

*Short note / Kurze Mitteilung*

## Records of *Nematogobius maindroni* (Teleostei: Gobiidae) from the Upper Volta basin

Nachweise von *Nematogobius maindroni* (Teleostei: Gobiidae)  
aus dem oberen Volta-Becken

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**Zusammenfassung:** Zwei Exemplare von *Nematogobius maindroni* wurden im Pendjari-Fluss im Pendjari-Nationalpark in Benin gefangen. Bisher wurde davon ausgegangen, dass die Art zumindest zeitweise in ihrem Lebenszyklus auf Brack- oder Salzwasser angewiesen ist. Da eine Wanderung über die Volta-Staudämme Akasombo und Kpong jedoch ausgeschlossen werden kann, scheinen diese Funde zu belegen, dass es reine Süßwasserpopulationen von *N. maindroni* in Westafrika gibt.

The small West African goby *Nematogobius maindroni* (Sauvage, 1880) is distributed in coastal basins from the St. Luis basin in Senegal to the Cunene River in Angola, including offshore islands in the Gulf of Guinea (MAUGÉ 1986; MILLER & MURDY 2016). This species is regarded

as euryhaline and mostly known from brackish water environments like estuaries and mangrove areas (SCHLIEWEN 2011). But they also occur in remarkable distance from the sea (HARRISON 1990). Most conspicuous in this regard are the records from the Upper Niger basin of Guinea



**Fig. 1:** *Nematogobius maindroni*, 42.8 mm SL; 30.11.2004, Pendjari River, Pendjari National Park, Benin.

**Abb. 1:** *Nematogobius maindroni*, 42,8 mm SL; 30.11.2004, Pendjari-Fluss, Pendjari-Nationalpark, Benin.

about 3,500 river kilometers away from the next brackish environment (HARRISON et al. 2003). These are explained with migrations over “considerable distance from the sea” (HARRISON et al. 2003, p. 661).

During field studies in Northern Benin a specimen of *N. maindroni* (fig. 1) has been recorded on 30.11.2004 in the Pendjari River close to the Hotel Pendjari (N 11.409°/E 1.598°). The specimen measured 42.8 mm standard length and is now registered in the Natural History Museum, London, under the collection number BMNH 2005.7.26.1. A second specimen was collected on 02.05.2006, also in the Pendjari National Park at Bourissaga (N11.425°/E1.762°) by Simon Ahouansou Montcho. In contrast to the records from the Upper Niger the Pendjari River is much closer to the sea, only about 900 river kilometers, and records of upstream migrating marine fishes in African rivers are not rare. Nevertheless, this record is worth mentioning due to the special hydrographic situation here. The Pendjari River originates in the Atakora Chain of Benin, forms the border between Burkina Faso and Benin for some 200 km, is renamed Oti by entering Togo and flows into Lake Volta in Ghana. The hydro-electric Akosombo dam was finished in 1964 resulting in the rise of Lake Volta. A second dam, the Kpong, was finished in 1982 only 25 km south of Akasombo. Surmounting these dams is not possible for migrating fish (PETR 1986). Therefore the presence of a brackish water fish upstream of Akasombo should not be possible, at least if the species depends on brackish or marine environments during some phase of their life cycle. Also the life span of a small species like *N. maindroni* is certainly too short to explain the latest records by remnants from the time before dam closure. If crossing, the dams of Kpong and Akasombo can be excluded for the species, the only remaining explanation should be that *N. maindroni* is able to sustain pure freshwater populations. This holds

for sure true for the presence of the species in the Pendjari River, but might also explain the records from the Upper Niger in Guinea far distant from the sea.

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