

Guapote tigre (Spanish)

# Parachromis managuensis

Superclass: OsteichthyesClass: ActinopterygiiOrder: PerciformesFamily: CichlidaeGenus: Parachromis

## **Distribution**

Native to Costa Rica, Nicaragua and Honduras

### <u>Habitat</u>

Inhabits slow-moving, turbid waters, preferring those with mud bottoms. It is capable of breeding over a wide variety of biotopes, from small tributaries of larger rivers through seasonally flooded marshes.

#### Food

Carnivorous. They consume both soft finned and spiny finned fish.

### **Reproduction**

They have breeding colours. Males use theirs to attract the females. They further court attentive females by displaying their erect finnage.



This fish is native to parts of Central America but has been introduced to several adjacent countries: El Salvador, Guatemala, Panama and Mexico: also to Cuba and Puerto Rica. Elsewhere it has been introduced to Hawaii, the Philippines, Singapore and the U.S.A.

Although a freshwater fish, they prefer eutrophic lakes. A eutrophic lake is shallow with high nutrient content. The phytoplankton are very productive and the waters are often murky. They are commonly found in very warm, oxygen depleted waters. They also occupy springs and ponds over detritus and sand bottoms.

This species is a carnivorous, highly predatory fish. Diet consists mainly of small fish and macro invertebrates. They are very opportunistic piscivores, consuming smaller fish and attacking others.

When a female responds to a male a breeding pair is established. Depending on her age and weight a large number of eggs are laid. This can be from 500 up to 5,000 in number. The eggs are laid on rocks and other hard substrates. As she lays them he follows up and fertilizes the eggs. She fans the eggs while he guards the perimeter of the nesting site. The parents become quite aggressive and territorial in protecting their eggs. She protects the eggs, he protects the nesting site.

# **Development**

Incubation is three to five days. Young fry continue to be protected by the parents. At ten days the fry are free swimming. They grow quite quickly. They are sexually mature by 10 cm and ready to pair off.

### **Characteristics**

The cichlid family is differentiated by having a single nostril each side of the snout, by having anterior spines in the dorsal and anal fins, and by the presence of lower pharyngeal bones usually joined together. This species is very aggressive, territorial and predatory.

# Adaptations

Evolutionary decoupling of oral and pharyngeal jaw mechanics has likely played a critical role in the unparalleled trophic diversification of cichlid fishes. In this genus the mouth is large, the jaw is strongly protractile and the teeth are complex.

# Status/Threats

These are not listed on the IUCN Red List. Over fishing of any species is always a potential threat.

# Sightings at Cano Palma

The newly hatched young feed on their yolk sacs and are referred to as wrigglers. They are golden at hatching. At this stage growth is quite rapid. The parents assist in providing food for their developing brood. They continue to aggressively protect their offspring until the young fish are swimming and exploring on their own. Between the sixth and eight week distinctive longitudinal striping begins. At this point serious fighting begins amongst the fry; they become intolerant of each other. Males can acquire a length of 50 cm. Females stay a bit smaller at 40 cm. The males develop longer fin extensions.

Jaguar cichlids are attractive fish with a gold/yellowish/bronze background and black markings all over the body. A series of large black dots run horizontally along the lateral line area. They have vermiculate markings on the head and flanks. The sexes are dimorphic, especially during courting. Males become more colourful as they age; the body colour breaks up into blotches of black and copper colour. Females are similar with thicker bodies. They have a less pointed dorsal and anal fin. Red pigment in the females is more prominent in the gill plates. This is prominent in her breeding colours. She is however less colourful than the male during periods of sexual activity.

There is a correlation between ram speed (RS) and maximum gape (MG) when carnivorous fish hunt other fish. The jaguar cichlid is very aggressive and therefore a successful hunter. It has enlarged pseudo canines, allowing it to grasp and hold on to prey. Further aggressive tendencies are demonstrated when providing protection not only to their developing eggs but also young fry. This protection guarantees a fairly high survival rate within a brood. This is both an aggressive hunter and protector. Being highly predatory they are not at all finicky about what they eat. They are benthopelagic, living and feeding near the bottom as well as midwaters or near the surface. They can survive in murky, low oxygenated waters.

This species is very popular amongst fish hobbyists and fishermen. It is fairly easy to breed in captivity. It is a food fish throughout its native and introduced range. It has a wide distribution and is unlikely to be in any current danger.

This is the common large guapote caught by fishermen in the canal. The jaguar cichlid tends to hide around sunken stumps and logs in relatively shallow water. At night they can sometimes be seen sleeping at the water's edge.

#### References

http://www.fishbase.org. Extracted Sept 2 2008 http://www.gcca.net/fom/Parachromis\_managuensis.htm Extracted Sept 2 2008. http://aquaticdatabase.com/index.php/Parachromis\_managuensis Extracted Sept 2 2008 http://www.cichlidae.com/article.php?id=92 Extracted Sept 5 2008



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