The Catfish Family Loricariidae - The Best and the Worst

An expert's assessment of these popular aquarium fish.

By Lee Finley

To paraphrase (and with apologies to Charles Dickens), the catfish family Loricariidae is "the best of catfish families, the worst of catfish families." Loricariidae is the largest family of all the catfishes and is currently composed of around 80 genera and more than 650 described species. And with many of the imported loricariids it is — with currently available materials — almost impossible to satisfactorily arrive at a genus designation, much less a species designation.

There are a couple of reasons for this. First, many genera are poorly known, even to the scientific community. Second, many of the fishes we are seeing come into the hobby are, in fact, proving to be undescribed. Third, many examples that have been described subsequent to importation are proving to represent not only new species, but new genera as well.

Fairly well accepted and widely used common names have also evolved with some of these imported fishes. Additionally, there is the German-originated "L" numbering system, wherein a photo of a "new" and unidentified fish is published and an L number is assigned to it. When it is accurately determined what the fish is (or if it is formally described) the L number is retired. Examples of this system are L 46, which is now Hypancistrus zebra, and L 14, which is now Scobinancistrus aureatus.

The use of both of these methods (common names and L numbers) can be very helpful in putting a functional handle on a particular fish, but as with any "identification" system you need to recognize its limitations and realize that both are potentially open to misuse and misinterpretation. Other potential problems are also making themselves evident. For example, see the section below on Panaque nigrolineatus.

Some genera and/or species have proved easier to identify (on one or the other level) and it is then possible to present them in an article such as this. Years ago, when we had just a few "plecos," things were easier. This is not the case now. But without question the situation is now more stimulating. Sure, there is a lot more challenge involved, but this is one group of fishes that is well worth it.

What follows are some brief notes on a number of commercially available loricariid species of interest. Some are discussed under their scientific names, while others are only provided with L numbers and common names. The goal (and I hope I'm successful) is to set some common ground on which some of these fishes can be discussed so that information on them can be more accurately disseminated.

Panaque "nigrolineatus"
The royal pleco, Panaque "nigrolineatus," has been a staple of the aquarium hobby for a number of decades, and specimens displaying differences in color and body pattern have made themselves evident occasionally over the years. Now with increased collecting and collection sites in many countries, the picture is becoming somewhat more complicated, with a larger number of distinctive looking forms making their way into the hobby. Some of these have been assigned L numbers based on their differing locality and/or appearance. I have chosen to put the species name "nigrolineatus" in quotes as a recognition of these differences.

Recently, a revision of the small Panaque species was published, and the same authors have promised that a similar treatment of the larger forms is forthcoming, which would include P. "nigrolineatus." I'm hopeful that this work, when completed, will shed some light on the situation of this species as we know it. Is it a widespread but extremely variable species, or is it a complex of a number of closely related, but distinct, species? Only time will tell.

For now, I would like to present two variables of this freshwater fish for your consideration. The first form is the "clear tail" (a clear window on the caudal fin bordered by dark coloration) type. Individuals showing this type of caudal pattern have been noted from Brazil and Colombia. The second form is from the Rio Xingu and has been commercially sold at smaller sizes as the "chocolate Xingu royal pleco." Other larger royals from the Rio Xingu show differences in base body color, so whether these are different fishes or only changes associated with growth remains to be seen.

L 129, Colombian zebra pleco
I first saw this fish in 1993, but at the time no information regarding its origin was available. Later, in 1994, I saw some additional specimens at a local supplier and was able to find out that Colombia was the country of origin. The original L

designation (assigned in 1993) was based on specimens from Venezuela, but because relatively few commercial shipments originate from this area, it was informative to find that the range of this species extends into Colombia.

Recently, Ben Rosler of Lombardo's Metro Pet showed me a shipment of this species he had received. He was using the common name gold scribble pleco for them. Naturally I just couldn't resist bringing a few home. They are quite attractive, with the base body color being black to dark gray.

Covering the head and body are very distinctive white to yellow winding lines. Most of the fins (minus the adipose) show similarly colored bands. The pectoral fins display a somewhat more spotted appearance. Although this species differs substantially from the zebra pleco (Hypancistrus zebra), the popularity of this fish has helped to bolster the use of the name zebra (with modifiers, such as chocolate, gold scribble, etc.) for a few additional similar fishes (see the section entitled "L 66, the psychedelic zebra pleco").

This appears to be a fairly small species. One individual I have is only slightly over 3 inches total length and displays the male dimorphic features of elongated cheek odontodes ("interopercular spines") and numerous distinctive, but smaller, raised odontodes on the pectoral spine.

L 66, psychedelic zebra pleco
Psychedelic zebra pleco is the one common name that has been used commercially for some time by Ben Rosler of Lombardo's Metro Pet. I have also seen this fish designated commercially as the scribbled pleco. It has not yet been determined whether it is of a known genus and/or species, although I have seen it in some hobby literature referred to the genus Peckoltia. Until additional studies are available, I believe it would be best to refer to it by either the L number or the common name(s).

This is an eastern Brazilian species and is known from both the Rio Xingu and the Rio Tocantins. Because many of the species from this area seem to do better in cleaner, more highly oxygenated water, it would probably be best to provide the same water conditions in its aquarium.

This species may offer good potential as a spawnable fish because it does not seem to reach a large size. Many imported specimens are about 3 or so inches in length, although some 4- to 5-inch specimens are occasionally imported. Fellow aquarist Jeff Rapp told me of a specimen he has had for approximately four years, and in this time it has not grown much past 4 inches.

Leporacanthicus heterodon
Members of the genus Leporacanthicus reaching the hobby were called "plecos with teeth" early on, and this has evolved into the more common name of "vampire" pleco(s). The reference is to the exceedingly long — though few in number — teeth of the upper jaw.

If we wanted to be more accurate we could call these fish the "hare" (rabbit) pleco(s) because the first part of the genus name is derived from the Latin word leporis, which means hare. The elongated teeth appear to be adapted for a specialized method of feeding. It has been suggested that they may be used to extract snails from their shells, or to help remove insect larvae from the crevices of submerged wood.

Currently the genus Leporacanthicus contains four described species: L. galaxias, L. heterodon, L. joselimai and L. triactis. The first three are Brazilian species (although a fish considered to be L. galaxias was recently reported from Venezuela) and the latter is from Colombia.

Leporacanthicus heterodon, which has no common name that I'm aware of, is so far known only from the Rio Xingu. The holotype (single specimen designated as the type of a species) came from the south of the system (Mato Grosso), whereas the paratype (other specimens of the type series other than the holotype) came from the north (vicinity of Altamira, which is a main aquarium fish collecting area), so apparently this species has a wide distribution in this river system. While not as colorful as L. galaxias, it is nonetheless — for all you loricariid fans — a desirable species.

The base color is a light grayish brown and the body and fins are covered with numerous black spots. In fact, with this color and pattern it closely resembles one or more of the Pseudacanthicus species ("spiny" plecos) that are also imported from eastern Brazil. Mark Soberman, a friend from New York, recently found some L. heterodon mixed in with a similarly patterned Pseudacanthicus species. The heterodon, on close observation, could be distinguished by their longer noses, the "spike" that is located on the backs of their heads and the lack of the distinctive rows of body spines that are seen on Pseudacanthicus.

The holotype of this species was a little over 4 inches in standard length (SL; to the base of the caudal fin), and most of the specimens I've seen have not exceeded this. One individual I saw that was possibly attributable to this species was at least 6 inches SL.

Dekeyseria
Amid the profusion of the many striking and beautiful loricariids that are imported into the hobby are others that are not so blessed. But to the true catfish aficionado this is of little concern. Any catfish is a potential aquarium resident.

With this in mind, a brief note about the genus Dekeyseria is warranted, especially because proper identification (either by text or photos) is nonexistent (or at least very rare) in the North American hobby literature. This genus currently consists of two species, D. amazonica and D. scaphirhyncha. This last species, known since the 1850s, has previously been placed in the Ancistrus, Chaetostomus [sic], Hemiancistrus and Peckoltia genera by various ichthyologists. There are at least a couple of loricariids with L numbers that appear to be attributable to this genus, but whether they are just variations of the already described species or new species awaiting description remains to be seen.

In work done on these fishes in 1985, the two species were shown to have a distribution around Manaus, Brazil and in rivers north and west of there (Rio Negro, Rio Branco and Rio Solimoes). Subsequent collections for aquarium fishes have greatly expanded this range (e.g., Rio Tocantins).

As noted above, these fish may not be particularly colorful, but they do make different and interesting aquarium inhabitants. They are moderate size loricariids and can reach a length of around 10 inches SL. In a study conducted on the gut of these catfishes (Goulding et al. 1988) there is information that indicates they are exclusively plant and detritus feeders. I have observed them "grazing" over driftwood, appearing to feed on the organic covering that inevitably coats it — not the wood itself. As for the Dekeyseria photo I have included here (page 44), my identification as to species is tentative (hence the cf.) and is based on the shape of the bone structure above the base of the pectoral spine.

Scobinancistrus aureatus
To finish this article, I have saved a species that, in my opinion, is one of the most attractive of the eastern Brazilian loricariids for last. Although it has been known in the hobby for a number of years, its official description was only published in September of 1994. Another species, Scobinancistrus pariolispos (the type of this genus), was described in 1989 from specimens originating in the Rio Tocantins, Rio Tapajos and Rio Itacaiunas.

Photos that may be attributable to this species can be seen in the aquarium literature, but its definite presence in the U.S. hobby is unconfirmed. On the other hand, S. aureatus has been a fairly regular import from the Rio Xingu for some time and has been sold under the common name sunshine pleco (more on this later). Initially it was given an L number (L 14), but this has been retired subsequent to the official description.

This is a modest size loricariid — reported to reach lengths of at least 12 inches SL — and is extremely beautiful at all sizes. The base color is darker (brownish) except for the underside, which is yellow, and the head and upper body are covered with yellow spots. In juveniles these spots are larger and fewer in number, but as the fish grows this pattern changes to one of smaller, but more numerous, spots. The spots spread onto all of the fins (except the anal fins, which are a solid color). All of the fins (again, except the anal) are trimmed with a wide band of orange to yellow coloration.

Like the Leporacanthicus species noted above, Scobinancistrus species have quite distinctive, but few in number, elongate teeth. As with the above genus, these have no doubt evolved for a special feeding function. However, although they might appear to prefer a more "meaty" (bloodworms, krill, etc.) diet, a friend (Jim Carmark of Oceans Unlimited, Scituate, Masschusetts) has told me that some individuals in his care have an absolute passion for eating cantaloupe. In fact, this dietary preference, coupled with the orange fin trim coloration, has prompted him to dub this species the "cantaloupe" pleco.

This brings us back to common names. The novelty of the name cantaloupe notwithstanding, I am still prone to stay with the designation "sunshine" pleco for this species for the point of consistency. I will note that I am strongly aware that there is no easy way to develop conformity in common name usage.

I recently had the pleasure to serve as a catfish judge for the excellent 1995 show put on by the Stark County Aqua-Life Enthusiasts Society (Canton, OH). One of the fishes in the small loricariid class was a very small, but nonetheless beautiful, "sunshine" pleco, which was entered under the name "gold nugget" pleco. This latter fish is quite different in appearance, but the name "gold nugget" has become quite popular and is unfortunately widely used (incorrectly I might emphasize) for a number of distinctly different loricariids. In the future, I shall present an article covering the use of this name and offer some suggestions to possibly help with the standardization of its use.

Acknowledgements: Special thanks are offered to Ben Rosler and Jeff Rapp of Lombardo's Metro Pet, Ginny Eckstein, Mark Soberman, Warren Feuer, Jim Carmark, John O'Malley and Don Levine.