

CATFISH \ RAINBOW CONNECTION

by Chase Klinesteker SWAM, July-Aug 2004



Pair of Millennial Rainbowfish. Their fry are very tiny and difficult to feed

A CHALLENGE TO RAISE

Consistently raising tiny rainbow fry has always been a challenge for me. Their very small mouths require infusoria and very fine foods. Some species' fry can be 2 or 3 weeks old before they will be able to take newly hatched brine shrimp as food. My results feeding them APR, Liquifry, and finely ground dry food were marginal at best, and often all the fry would die from water pollution or would starve before they would reach the brine shrimp stage. A solution to this problem for me came when I had some newly hatched *Melanotaenia duboulayi* rainbow fry to raise and no empty tank for them. Looking around at what tank I might use, I noticed a bare bottomed 10 gallon tank with 6 *Corydoras julii* as the only inhabitants. A "Spundergravel filter" and some floating hornwort was all that the tank contained. I reasoned that since the rainbow fry usually swim freely in the upper layers of water, The catfish, who are bottom feeders, shouldn't be able to eat many of them. I watched the fry closely after introducing them to the tank and they seemed to be very safe. Soon I also noticed that the fry had full bellies without feeding them the APR, Liquifry, or finely ground dry food!! I was feeding the corys dry food and frozen brine shrimp, but it was way too large for the rainbow fry to eat. So what were the rainbow fry eating?

MESSY EATERS

Catfish are known as somewhat "messy" eaters because they take food into their mouths, chew on it, and spit it out several times before swallowing it. In tanks where they are well fed, there is usually a little cloudiness to the water. This slight cloudiness

is very fine particles of the food and tiny organisms feeding on it that is ideal size for tiny rainbow fry. So that is what they were eating! As long as I fed my corydoras adequately and had good filtration, the rainbow fry thrived and grew well.

FEED THE CATFISH

Catfish are often fed little because some think they are just scavengers and will clean up excess food. In reality, they are slow eaters and need time to chew on their food. That is why catfish often do best without other species of fish in their tank to beat them to the food. I fed my corydoras fairly fine crushed up flake food (about 50% spirulina) wetted and placed on the tank bottom. Frozen brine shrimp was given once or twice a week as a treat. Snails were present to clean up any excess (corys beat the snails to the food!). Once the rainbow fry can take newly hatched brine shrimp, they are easily fed in the same tank, since the corys will not quickly consume them but will eventually clean up the excess. As the rainbows grow larger, they will come down to the bottom of the tank and join the catfish feeding on the food.

FILTRATION

At this time I need to mention about filtration. Undergravel filters can be harmful to corydoras barbels, power filters would pick up the tiny fry or be too much current, and sponge filters don't seem to be efficient enough to control the "mess" that corys produce. The debris that corys kick up into the water needs to be collected and periodically removed. What seems to work best for me is the "Spundergravel Filter". This is a combination sponge and undergravel filter in a quart pan. Place a standard sponge filter in a plastic quart sherbet pan (aprox 6" diameter and 3" high). Then place large sized gravel (1/2 inch) over the sponge filter about 1 inch deep. All the suspended debris is pulled into the gravel and stays there. The pan can easily be removed from the tank and the gravel and sponge filter cleaned in a bucket of water and returned to the tank. This works well also for other messy fish like cichlids, although larger rocks or shells may have to be placed over the gravel so these fish don't remove the gravel.

OTHER SYMBIOSES

The symbiotic relationship of catfish and rainbows might be expanded to other species as well. Tiny free swimming fry that need infusoria include some danios, tetras, rasboras, pencilfish, anabantoids, and even a few killiefish. Certain goby fry have never been raised because a small enough or proper food could not be found and this might be worth a try. Also, discus and uaru fry are very difficult to feed and this approach might have merit. One would have to be aware of how mobile and free swimming the fry were so the catfish couldn't catch and eat the fry. Pigmy corydoras, young specimens, or pleco species might be used if this was a problem. The potential could be endless. Give the "Catfish Connection" a try!



Corydoras sterbai, bottom feeding catfish

Update 2017: I have noticed that sometimes tiny fry did not survive when placed with adult Corydoras. Possibly they can search and find the fry at night. I did not notice any fry disappearance when placed with Plecos or Rhinoloracaria. C. K.