

Year of the Rainbowfish

A monthly column about Rainbowfish by Derek Tustin

The Non Sahul Species

Purists refer to the Rainbowfish from Sahul as the “true” Rainbowfish, but others also consider one family of fish from Madagascar (*Bedotiidae*) and one family from Sulawesi (*Telmatherinidae*) to be Rainbowfish as well. Scientific literature seems to indicate that there are some similarities, but as yet a final consensus has not been reached. Also, as can be shown through historical geography, all the Rainbowfish from Sahul at one time were from the same island. There is little information about how similar species came to be found on both Madagascar (which is just off the east African coast) and Sulawesi (an island to the west of New Guinea but which was never part of Sahul). (For an interesting article on this, as well as the *Bedotia* species, I would recommend reading Christophe Mailliet and Aleksei Sunders’ article on **Madagascar Rainbowfish** that was first published in **Fishes of Sahul** and is available online at http://www.malawicichlidhomepage.com/aquainfo/bedotia_christophe.html.)

However, as some do consider the Madagascar and Sulawesi fish to be Rainbowfish, I’m going to introduce you to them as well... After all, knowledge is power!

Members of the *Telmatherinidae* family

The *Telmatherinidae* family is composed of five genera containing seventeen different species of fish. With the exception of *Kalyptatherina helodes*, all originate on the island of Sulawesi (previously known as Celebes). Sulawesi is an island (the 11th largest in the world) and part of Indonesia with a population of roughly fifteen million. There are several species of freshwater halfbeaks, freshwater shrimp and freshwater snails that are endemic to Sulawesi. However, of the aforementioned seventeen species in the *Telmatherinidae* family, only one species, *Marosatherina ladigesii*, is commonly available in the aquarium hobby.

Marosatherina ladigesii

Commonly called the Celebes Rainbowfish, *Marosatherina ladigesii* (previously named *Telmatherina ladigesii*) is occasionally seen in local fish stores and at local society auctions. Originally introduced to the aquarium hobby in the 1930’s, it has remained a favorite, although due to its delicate nature, it is usually only kept by expert hobbyists.



As with other Rainbowfish, it has two dorsal fins, one larger than the other. The body is brownish/yellow with green undertones, and the rear portion of the body is translucent, making the organ sac visible. It is a relatively small fish, only reaching about 7.5 centimetres (3 inches) in size. It does best in groups of three or more, and the water should be slightly brackish. Be aware that they are relatively slow growers, taking eight to nine months to reach full size.

As mentioned, it is rather delicate and is quite often susceptible to fin rot and other infections. Excellent water quality is not only recommended, but is essential in keeping healthy specimens.

Marosatherina ladigesii is not currently listed on the C.A.R.E.S. Conservation Priority Species at Risk List, but it should be noted that they are on the IUCN Red List of Threatened Species as being Vulnerable.

They are a beautiful species, especially if the tank receives some direct sunlight. Unfortunately, they are not commonly available, but if you get the chance, they are an interesting species to keep.

Members of the *Bedotiidae* family

Endemic to the island of Madagascar (the 4th largest island in the world), two genera of *Bedotiidae*, *Bedotia* and *Rheocles*, are considered by some to be Rainbowfish. Of the two, *Bedotia* species (commonly called Madagascar Rainbowfish) are the ones that are seen in the hobby, while the *Rheocles* species (Madagascar Silversides), are extremely rare, under high levels of conservation concern, and very difficult to keep.

Rheocles

Rheocles, or the Madagascar silversides, are very similar in appearance to the *Bedotia* genus, but have not been kept in captivity to any large degree. In fact, only one species, *Rheocles alaotrensis*, has been recorded as being kept in aquaria. They are a delicate species and are extremely sensitive to water temperature, so much so that a chiller must be used to keep them in optimum health. Further, it has been reported that after only two generations of captive breeding, they will no longer breed and will develop physical deformities.

Unfortunately, a total nine *Rheocles* species (including the aforementioned *Rheocles alaotrensis*) appear on the C.A.R.E.S. Conservation Priority Species at Risk List. With their total unavailability in the hobby and their specialized care requirements, they are at extreme risk of extinction.

Bedotia

For many years there were only four known species of *Bedotia*; *Bedotia geayi*, *B. longianalis*, *B. madagascariensis* and *B. Tricolor*. However, in recent years there have been numerous new species found, many of which are awaiting description. Presently there are eight described species and 8 – 10 awaiting description.

All *Bedotia* species are robust fish that require ample space for swimming, and well oxygenated water. As with all Rainbowfish, excellent water quality is a must. It is reported that in trios and quartets these fish are very amiable to one another, but in larger groups (5 – 10 fish), males may become extremely aggressive. There are further reports that one species, *Bedotia marojejy*, may be hermaphroditic.

The fish that is most commonly seen in the North American hobby is actually *Bedotia madagascariensis*, which used to be sold under the name *Bedotia geayi*. (Recent studies have shown that *Bedotia geayi* has never been exported.) Dr. Paul V. Loisel is currently working on describing the undescribed species and Aleksei Saunders of the Denver Zoo is also extremely involved with *Bedotia*. I would highly recommend that those wishing to keep and to understand these species visit Mr. Saunders' website **Madagascar's Endangered Fishes** at www.madagascarfish.org.

Fourteen *Bedotia* species (including ten species awaiting description) are listed on the C.A.R.E.S. Conservation Priority Species at Risk List, three being listed as Critically Endangered ("a species facing an extremely high risk of extinction in the wild in the immediate future.") and eleven as Vulnerable ("a species facing a high risk of extinction in the wild in the medium term future.") Unfortunately the *Bedotia* species listed are not available in North America.



Bedotia madagascariensis



Bedotia geayi

In September...

Since January, I've given you a broad-strokes overview of what most people consider to be Rainbowfish. While purists seem to hold the Sahul species as the true Rainbowfish and the others as distant relatives, they are all beautiful in their own way. Unfortunately with so many species, it is impossible to keep them all. I hope that you've found a species that has captivated your interest and have gone out and got some, because starting in September I'm going to take you through what you can do with these beautiful creatures. In September I'll address breeding, and then in October I'll take a look at the genetic issues surrounding Rainbowfish (including albinos and the "balloon" Rainbowfish). In November I'll share information about *Melanotaenia oktediensis*, how I got them to Canada from Europe and how I've fared. Finally in December I'll show you the best resources on Rainbowfish so in the future you know where to go for information!

Hope you all have a wonderful summer. I'll be trying to breed some more Rainbowfish in my pond, so if you have an inclination to do so, stop on by...



Rainbow Eggs



Albino Rainbow Fish