

## Oddballs, Misfits and Cousins

**Acaras for those with small aquariums who want relatively peaceful fish.**

*By Wayne Leibel*

In this article we will discuss the remainder of the acara lineage — what we have historically called Aequidens. These fish exist as a series of nomenclatural and systematic fragments, the result of Kullander's (1986) recent restriction of the genus Aequidens to what I have elected to call the "true" acaras.

Some of the fish included here were previously placed in the broadly defined genus Aequidens and can be found in the aquarium literature under that older name. Some of the species discussed below were classified there initially and then removed because their "intermediate" characteristics were acara-like — but not exactly. And some of these species never were placed in this genus because they are so different — yet they exhibit some pronounced affinities to acaras.(more or less).

### The Keyhole Cichlid

Virtually every aquarist, beginner or experienced, is familiar with the keyhole cichlid. This pleasant, brown, moderate-sized and peaceful acara with the black keyhole marking on its side is as ubiquitous in fish stores as it is a common denizen of the beginner's community aquarium. We all know it as Aequidens maronii, but Kullander and Nijssen (1989) have recently erected the new genus Cleithracara (from kleithron, Greek for "lock") to hold maronii, the only species currently in this genus. Kullander and Nijssen (1989) suggest affinity with the "smiling" acaras of the genus Laetacara, but there are enough differences to warrant a genus of its own. The keyhole cichlid, Cleithracara maronii, is found in the Guianas (Guyana, Surinam, French Guiana) and was originally described (Steindachner 1882) from specimens taken from the Rio Maroni in Surinam.

The keyhole cichlid, by any name, remains a delightful addition to planted community aquariums and is still on my personal short list of "all-time favorite cichlids." It is one fish I keep coming back to from time to time because I enjoy it so much. Truly huge keyhole cichlids are all of 5 inches (13 centimeters) in length. They tend to be shy and retiring and prosper only in aquariums with a thicket of vegetation and driftwood and shoals of peaceful dither fish. In fact, most of what I said regarding the maintenance of the "smiling" and "mouthbrooding" acaras (part 5, AFI July 1992) applies to these fish as well.

The keyhole cichlid is a somewhat reluctant spawner and notorious egg-eater (in both cases because they "spook" easily), but with the preponderance of commercially reared keyholes on the market (wild stock is rarely imported today), these stereotypes may no longer be true. Because females are usually a bit smaller than males in adulthood, selecting large and small individuals from the same batch usually will result in a compatible pair. Make sure you house them with other peaceful fish — any harassment will foil spawning attempts due to the shyness of this fish. It is an acara to begin with and return to in your aquaristic career. They are simply delightful freshwater fish.

### The Itanyoids

One fish historically coveted by acara aficionados is Aequidens itanyi, the "dolphin acara," now in the genus Krobia (Kullander and Nijssen 1989; krobia is the native name for these fish). In fact, we have probably never seen the "real" Krobia itanyi because this fish is known only from the Marowijne drainage in Surinam (described first by Puyo [1943] from the Rio Itany in French Guiana), far from commercial collecting sites. Instead, the hobby "itanyi" is most likely Krobia guianensis, whose extended range throughout the Guianas makes it a reasonable candidate for the collectors' nets, particularly those in Guyana. Kullander and Nijssen (1989) report an additional two species in this genus, as yet undescribed, from the Rios Araguaia and Xingu in Brazil.

Although separated from the other acaras as a coherent group based primarily on osteological characteristics (bones) (Kullander and Nijssen 1989), the "itanyoids" are readily identified on the basis of group-specific markings. Like the "mouthbrooding" acaras of the genus Bujurquina, the "itanyoids" have an oblique lateral stripe extending from the eye back to (guianensis) or toward (itanyi) the insertion of the soft dorsal fin, which slants to the end of the fin, not the base. Also, the diagnostic "nape" marking of the Bujurquina is not present in the "itanyoids." Finally, the tail is asymmetrically rounded and lacks the fringing of many of the Bujurquina species. To the best of my current knowledge, there are no Bujurquina species known from the Guianas. The base coloration of the "itanyoids" varies from olive drab to iridescent gold depending on the population the fish originates from. "Subtle" might be the best description.

As aquarium fish, these are peaceful, moderate-sized (5 to 6 inches [13 to 15 centimeters] total length) acaras that will not disturb planted aquariums, yet do not require them to prosper and spawn. In the wild they have been observed spawning on leaf litter (Keenleyside and Bietz 1981); they are not mouthbrooders. They are easily induced to spawn and the young are no problem to raise.

#### The Geayoids

Another acara from the Guianas has presented cichlid systematists with a formidable challenge — where to put it! *Aequidens geayi* was described by Pellegrin (1902) as *Acara geayi* and promptly kicked into the genus *Aequidens* when *Acara* (Heckel 1840) was abandoned by taxonomists.

The history of this fish in the hobby was to foreshadow systematic changes to come. I remember the first "*Aequidens*" *geayi* that were imported back in the late '60s. I was sure I was looking at an eartheater of the genus *Geophagus*. In fact, that's how they were being sold before being properly identified (the name *Geophagus thayeri* is one associated with this fish, as well as with *Acarichthys heckelii*). The reason for its inclusion in the genus *Aequidens* was simply the three hard anal fin rays and the fact that there was no discernible lobe on the first gill arch, a diagnostic of *Geophagine* cichlids.

Kullander (1980) was the first to formally suggest that *Aequidens geayi* should be removed from *Aequidens* and placed, instead, in the genus *Acarichthys* (Muller and Troschel 1848) along with *Acarichthys heckelii*. *Acarichthys heckelii*, an oddball "acara"-like fish with affinities to the *Geophagine* cichlids, will be discussed in a future article. For years thereafter, *Aequidens geayi* (Pellegrin 1902) was written about in the aquarium literature as *Acarichthys geayi*. While it does share some characteristics with *Acarichthys heckelii*, recall that *geayi* lacks a lobed gill arch.

For this and other reasons, Kullander and Nijssen (1989) erected the new genus *Guianacara* (Latin for "acara from the Guianas") to house *geayi* and a small number of described and yet-to-be described species. These include *oelemariensis*, *owroewefi* and *sphenozona*, all newly described (Kullander and Nijssen 1989) along with an undescribed "geayoid" from Venezuela.

#### References

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\*Available from many mail-order aquarium book dealers, some listed in this magazine. Coverage of what's new in both Old and New World cichlids.

\*\*This book (with pictures) and a companion English translation (no pictures) are available from the American Cichlid Association Book Sales.

\*\*\*This German book is available from the Aquatic Book Shop, which advertises in the classifieds in this magazine.

As was true for *Krobia itanyi*, the fish in the hobby we call *geayi* is most likely *sphenoazona* for reasons of geographic distribution. *Guianacara geayi* hails from French Guiana, a region not collected commercially. It is replaced in the west (Surinam and Guyana) by *Guianacara sphenoazona*. Given the very restricted distributions of *Guianacara oelemariensis* and *G. owroewefi* in Surinam, *Guianacara sphenoazona* from Guyana is probably the hobby "*geayi*."

All the species are very much alike and are discriminated chiefly by the extent and size of the lateral blotch — a rectangular spot or wedge-shaped vertical bar — in the different species. This saddle-like marking inspired the common German name for these fish: "*Sattelfleck-buntbarsche*" (the saddle-mark cichlid fish). They also have a dark vertical band passing from the nape down through the eye to the bottom of the gill cover, no doubt the reason for its other European name, the bandit cichlid (Stalsberg 1990). I refer the true fanatics to either the original descriptions in Kullander and Nijssen (1989) or my recent summary of their work, including photos (Leibel 1990).

There are both "green" and "gold" populations of *Guianacara sphenoazona* in the hobby whose relationship to each other is unclear — perhaps geographic variants. The base coloration is overlaid with rows of iridescent gold scales and the vertical fins are lightly spotted. A recent photo of this fish appeared in *AFI* (February 1992, page 55) labeled incorrectly as *Aequidens geayi* (although labeled correctly when the photo was originally taken — Ed.).

The other hobby "*geayoid*," from Venezuela, remains undescribed at this time. We call it the "orange-cheek" *geayoid* ("*Rotwangen*" [red] by our German counterparts). Good photos of this fish can be seen in Stawikowski and Werner (1988) and still another, apparently undescribed, "*geayoid*" is discussed in a recent article by my good friend Alf Stalsberg (1990) from Norway.

The husbandry of all forms of "*geayoids*" in the aquarium is identical. Wild *geayoids*, at least the ones I got in the early 1970s, were highly belligerent — along the lines of wild green terrors. The aquarium-raised fish now available are much calmer — even peaceful.

Their requirements in the aquarium are few and they can hold their own in the rowdy environment of a mixed-cichlid community aquarium. I have seen large "bull males" reach lengths of more than 6 inches (15 centimeters), but they will spawn at 3 inches (8 centimeters). Females are typically two-thirds or less the size of males.

I am unaware of published spawning observations in the wild, but in the aquarium these fish are cave spawners. And the best cave for them? An inverted clay flowerpot, the bottom of which has been carefully knocked out with a ball-peen hammer! The trick is to choose a pot with a bottom large enough to permit the female easy access, but keep out fish larger than her including, in the case of particularly belligerent males, the male of her own species! This method is one that has been used successfully for several cave-spawning fishes in which there is sexual-size dimorphism.

The female will remove the substrate from inside the inverted flowerpot. When she is ready, the female will actively court the male. She will lay her eggs on the vertical surfaces of the pot and the male will fertilize them, either directly if he can enter the pot or indirectly, spraying milt in from the opening above. Actually, most pairs are quite compatible, so make the opening large enough for both once compatibility has been established. The *Guianacara* species are truly charming *acaras* and are well recommended.

#### The Goldeneye Dwarf *Acaras*

According to both Kullander (1986) and Stiassny (1991), the two nominal species of the genus *Nannacara* (Regan 1905) — the common goldeneye dwarf *Nannacara anomala* (Regan 1905) and the disputed *Nannacara aureodephalis* (Allgayer 1983) — are direct descendants of the *acara* lineage. That is, of course, in keeping with their generic name, whose roots are *nano* (small, dwarf) and *acara*. Nonetheless, this is surprising to me. Again, osteological (bone) details suggest the affinity, and not the overall appearance of the fish.

The goldeneye dwarf is one of the best dwarf cichlid fish, if not the best neotropical cichlid, for beginners. For starters, they stay small: exceptional males may reach 3 inches (8 centimeters) and females max-out near 1½ inches (4 centimeters). They are therefore a logical choice for smaller aquariums and are relatively peaceful (planted) community aquarium residents, as long as they are not spawning. But that's not an easy physiological state to maintain!

These fish can be easily conditioned on dry fish foods, although I don't recommend it, and spawn readily and willingly on any hard substrate that is available. You'll know when they spawn: The female, who usually sports a pair of brown parallel lines, exhibits a dark, distinctive latticework pattern when she is spawning and brood tending. Vertical bars intersecting the parallel stripes herald motherhood! (Actually, the invalid species *Nannacara taenia* was originally described from a brooding female, which looks quite unlike her sexually quiescent counterpart.)

There is another clear indicator of spawning: The male is absent — either hiding or floating belly-up. Females become almost completely intolerant of their consorts at this time, and in a small aquarium (pairs can be housed in a 5-gallon [19-liter] aquarium, although I don't really recommend it), this spells death for the male. Please remove him or keep the pair in a large enough (20-gallon [76-liter] or larger) aquarium with plenty of hiding places. The female takes exceptional care of her offspring, which will grow even on crushed dry fish food (here again, I don't recommend it).

*Nannacara anomala* is a rather inexpensive and commonly imported fish. They are usually the principal species in boxes of "assorted dwarf cichlids" from Guyana (along with *Apistogramma steindachneri*). They can be sexed at a small size. Males have high foreheads and beautiful iridescent green/gold spangling on their flanks, while females are brown and exhibit the parallel two-stripe marking mentioned above (see most aquarium texts for pictures). There are several color varieties — orange, "black," and a red strain from Germany that commands high prices — but these are believed to simply be color variants from geographically different populations.

*Nannacara aureocephalis* (Allgayer 1983) hails from French Guiana and is characterized by its higher body and bigger head, the latter a bright gold (hence the name, *aureo-cephalis*). A good photo of this fish appears in Linke and Staeck (1984). There is some debate as to whether this is a valid species or simply one end point in the normal geographic variability of *Nannacara anomala*.

Two other species, *Nannacara taenia* (Regan 1912) and *Nannacara bimaculata* (Eigenmann 1912) are probably invalid (Kullander and Nijssen 1989), but there is at least one other as-yet-undescribed species from Belem, Brazil. Most aquarists will encounter only *Nannacara anomala*, but that's okay. At a price of usually under \$2 each, these pretty fish are a steal and a terrific beginner's cichlid fish for all who wish to experience "cichlid parenthood" but want something more exotic than convict cichlids!

*Tahuantinsuyoa macantzatza*

Say what? The Inca stonefish, of course. Whaaaa? Ta-wan-tin-sue-yo'-a macan-tsa-tsa'. Yeah, right!

In 1986, Kullander described a Bujurquina-like fish from the Rio Aguatyia drainage system in Peru that he believed was different enough to warrant its own genus. His choice of names actually makes sense despite their unpronounceability. The generic *Tahuantinsuyoa* is the native Quechua name for the Inca empire, and the specific nomen derives from Shipibo (native) words for "stone" (*macan*) and "fish" (*tzatza*), alluding to the stony stream beds over which this fish is usually found. So now you know. Just keep practicing the name! Ta-wan-tin-sue-yo'-a macan-tsa-tsa'!

Chances are you will never encounter this fish, coming as it does from a rather obscure (from a commercial collector's point of view) location. Nevertheless, intrepid aquarist/explorers from Germany have returned this interesting fish to the motherland (apparently Rio Aguatyia lies in the middle of Peru's largest cocaine plantations [Bernhard 1991]) and are breeding it sporadically in small quantities. I refer you to pictures in Stawikowski and Werner (1988) and in Konings (1991), the same ones I'm using to describe it to you.

To my eye, it looks like a Bujurquina trying to be a green acara. The green spangling and facial vermiculations are like those of the green acara, but the body plan and striping definitely scream "Bujurquina." It has the oblique lateral stripe back to the dorsal fin that is diagnostic for Bujurquina species (see part 5, AFI July 1992), but the nape band that connects the eyes over the top of the head angles backwards towards the dorsal.

The fish remains medium-sized, with males reaching about 5 inches (13 centimeters) — females are smaller (Bernhard 1991). Apparently, this fish is a biparental, delayed mouthbrooder whose spawns are rather small (40 to 50 eggs) (Bernhard 1991). This, coupled with apparent difficulties in spawning this species in the aquarium, will make *Tahuantinsuyoa macantzatza* an unlikely fish on the American aquarium scene anytime soon. Anyone for a trip to Aguatyia?

**Conclusion**

Well, that concludes it for this installment and for the acaras. There were a few more "acara-like" cichlid fish we could have covered here (e.g., *Acarichthys heckelii*, *Acaronia nassa*), but I have chosen to leave them for another time because their affinity with the acaras is debatable.

For those of you picking up this series for the first time, I direct you to the March, June and July issues of AFI 1992 for the rest of our discussion on acaras. It's taken a large number of installments to cover this assemblage of fishes and I hope you're impressed with their sheer diversity and evolutionary ingenuity. I think our friend, ichthyologist Sven O. Kullander, will get little argument — certainly not from me — for carving up what was essentially a relatively heterogeneous group of

cichlid fish united under the name Aequidens by virtue of "equal" conical teeth and three — rather than four — hard anal fin rays!

From an aquarist's point of view, the acara lineage offers a variety of challenges from large, belligerent (but loveable!) lug-heads (the "true" acaras) to the peaceful dwarf forms like the "smiling" acaras (*Laetacara* sp.) and the goldeneyes (*Nannacara* sp.). From cave-spawners (*Guianacara* sp.) to leaf spawners (the "blue" acaras, "*Aequidens*" sp.) to mouthbrooders (*Bujurquina* sp.), this group of South American cichlid fish has it all!