

## Breeding Tiger Teddies

**Swordtails, platies, guppies and mollies make up the “big four” of the livebearing tropical fish group.**

*By Mike Hellweg*

The female tiger teddy can hold unborn fry at different stages of development. Credit: Gary Lange

Swordtails, platies, guppies and mollies make up the “big four” of the livebearing tropical fish group. Every shop that sells fish sells at least a few representatives of these four popular groups of fish. They come in every color of the rainbow and unlike most fish, they produce living young at regular intervals, even for beginning aquarists. This has endeared them to generations of hobbyists. But there are many more fish that also produce living young—so many that there is a national organization just for aficionados of these fish, the American Livebearer Association.

One of the prettiest of the so-called “wild-type” livebearers is the diminutive tiger teddy (*Neoheterandria elegans*). The scientific name means “elegant new Heterandria,” and they certainly live up to that. Both males and females are a deep olive brown with six to nine vertical bands of varying width. The band under the dorsal fin widens into a wedge-shaped to round spot, which is bordered by an elegant metallic gold to amber ring, hence the name. In some specimens, this ring can even be orange or red. Unpaired fins are often dark gold to dark brown, outlined in a deep blue color. Their eyes are ringed in gold. Add this to their diminutive size of less than an inch, and you have a truly stunning fish.

In the wild, they are found in the Rio Truando, which is in northwestern Colombia, very near the border with Panama. They are found in shallow water, usually full of aquatic plants. This provides them with plenty of places to duck for cover, should a real or imagined danger appear. They form loose schools both in the wild and in the aquarium. Fortunately, this environment is easy to replicate in captivity.

The best way to display them is in a small planted, species-only aquarium. One of the popular desktop aquariums is perfect for a small group, and a colony can be maintained for generations in a single 10-gallon aquarium. They will spend most of their time out in the open, as long as they feel secure and have many places to hide if they feel threatened.

Water parameters appear unimportant. The pH should be kept on the neutral to slightly alkaline side, and there should be at least some carbonate hardness to maintain the buffering capacity of the water. Temperature should be kept on the warm side, in the upper 70s to low 80s Fahrenheit. Clean water seems to be the most important factor in successful maintenance, so regular water changes should be the rule. At least 50 percent of the water should be changed on a weekly basis (more if you have the time). With a small aquarium, this doesn't create much trouble for even the busiest hobbyist.

Because they are small and the fry are even smaller, the safest type of filter to use is a sponge filter. Even a small power filter might be too powerful for these tiny beauties. At the very least, it will create too much of a current in the aquarium, and they'll spend most of their energy swimming against it. A small box filter with the top removed, would also suffice.

Feeding presents no problem. They are micro predators and should have a mostly meaty diet. In the wild, they eat terrestrial insects that fall into the water, aquatic insect larvae (such as mosquito and midge larvae), small crustaceans, and worms. The aquarist should try to replicate this diet as much as possible. They will take small pellet foods and finely crushed carnivore-type flakes. In addition, they should be offered live foods from time to time. Newly hatched brine shrimp is a particular favorite. They will also take microworms, grindal worms, mosquito larvae, *Daphnia* and *Moina*; and even adults will feed on vinegar eels. They will also eat frozen foods including frozen cyclops, frozen *Daphnia* and frozen baby brine. Fry will eat the same foods right from the start, in addition to grazing on the coating of microfauna that covers the aquatic plants.

Breeding is pretty straight forward, and as long as you have both males and females and keep the water clean, you should be rewarded with fry on a regular basis. Males perform a short little dance for the female, showing their spot and spreading their fins to the utmost in front of the female. If she is receptive, she allows the male to mate with her. If not, she swims away. Contrary to popular belief, it is the female that chooses her mate, not vice-versa. If she does not wish to mate with a particular male, she will not allow it. It may seem like a hectic chase to the casual observer, but mating in livebearing fish is actually a complex behavior that is much richer than we give such tiny animals credit for. Take some time to watch and observe the behavior of your fish sometime – it's amazing!

The male's anal fin is modified into a bony tube called a gonopodium. The male uses this gonopodium to transfer sperm

packets directly into the oviduct of the female. Interestingly, unlike most other livebearers, the female tiger teddy will carry several broods in various stages of development. This is known as superfetation (also spelled “superfoetation” in older texts). The eggs are fertilized inside the female and begin development. Also contrary to popular belief, the female does provide some nutrition, as well as gas exchange (oxygen for carbon dioxide) with the developing embryos. When another brood is fertilized and starts to develop, the female apparently ceases to provide nutrients to the older brood, and the fry continue their development with the nutrition in the yolk sac. After about a month, the eggs of the oldest brood begin to hatch internally, and the fry are born.

Each day for about a week, the female drops two to four fully developed youngsters. They are all a quarter-inch or so, which is amazing considering that the female is barely an inch long. With several females in the aquarium, there will always be some newborn fry swimming about. Some larger females will drop larger broods, and there are reports of up to 25 fry being born, though two or three are more the norm.

Even when newborn, the fry already have the “spot”: the gold-ringed black marking on their side. This really stands out and is easy to see across the room. They also have the bright gold eyes of the adults. They are ready to care for themselves and soon after birth will be seen eating right along with the adults at feeding time. They will also spend much of the day hunting microscopic life on the surface of the aquatic plants in the aquarium. In a well-planted aquarium with well fed adults, there should be little if any predation of the fry by the adults.

Fry can be moved to another aquarium for grow-out, as they seem to grow more quickly in an aquarium without adults. This might be a result of some sort of “growth-inhibiting hormone” released by larger juveniles (though this should be diluted quite a bit by doing regular water changes). More likely, it just might be that they don’t get enough to eat, as the larger fish get to it first. Fry are sexually mature at about 3 months and are ready to produce the next generation.

If you reach this point, congratulations! You’ve successfully had another Adventure in Fish Breeding!