

Gymnarchus niloticus Cuvier, 1829



10 km south of Ouagadougou, White Volta, Burkina Faso (MRAC-P-143741). © D. Geelhand/Royal Museum for Central Africa.

Synonyms

Gymnarchus electricus Cuvier, 1829

FAO names

Aba

Local names

Arabic : Weer (Sudan), Wir (Sudan)

Dinka, Northeastern (Dinka): Cot (Sudan), Riaal (Sudan)

English: Aba (official FAO and AFS name, Kenya), Aba aba (Kenya), Frankfish (Ghana)

Ewe: Eyor (Ghana), Yor (Ghana)

Fulfulde, Pulaar (Pulaar): Beesoo (Senegal)

Hausa: Dan sarki (Nigeria), Salbali (Nigeria), Yauri (Nigeria), Zawo (Nigeria)

Igbo: Asa (Nigeria)

Ijo: Aba (Nigeria)

Jula: Sojige (Burkina Faso)

Kanuri: Ka'a (Nigeria)

Krio: Kpoyei (Sierra Leone), Kuninay (Sierra Leone), T-gbaren (Sierra Leone)

Limba, west-central: Kuninay (Sierra Leone)

Mende: Kpoyei (Sierra Leone)

Mòoré: Memenego (Burkina Faso)

Nuer: Reel (Sudan)

Nupe: Eshi (Nigeria)

Shilluk : Mok (Sudan)

Soninké : Alluuxuune (Senegal), Kawale (Senegal), Sinjaane (Senegal)

Themne: T-gbaren (Sierra Leone)

Turkana: Lowarayame (Kenya)

Wolof: Galakh (Senegal)

Yoruba: Osan (Nigeria)

Zande: Tiocumba (Sudan)

Geographical distribution

Basins of the rivers Senegal, Gambia, Volta, Niger and Chad in West Africa (Gosse 1984; Bigorne 2003), in the Nile basin (Gosse 1984; Bailey 1994) and in Lake Turkana (Gosse 1984; Seegers et al 2003).

Habitat and Biology

Feeds on crustaceans, insects and fish (Bailey 1994). Following flooding of the river banks (Gambia River), this species builds large elliptical floating nests in densely vegetated swamps at depths of about 1-1.5 m; lays about 1000 'amber-like' eggs; larvae hatching after 5 days (Budget 1901). Possesses an electric organ that extends along almost the entire trunk to the tip of the tail (Bennett 1971). Also equipped with ampullary receptors and two types of tuberous receptors for electroreception (Szabo 1974). IUCN red list status least concern (Lalèyè et al 2020).

Key features

Body very elongate, its depth 7.2-10.6 times in SL, covered with tiny scales and ending in a sharp point; pelvic, anal and caudal fins absent (Bailey 1994; Bigorne 2003). Head naked, its length 5.6-6.9 times in SL; snout prominent. Mouth large and terminal; teeth strong, pointed or notched, aligned in a single row in both jaws, 12-16 in upper, 22-28 in lower jaw; maxillae, vomer and palatines toothless; eye very small, without a free margin and covered by skin; lateral line complete; dorsal fin with 183-230 soft rays, extending almost over the entire length of back almost up to naked tail; pectoral fins reduced, 1.9-5.0 times in head length; only left gonad developed and functional; body dark grey to almost black, darker posteriorly; belly whitish (Bigorne 2003).

Interest to fisheries

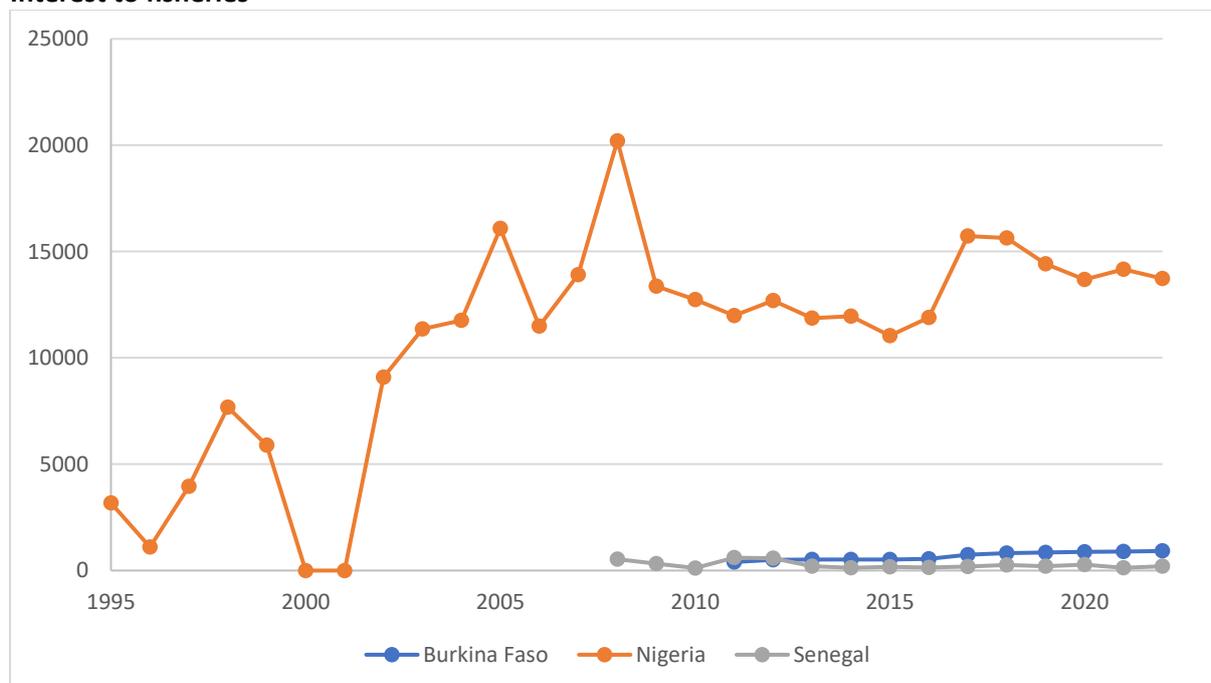


Figure 1: Catches (in tonnes) of *Gymnarchus niloticus* as available from FAO (April 2024).

Gymnarchus niloticus is a high value target species that usually makes up only a few percent of the total fisheries catches (Bailey 1989; Adite & Van Thielen 1995; Béné 2007; Mohammed 2012; Thiaw et al 2016; Olieng 2019; Ouedraogo et al 2021; FAO 2024a).

Although statistics for the period 1950-1990 are lacking, Laë (1995) reported that the increase in fish productivity in the central Niger delta is characterized by a depletion of species whose reproduction is linked to the floodplains, such as *G. niloticus*, and that were prominent in the catch in the past but no longer found in landings in 1990-1991. However, reversion to more normal hydrological regimes may lead to the re-invasion of the delta because the species could migrate back into the delta from upstream or downstream areas (Laë et al 2004). Following the post Sahelian drought changes in Lake Chad, Sagua (1983) reported that *G. niloticus* had become a major economic species. Neiland et al

(2004) reported *G. niloticus* ranking fourth in Lake Chad, making up 8.5% of the fisheries composition based on a 2001 market monitoring.

Dankwa et al (2011) reported a decline in predatory species, including *G. niloticus*, in Lake Volta.

Dialla et al (2016) reported that in the Sourou reservoir in Burkina Faso, 15.8% of the *G. niloticus* catch consists of juveniles that have not yet reached size at first maturity, with over 50% of fishing gear used having illegal mesh sizes.

Sanda et al (2017) reported a marked reduction in number and average weight (1.5 kg to 0.34 kg) of *G. niloticus* between 1991 and 2022 in Lake Oguta (Nigeria), and the species was one of several conspicuously absent from a one-year survey of the lake by Adaka et al (2016).

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