A pictorial guide to *Microsynodontis* catfish By Steven Grant

There are currently only three valid species of the African catfish genus *Microsynodontis* Boulenger, 1903; I say currently because Heok Hee Ng is working on the descriptions of at least three, possibly four or five, new species, and he will revalidate one other.

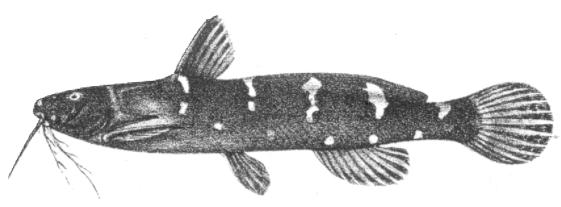
Some confusion exists as to which name to put to the specimens we come across in our hobby, and I will attempt here to give you an idea on the correct identifications. In the first draft of this article I was convinced I had my identifications correct, but Heok Hee kindly reviewed my attempts and I was incorrect on at least one of the identifications, so it just shows you why people are confusing the species! Until his work is published, this may go some way to clear up the confusion.

Firstly we need to be able to tell if the fish we have is a *Microsynodontis* or a member of the genus *Synodontis* Cuvier, 1817. Perhaps the easiest way for most aquarists to use is the shape of the outside edge of the caudal (tail) fin; in *Microsynodontis* it is either rounded, truncate (squared), or emarginate (like truncate but with a indent near the centre), whereas in *Synodontis* it is either forked, or lunate. The way to tell for definite is to look at the eye of the fish; in *Microsynodontis* the eyeball is fixed in the socket so it cannot move, whereas in *Synodontis* it is moveable (this is called having a free orbital rim). There are also two internal differences i.e. no suborbital bones, and a modified fourth vertebrae in *Microsynodontis*.

The closest related genus to *Microsynodontis* is *Mochokiella* Howes, 1980, which only has one species in it—*Mochokiella paynei*, Howes, 1980, which comes from Sierra Leone. *Mochokiella* (like *Microsynodontis*) are a peaceful, excellent addition to any community tank with small fishes; unfortunately they are harder to find in the shops than the *Microsynodontis* species. *Mochokiella paynei* has not got a free orbital rim, just like *Microsynodontis*, but in *Mochokiella* the caudal fin is forked, with the lobes rounded.

The species

Microsynodontis batesii Boulenger, 1903





This is the original drawing of *batesii* and a picture of the true *batessi* – picture courtesy of Aqualog (now *Microsynodontis christyi*) See update below.

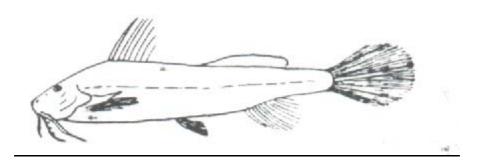
This species name is given to most fish in the hobby. In 1999 I thought I had correctly identified the fish known as 'Nyong Syno' as being the true *batesii*, because the fish I pictured was supposedly caught in the Nyong River, Cameroon – a locality listed by Boulenger (1911) for *batesii*.

The type specimens originate from the Mvile River in south Cameroon, but Boulenger (1911) lists additional specimens from Ja River, Bumba River, Nyong River and near Efulen (all Cameroon), and also Gabon, although these identifications may represent two of the new species that will be described.

Heok Hee has identified the true *batesii* for me (see picture) and says that the 'Nyong Syno' in my 1999 work represents one of the two new species he is describing which both come from the lower Gabon River. He says *Microsynodontis* sp. 'Gabon' can be identified by its deep body and faintly marmorated pattern. I have no other information on the other undescribed species from the lower Gabon River.

Most literature will give a size of 10 cm Standard Length (minus caudal fin) for *batesii* but this is due to a misunderstanding of the size given by Boulenger; in my opinion this species should only reach 8.5 cm SL.

Microsynodontis polli Lambert, 1958





This is the original drawing of *M.polli* and an image of *polli* by me.

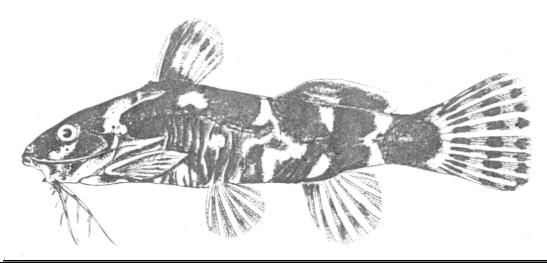
This name is used now and again in the hobby but again, incorrectly. If one consults the original description and subsequent scientific work it is apparent that this species has appeared in the hobby but usually under the name of *batesii*!

Baensch & Fischer (1998) appears to show a *polli* on page 357 (incorrectly identified as *batesii*), although Heok Hee says that the fish in Baensch & Fischer probably originates from the Zaire River near Kinshasa in Zaire, and at the moment he is not sure if this fish is a separate species from the true *polli* which originates from the Gbin River, Guinea, which is a considerable distance away. My photograph of *polli* may also be the Zaire variant. When it was small it had no or only very minute markings on the body. The fish is now approx. 4 cm SL and the markings are more distinct now.

M. polli will probably only grow to around 4 cm SL (the type specimen was 3.2 cm SL). Paugy & Roberts in Lévêque, Paugy & Teugels (1992) list it as reaching 4.1 cm Total Length.

Apart from the differences in markings (*polli* having very small and indistinct markings), this species can be differentiated from the others by the slender caudal peduncle area (the body area before the caudal fin starts), and the elongated caudal fin.

Microsynodontis lamberti Poll & Gosse, 1963



Drawing of *M.lamberti* from description

It comes from Lilanda River, Yangole, Central Congo, and will **probably** only reach around 5 cm SL (largest type specimen is 3.4 cm SL). I don't think that this fish has appeared in the hobby yet. See picture of one of the type specimens.

Microsynodontis christyi Boulenger, 1920





Original drawing of *M.christyi* and a picture by Ingo Seidel

Originates from Poko, Zaire. This has long been considered a junior synonym of *batesii* but Heok Hee will be revalidating it. Boulenger listed the following differences to *batesii*: there are fewer anal (6-7 in *christyi* vs. 8-9 in *batesii*) and dorsal (5 in *christyi* vs. 6 in *batesii*) fin **rays**, and also the dorsal fin spine is shorter in *christyi*.

This is rare in the hobby.

Microsynodontis sp. 'Rio Muni'



Microsynodontis ` Rio Muni' by Heok Hee Ng

This fish is currently being described to science by Heok Hee. It originates from Rio Muni (Equatorial Guinea) and can be distinguished from the others by its very deep body.

Microsynodontis sp. 'Nigeria'



Microsynodontis sp. 'Nigeria' photo by me.

This is the species most commonly available in the hobby. It is usually sold as *batesii* or *polli*. Baensch & Fischer show one as cf. *polli*. The identity of this fish is uncertain at the moment but I originally thought it represented *lamberti*. It should reach approx. 5 cm SL.

Update: Further to my article which appeared in Volume 3 Issue 3 of Cat Chat, (this article) Heok Hee Ng had originally changed my 1999 identification of the 'Nyong syno' as *Microsynodontis batesii* to what he said was an undescribed species (captioned as *Microsynodontis* sp. 'Gabon' or sp. 'Nyong' in the article). Heok Hee has since altered his opinion and has reverted back to my original identification which I had made in 1999. Therefore the fish captioned as *Microsynodontis* sp. 'Gabon' or sp. 'Nyong' (on page 9) should be regarded as the true *Microsynodontis batesii.* (see image below) The fish captioned as

Microsynodontis batesii in the article (on page 7) should now be regarded as representing *Microsynodontis christyi*.

Acknowledgements

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Microsynodontis sp. 'Gabon/Nyong' – (now *Microsynodontis batesii*) photo by D.M.A.Wright



Microsynodontis sp. 'Gabon'– photo by Erwin Schraml



Mochokiella paynei – photo by Erwin Schraml