

Cichlids of the Americas - It's the Chanchito

The aquarium hobby's first cichlid.

By Wayne Leibel

It is time to talk of the chanchito or Brazilian "zebra" cichlid. As was true for the severum and chocolate cichlid(s), several distinct species are involved. These include at least three species: "Cichlasoma" facetum, "C." autochthon and "C." oblongum, and probably the newly described "C." tembe (Casciotta et al. 1995). Chanchito, the Spanish designation for this fish, means "little pig," a name that Loiselle (1980) suggests derives from its feeding behavior.

The chanchito, which we will refer to as "C." facetum in this article (see below), has the distinction of being the first cichlid in the aquarium hobby and the second "tropical" fish overall, after the paradisefish (*Macropodus opercularis*), which was introduced sometime before 1880. Sterba (1965), in his classic, *Freshwater Fishes of the World*, suggests 1894 as the first time of importation into Germany.

In fact, the first published account of its spawning — and what is probably the first spawning of a cichlid in captivity — by one Dr. Ludwig Slaby appeared in the German magazine *Natur und Haus* in 1894. This article was subsequently translated into English by Angus Gaines and appeared in the American magazine *Natural Science News* in June of 1895 (Vol. 3, No. 35).

Mulertt shipped live fish by rail or other express in metal shipping cans, and the cans themselves cost customers an additional 25 to 50 cents, as detailed in an advertisement. Although no prices are quoted for the fish, Mulertt notes "above fish are fully domesticated and of suitable size for the parlor aquarium. Prices range according to shape and brilliancy of colors." Rarity too, I bet. Those first Brazilian zebrafish probably cost a small fortune, but I bet aquarists of the day lined up to buy them.

These days, the chanchito is pretty much a forgotten fish in both dealers' and aquarists' tanks. Coming as they do from subtropical South America (southeastern Brazil and Argentina, the La Plata basin, Uruguay, Paraguay, Rio Parana basin), they are only rarely imported, usually from Argentina. Commercial breeders have all but ignored the chanchito, although it is a lovely, medium-size, cold-tolerant species whose vertical barring and shape (and attitude) is reminiscent of that of the Central American convict cichlid ("*Cichlasoma*" [*Archocentrus*] *nigrofasciatum*). So we don't see it often in the hobby, and that is regrettable. Perhaps this article will revive some interest in this forgotten cichlid.

How Many Chanchitos?

Cichlasoma facetum was first described as *Chromis facetus* by Jenyns in 1842 from specimens taken from Rio de la Plata. It is distributed throughout southeastern Brazil southward to Uruguay, including the Rio Parana basin. Castelnau then described *Chromys oblonga* from a fish supposedly caught in the Rio Tocantins. (Pellegrin 1904 reported that the type specimen was in poor condition, but suggested an affinity with the next species, *H. autochthon*, and Regan 1905 redescribed this species based on material from Argentina. It is also found in southeastern Brazil.)

Finally, Günther (1862) described *Heros autochthon* from material collected from coastal rivers in eastern Brazil. Its distribution extends southward to Argentina. Regan (1905) recognized all three species as distinct and as *Cichlasoma* species, and put them in a separate section (Section 3). Whether or not these are distinct species, or rather subspecies of *C. facetum*, has been debated.

More recently, Kullander (1983) suggested there was but a single species, "*Cichlasoma*" facetum. This is particularly puzzling in view of the apparent polytypic nature of chanchitos over their subtropical range and Kullander's predilection for "splitting" species (e.g., the ports). Most recently, Casciotta et al (1995) have described "*Cichlasoma*" tembe from the Rio Parana basin in Argentina, which would appear to be a thick-lipped, elongate chanchito. It is my guess that there are at least four species here, and probably many more awaiting more extensive collection in southeastern Brazil and Argentina.

One interesting note concerning the chanchitos is their apparent lack of affinity with any other living South American cichlasomines. Regan (1905) suggested that the three species he recognized were most closely related to the port cichlids, more particularly *Cichlasoma bimaculatum*. While agreeing that there is a general resemblance in overall shape, mouth shape and scalation to the ports, Kullander (1983) suggests that the chanchitos may well be most closely related to the *Archocentrus* group (i.e., convict cichlids) of Central America! Indeed, Regan (1905) had already suggested descent

of the *Archocentrus* (his Section 5) from *C. facetum* or its ancestor. Obviously there is still much for scientists to do with these oddball, medium-size cichlasomines.

One striking convergence that, along with details of dentition, suggest such a convict-chanchito affinity is coloration and size. I have seen large chanchitos that were all of 6 inches, but most seem to stay in the 4- to 5-inch range. Their body shape is a generalized oval, and the base coloration is varying shades of olive to burnt orange to even red. There are typically six to seven dark vertical bars along the sides, the fourth bar including a large lateral blotch (which is what is left of a less-distinct horizontal stripe extending from the gill cover back to the tail), and a spot or even bar on the caudal peduncle. There are also two dark stripes across the forehead and two oblique bars across the nape. These bars are variable in darkness — with most geographic variants sporting very dark bars — hence the suggested likeness to the convict cichlid "*Cichlasoma*" (*Archocentrus*) *nigrofasciatum*.

References

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While this may sound drab, many of the geographic variants exhibit a dramatic contrast between the dark bars and lighter, often colorful, inter-bar regions. In addition, at least one variant has a great deal of iridescent spangling (blue or gold) distributed throughout the body and on the dorsal, anal and caudal fins, particularly at their point of insertion with the body. This "morph" has been designated and sold as "*Cichlasoma*" *oblongum* in the hobby, and is much smaller (about 3 to 4 inches) than typical "C." *facetum*. Finally, the new chanchito species, "C." *tembe*, is notable for its large fleshy lips reminiscent of one of the red devils ("*Cichlasoma*" *labiatum*) — "tembe" is native Guarani for "lips, as well as being more elongate (Casciotta et al. 1995).

Chanchitos in the Aquarium

As mentioned previously, the chanchito has enjoyed a long history in the aquarium hobby as perhaps the second "tropical" fish to be imported and kept. This is both an accident of history as well as biology.

History, in that southeastern Brazil was once a focus of German commerce, and German aquarists collected and exported this fish to the motherland in the mid 1890s. Biology, in that this region is decidedly subtropical, and the chanchito (along with the Brazilian mother-of-pearl eartheater (*Geophagus brasiliensis*) adapted very easily to unheated tanks. They can easily withstand temperatures in the mid to upper 50s (degrees Fahrenheit), and can survive brief drops to near freezing, while prospering and breeding in temperatures from 68 to 80-plus degrees Fahrenheit. The perfect aquarium fish!

The chanchito was something of a staple in the American hobby until the World War II, and then was reimported again in 1970. Because there are cichlids with far more commercial appeal, and because Argentina has yielded only a few interesting aquarium fishes, chanchitos are only sporadically imported today. Pity, because these are truly beautiful and interesting fish, and great for "beginners" as well!

The first captive spawning of this fish took place in Germany in 1894. According to Dr. Slaby, who wrote about his experiences (1894; English translation by Angus Gaines, 1985), the aquarium society "Triton" of Berlin (Germany) arranged for a shipment of South American fishes in 1893, which had been captured and imported by one of the

members of the society and "among them was one species that can be recommended as a most desirable acquisition for aquarianists. This is the chanchito of the Brazilians, a fish about 5 centimeters broad and 12 centimeters long. It belongs to the genus *Chromides* and to the family *Heros*, but whether it is the *Heros facetus* or some closely allied species has not yet been fully determined." This article goes on to describe in vivid detail the coloration of these fish and how this changes dramatically with the behavioral state of the fish, and concludes that the name "chameleon fish" might be a better choice than the native "chanchito."

Slaby writes: "The chanchito should be kept in water at from 10 to 20 degrees Reaumur (= C, 50 to 68 F) and fed on earth worms and small living animals of all kinds and minced meat. Their manners are as curious and interesting as their color changes. During the spawning season the male and female stay close together and circle around each other in beautiful, graceful curves, their fins outspread and their gorgeous hues constantly changing. At length they choose a shaded corner of the aquarium and after they have cleared it of all loose sticks and dirt the female, by means of an ovipositor 5 millimeters in length, attaches her eggs to the wall, and these are immediately fertilized by the male. Both fishes then remain close to the nest and guard it carefully. After about four days the young appear, though they remain in their corner for two weeks or more until the yolk is absorbed."

He continues: "The parent fishes are remarkably assiduous in the care of their young. Even when they are preparing for the second brood, which occurs in about eight weeks, they still keep a tender watch over the half grown fry. Anything that approaches their nest corner is at once attacked and, as I myself have observed at Matte's (note: a skilled German aquarist who was given the fish to propagate) basin, they will even spring out of the water in their efforts to strike at a finger held near the surface. It is a beautiful sight to see the troop of little fishes swimming about before the old ones and obeying every gesture of their parents. Herr Matte succeeded in raising two broods of these interesting fishes last summer. The young were fed on *Daphnia*."

Apparently the chanchito became quite popular. An article in the journal *Aquatic Life* for November 1916, by Ernest Leitholf, captures some of the charm of cichlid behavior. "It is now that the wonderful activity is displayed, in which, it is my experiences, no other fish excels. Never for a moment is the nest left unguarded, alternately male and female take up a position above the eggs, ceaselessly working their fins to keep freshwater constantly circulating about the treasures...never for an instant are the youngsters out of the range of a pair of watchful parental eyes. After several days the flock begins to swarm about, the proud parents guarding their issue at all times.

"One day when showing such a family, a friend, while glancing toward another tank, placed his hand near the surface of the water of the chanchito aquarium. Mistaking his intentions, one of the parents made a powerful leap to meet the fancied enemy, cleared the rim of the aquarium fully 6 inches above the water line, and landed 5 feet below on the cement floor of the conservatory, fortunately without suffering injury. This acrobatic feat was repeated on several other occasions, each time with the intention of charging some object deemed hostile to their offspring, showing their intense determination to defend them at all costs. Finally, for their own safety, we covered the aquarium...The chanchito is interesting and temperamental and well worth study."

And a great beginner's fish! I have already mentioned their cold tolerance. Moreover, they are omnivorous and root around the gravel — dare I say it? — like pigs. They will eat virtually all prepared, frozen or live foods that are of the proper size.

Because they originate from coastal rivers and streams of eastern Brazil, soft water is not necessary. In fact, it is probably not advised! In the past I have had good luck including some dolomite or crushed coral in a filter box to buffer and gently harden the otherwise soft acid tap water.

This fish does have two major shortcomings — which probably gave cichlids their bad name initially. They dig and they fight! So, you may have difficulty in maintaining these fish in planted tanks, and you certainly should provide enough shelter to minimize aggression (see Leibel 1995 for strategies).

Chanchitos are prolific, laying several hundred eggs on stones or plants. They tend these eggs with great diligence. The parents will, if available, hang their newly hatched fry via secretions of their cephalic "hatching glands" in water plants floating near the surface, much like the rainbow cichlid, *Herotilapia* (*Archocentrus*) *multispinosa*, and one of the convicts, "*Cichlasoma*" (*Archocentrus*) *spinossissimum*, both from Central America. This perhaps underscoring the aforementioned accepted relationship between the chanchitos and the convicts.

Unfortunately, there probably is not much of a commercial market for chanchitos, so we will probably continue to depend on sporadic importations of wild fish, which happen all too infrequently. This is a great, if understated, cichlid, and is well worth your time to find.