

The Orinoco Area and its Fish

Bonus content from the April 2009 AFI magazine article "How to Create an Orinoco Habitat."

By Oliver Lucanus

One of the many streams branching off from the Rio Orinoco is close to a small village of around 40 people. The village is made up of Indios from the communities of the interior. The proximity to the mainstream of the Rio Orinoco means easy fishing – the mainstay of their diet. Because the water comes from terra firma (a place that does not flood even at the peak of the rainy season) in the nearby mountains where it flows over granite rocks and picks up little silt, it is vital for the village. The local people take their drinking water from the stream, not the nearby Rio Orinoco. While kids are allowed to play in the stream and women wash clothes below the village path, it is strictly off limits above the path.

When the dry season peaks and the cardinal tetras (*Paracheirodon axelrodi*) are concentrated, the fishermen and their families harvest some 15,000 cardinals for the aquarium trade. They are sold to brokers that bring the fish to Puerto Inrida, an important waypoint in the Colombian aquarium fish industry. A box of cardinal tetras fetches around \$5 for the local village — big money in a place where there is little else to generate income. This harvest of cardinal tetras does not seem to affect the stream's ecology. In the following year, the cardinals are back in great numbers.

Many streams in the region have been destroyed because greedy fishermen use the toxin from a local tree to kill all the fish, and in low concentrations to collect fish, such as altum angels (*Pterophyllum altum*) for the aquarium trade. This unscrupulous method has destroyed not only the habitats but also vital income for communities in this region. It is of great importance that local communities and families see the importance of sustainable development and sustainable harvest of products from their forest, especially in a region that is considered unsafe because of ongoing fighting in the Colombian war and proximity to one of the major cocaine smuggling routes in South America. Selling aquarium fish is an ideal method for these communities to generate income from a renewable, sustainable source, while at the same time teaching their children the importance of protecting the forest, and with it the fish that fascinate all of us.

Water Values of the Stream in Dry and Rainy Season
 Measurement Peak Dry, February Peak Wet, July
 Temperature, surface at noon 30 C 28 C
 PH 6.25 9
 GH 1.0 < 1
 Conductivity 55µS 42µS
 Depth 1-2 ft 5-9'
 Visibility 10 ft + 2-3 ft

Orinoco Aquarium Fish

Here is a list of species found in the Orinoco habitat that went into the biotope tank covered in "How to Create an Orinoco Habitat," in Aquarium Fish International's April 2009 issue.

- * Rubi tetra (*Axelrodia risei*)
- * Cardinal tetra (*Paracheirodon axelrodi*)
- * Pretty tetra (*Hyphessobrycon* species)
- * *Nanostomus unifasciatus*
- * Checkerboard cichlid (*Dicrossus filamentosus*)
- * *Apistogramma inridae*
- * Twig catfish (*Farlowella acus*)
- * Vandit cory (*Corydoras metae*)
- * Rivulus killifish

Although they were not residents of the biotope tank, these species are also found in the habitat.

- * Leaf fish (*Monocirrhus polyacanthus*)
- * Wolf fish (*Hoplias malabaricus*)
- * Peacock bass (juveniles) (*Cichla orinocensis*)
- * Pike cichlids (*Crenicichla* aff. *regani* and *C. lugubris*)
- * Chocolate cichlids (*Hypselecara coryphaenoides*)
- * Spotted leporinus (*Leporinus maculatus*)
- * Red hook (*Myleus rubripinnis*)
- * Demon eartheater (*Satanoperca daemon*)
- * Oscar (*Astronotus ocellatus*)
- * *Cichlasoma orinocensis*
- * Flagfin cichlid (*Mesonauta insignis*)

- * Basketmouth cichlid (*Acoronia nassa*)
- * Redtail moenkhausia (*Moenkhausia colleti*)
- * Red spot tetra (*Hemigrammus stictus*)
- * Spotted catfish (*Tatia* sp.)
- * Hockeystick tetra (*Hemiodus gracilis*)
- * Spotted headstander (*Chilodus punctatus*)
- * Dwarf tetra (*Poeciliocharax weitzman*)
- * Marbled hatchetfish (*Carnegiella strigata*)

Want to read the full story? Pick up the April 2009 issue of *Aquarium Fish International*, or subscribe to get 12 months of articles just like this.