. *Labeo victoriana* is a migratory species that lives in the lake but ascends rivers to spawn during the rainy season (Kibaara 1981). Before the 1950s, *L. victoriana* supported a commercial fishery in Lake Victoria and formed the most important commercial species in the affluent rivers of the Lake Victoria basin. Yet, in the late 1950s, well before the Nile perch (*Lates niloticus*) became established, its population rapidly declined and the fishery collapsed by the early 1960s (Cadwalladr 1965; Ogutu-Ohwayo 1990; Rutaisire & Booth 2005) (Figure 1). A major factor for its decline is probably overfishing in the vicinity of river mouths and the use of more efficient methods of exploitation (Cadwalladr 1965). The indigenous fishing methods, which consisted of barriers and basket traps set mainly along the rivers, did not have a particularly deleterious effect on the stocks, but the introduction of more efficient gillnets at the mouths of the rivers at the time of spawning, effectively blocking them off from the lake, caught many mature adult fish migrating to the spawning grounds (Ogutu-Ohwayo 1990). Data from Kibaara (1981) for the Kenyan part of Lake Victoria show a rise in catch in 1979-1980, perhaps by increased numbers of gillnets of smaller mesh size and beach seines used especially at river mouths. Ssentongo & Welcomme (1985) reported a slow recovery of populations of *Labeobarbus altianalis*, *Labeo victoriana* and *Mormyrus* species in the late 1970s-early 1980s in the Nyanza (Gulf), following the use of larger mesh gillnets for the Nile perch fishery. However, shortly afterwards a drastic fall in catches was observed and subsequent reports only reported very low catches or the complete absence of the species (see e.g. FAO 1988, 1990; Balirwa et al 2003) (Figure 2).

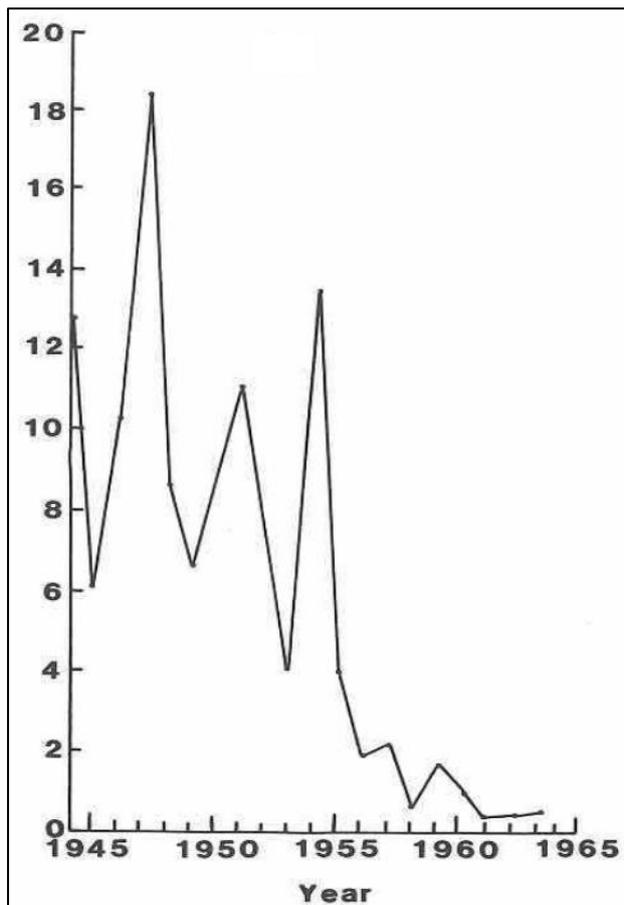


Figure 1: Annual changes in catch per net of *Labeo victoriana* which was initially the most important commercial species in the affluent rivers of Lake Victoria. Image from Ogutu-Ohwayo (1990).

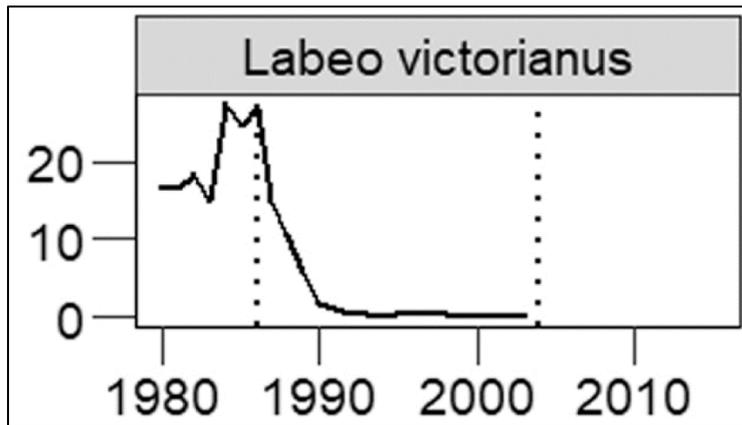


Figure 2: Total annual catches (thousand tonnes) of *Labeo victoriana* in Lake Victoria over time. Image from Natugonza et al 2022.

Predation by the introduced Nile perch, competition for food resources, environmental pollution, illegal fishing methods and overfishing were cited as the main causes of the disappearance of *L. victoriana* from Lake Victoria (Cadwalladr 1965; Ogutu-Ohwayo 1990; Greboval & Mannini 1992; Hauser et al 1998; Njiru et al 2005).

Although the species has virtually disappeared from commercial catches in the lake proper, it can still be found in rivers, dams and the satellite lakes around Lake Victoria (Ojwang et al 2007; Obiero et al 2023), although numbers are considerably reduced, as is length at maturity (Outa et al 2020). *Labeo victoriana* dominated samples from the Sondo-Miriu River and was the second most abundant in the Mara (13.7%) and Yala (28.4%) rivers (Achieng et al 2020). Seepage from mining and the impact of heavy metals on the reproductive success is a potential threat to the species in the Mara River (Pringle et al 2020).

The establishment of the Nile perch in L. Kyoga was followed by a decline of the population of indigenous fishes (Ogutu-Ohwayo 1990), including *L. victoriana*, which by 1978 was very rare and only caught in very small numbers. In 1996 the species was present in 1.9-5.9% of the samples, depending on the station (Mbabazi et al 1997). Nsinda et al (2020) reported a catch contribution of 1.8% to fishing craft samples from Lake Kitangiri, with an estimated catch rate of 0.6 kg/boat/day.

Attempts to breed *L. victoriana* in captivity have been tried with significant success (see e.g. Maithya et al 2003; Rutaisire and Booth 2004; Oyoo-Okoth et al 2011; Magondu et al 2013; Abwao et al 2014; Mokoro et al 2014; Orina et al 2014, 2018, 2023; Kembenya et al 2017), indicating it can be propagated in captivity and enhancement of the wild stock is possible. Despite having the potential, the culture of *L. victoriana* has not been widely adopted by farmers (Munguti et al 2014; Orina et al 2018; Obiero et al 2023).

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