

**A welcome surprise from Madagascar: the apparent rediscovery
of *Ptychochromoides betsileanus* (Boulenger, 1899)**

by Tom Williams

On July 16th 2005 Olaf Pronk, who is lucky enough to be based in Madagascar, posted a message on the "Madfish" Internet-based discussion group asking people to look in his personal photograph folder to identify a fish he had collected from the Ihazofotsy River in the central highlands of Madagascar.

Before checking the photo I became extremely excited as the only cichlids known from the Central Highlands are *Paratilapia* spp. and the elusive if not extinct *Ptychochromoides betsileanus*, often seen as the "holy grail" by those involved in the conservation of Madagascar cichlids, due to its rarity.

Tentatively opening the folder, I saw four images of a fish which was definitely not a *Paratilapia*. Grand in stature, with a strong caudal peduncle and a long, deeply emarginated caudal, this was a striking fish. Other indicators of the importance of this find were the high flowing dorsal and a large cephalic hump. The fish also bore a strong resemblance to a picture of a fish taken by Jean-Claude Nourissat and published in *The Endemic Cichlids of Madagascar* (De Rham & Nourissat, 2005) illustrating one of only four *Ptychochromoides betsileanus* ever to survive in captivity.



Ptychochromoides betsileanus?

Photo by Olaf Pronk

Debate quickly started as to the identity of this fish. Olaf believed that it wasn't *Ptychochromoides betsileanus* as it differed from a preserved specimen from the Ilananana River in the similar area. This in itself was interesting as it confirmed that the species was extant, albeit extremely rare, in this river also, a surprise considering that no specimens had been collected for many years from this particular river.

I on the other hand believed that the fish he had caught was *Ptychochromoides betsileanus*. The fish was caught within the accepted range for the species, it was similar in shape to other specimens and also to me the coloration seemed correct for a juvenile fish (pale silvery grey as opposed to the jet black of an adult male). Eventually consensus seemed to be reached that the fish Olaf was keeping were likely to indeed be *Ptychochromoides betsileanus* albeit in juvenile coloration, and we were once again able to say that the fish was not extinct! Surely this was some of the best news to come from Madagascar in recent years.

Ptychochromoides differ from their cousins, the *Ptychochromis*, by virtue of having a large nuchal hump in mature males (less so in females) and a slightly different skeletal structure. They are also generally larger (up to 40 cm total length) and are restricted thus far to the central highlands of the Grande Île.* They are an ancient lineage of cichlid and look somewhat prehistoric. Having been separated from Africa for millions of years, along with *Ptychochromis*, *Oxylapia*, *Paratilapia*, and *Paretroplus* they have evolved separately from their distant African cousins and probably represent a far more ancestral form of cichlid than the African species.

As far as we know, three good species of *Ptychochromoides* are known as well as one questionable species. These are *Ptychochromoides betsileanus* (Boulenger, 1899), *Ptychochromoides vondrozo* Sparks & Reinthal, 2001, and *Ptychochromoides itasy* Sparks, 2004 (extinct since the 1960's, description based on old preserved material). More questionable is *Ptychochromoides katria* Reinthal & Stiassny, 1997, which has been found to have very similar DNA to an undescribed species thought to be a *Ptychochromis* sp. from the Mangarahara River (more information and photograph of this species can be seen in the Christmas 2005 issue of *Practical Fishkeeping* as part of an interview with me). Both these species could be reclassified shortly in a new genus. Also known is a huge cichlid from the Mananantanana river of Madagascar, which is pale grey and has red edging to its fins. Although opinion is divided this is thought to be very closely related to *Ptychochromoides betsileanus*, if not the same species.

If Olaf is lucky enough to breed these fish and some make it out of Madagascar they would require certain conditions to thrive in captivity. Information suggests that they are found in slow-moving water, in fact in the Ilananana River they are found in one small stretch of calm water between two sets of rapids, so we would need to ensure that the filter turnover in the

* = Madagascar. Ed.

aquarium wasn't too great. The water would also need to be kept scrupulously clean with very regular water changes and a temperature of around 24 °C (75 °F) should be sufficient for their maintenance. Décor would consist of large rounded rocks and bogwood and a large tank of at least 48 x 24 x 24" (120 x 60 x 60 cm) would be needed for a pair due to their large adult size. They would probably prosper best with no tankmates, though in a large (over 300 gallon) aquarium they could be kept with some Large Spotted *Paratilapia* (this would be biotopically accurate). As no one has kept these fish to adulthood, breeding strategy is unknown though it is likely to be similar to that of *Ptychochromis*, which are typical substrate-spawning cichlids and also extremely good parents. All we can really do is sit and wait for more information to emerge about these stunning cichlids, and maybe one day we will see them making an appearance in the hobby as part of a captive maintenance programme of what is an exceedingly rare and also highly unusual cichlid.

Acknowledgement

Thanks to Olaf Pronk for allowing me and the BCA to share his wonderful photographs of this elusive cichlid!

References

de Rham, P., & J.-C. Nourissat, 2005, *The Endemic Cichlids of Madagascar*. Association France Cichlid. 189 pp.

Gay, J., 2005, Mad About Madagascans. *Practical Fishkeeping*, 2005 (13): 118-119.



Another photo of the mystery fish.

Photo by Olaf Pronk