

Crenicichla frenata (Pike Cichlid)

Family: Cichlidae (Cichlids and Tilapias)

Order: Perciformes (Perch and Allied Fish)

Class: Actinopterygii (Ray-finned Fish)



Fig. 1. Pike cichlid, *Crenicichla frenata*.

[<http://www.plantedtank.net/forums/21-fish/568114-seeking-pike-cichlid-crenicichla-frenata.html>, downloaded 26 February 2016]

TRAITS. *Crenicichla frenata*, commonly called the pike cichlid, possesses an elongated body which is of medium size (about 20cm) and is brown/grey in colour. The fish has a horizontal line across its body from mouth to tail, along which are blotchy spots of dark brown to black (Fig. 1). Pike cichlids are a predatory species with well-developed pharyngeal teeth in the throat in addition to their regular teeth in a wide, protruding mouth (Berra, 2001). They have spiny fins which serve as a hindrance to predators. The pike cichlid is often distinguished from other fish due to the possession only one nostril on each side of the face as compared to most fish that have two sets.

DISTRIBUTION. *Crenicichla frenata* is native to South American fresh waters (Fig. 2). They can be found particularly in Trinidad and north-eastern Venezuela (Wikipedia, 2016).

HABITAT AND ACTIVITY. *Crenicichla frenata* can be located in lowland, tropical areas. They thrive best in warm, fresh waters usually between 23-28° C. During the day they can be found nearer the water surface, hidden under objects waiting for prey. Pike cichlids generally do not travel long distances for food, they usually remain within close limits for feeding. They are diurnal fish, and at night they return to shallow waters.

FOOD AND FEEDING. *Crenicichla frenata* are resourceful feeders with a huge appetite. This species is a predator, it spends most of the day stalking prey. Standard hiding spots include under objects such as driftwood, rocks and amongst trees. Its prey is usually of a smaller size. Some common prey are worms, smaller fish, and insects. The pike cichlid is one of the biggest predators

to the Trinidadian guppy. *Crenicichla frenata* usually allows its prey to swim while it watches patiently lurking amongst and beneath objects before striking the chosen victim. The pike cichlid's mouth, particularly the jaw and sharp teeth, are well adapted to its feeding habits as it allows easy snatching and tearing of food.

POPULATION AND ECOLOGY. *Crenicichla frenata* are extremely aggressive fish. They are not strong schoolers with either their own kind or other species. They can however sometimes be found in pairs with their mating partner. Pike cichlids have a lifespan of up to 10 years.

REPRODUCTION. A male reaches sexual maturity at a size 18cm whereas the female tends to be smaller, at 14cm. The mating pair may appear violent to each other prior to breeding. Once a spawning site is chosen, the pair usually digs a pit beneath a cave or piece of wood; this is referred to as substrate brooding. *Crenicichla frenata* can mate at any time of the year and normally produce a large amount of eggs ranging from hundreds to thousands (Barlow, 2000). The eggs, which are white and oval shaped (Fig. 3), would then be laid in the nest area. Hatching occurs within 4-5 days but is ultimately influenced by the temperature, which is most favourably 26°C. Both fish in the pair play a vital role in guarding their young. The female usually cares for her eggs and the male takes on the role of protecting their territory (Stratton, 2002). Once the young begin to swim the male takes on the responsibility of care for his young.

BEHAVIOUR. *Crenicichla frenata* tend to stay within the same regions and do not wander far. This species prefers leading a solitary life as opposed to being in schools. They are known to be very hostile and territorial even towards their own kind. However, *Crenicichla frenata* do have a tendency to form strong bonds with their mating partner once found to be well-suited. As a predator, a pike cichlid will choose to hunt alone and maintain its territory by attacking other predators that are either smaller or of similar size. Sometimes the attack will end in the death of the intruder.

APPLIED ECOLOGY. *Crenicichla frenata* is not red-listed on the World Conservation Union (IUCN). This serves as indication that this species is not considered to be threatened or endangered.

REFERENCES

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- Wikipedia. (2016). Cichlid. <https://en.wikipedia.org/wiki/Cichlid>, downloaded 12 March 2016.

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Posted online: 2016



Fig. 2. Map showing the distribution of *Crenicichla frenata*.

[<http://www.discoverlife.org/20/q?search=Crenicichla+frenata> downloaded 22 February 2016]

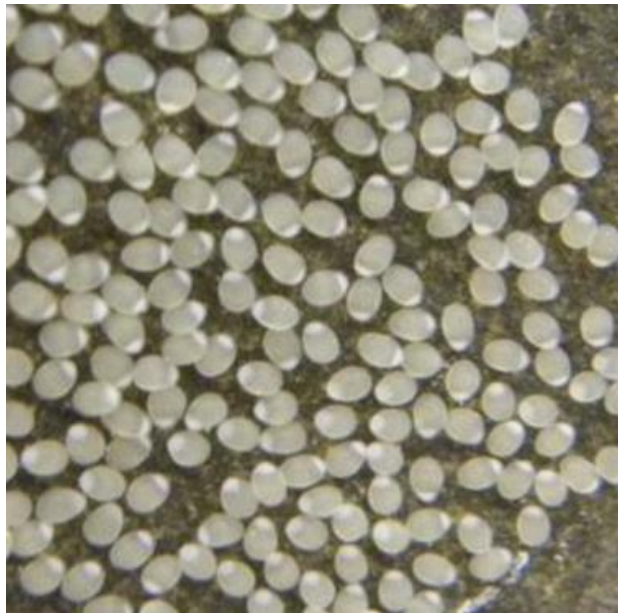


Fig. 3. *Crenicichla frenata* eggs.

[<https://www.amherst.edu/people/facstaff/acbrown/acbrown.grad/oldprojects> downloaded 23 February 2016]