

SPAWNING DEVIATIONS IN THE NOTROPIS LUTRENSIS ----(THE ASIAN FIRE BARB OR THE FIRE MINNOW)

BY FRANK G. PAGORIA

One of our local "chain" department stores had "Fire Minnows" on sale for 29¢ each, so I bought five knowing that they were a native fish. Researching their correct name, I discovered that they were the *Notropis lutrensis*, indigenous to the lower Mississippi valley from southern Illinois, down to Texas.

I placed them in a ten-gallon aquarium with an undergravel filter. No other aeration was provided.

Only one fish had any hint of coloring to it, thus I assumed that this was a male. One of the other four fishes was very fat, this turned out to be a female with a four inch roundworm.

I had set up a veranda of red shale in one corner as a planting site for anachris. The aquarium was placed on a lower level of my "tropical" tanks, (with room temperature for my other fish) this gave the Redfins a temperature of about 50 to 65 degrees maintained until warmer outside temperatures warmed up the inside.

The *Notropis* gladly accepted frozen brine with their usual fare of Tetra-min flake foods, which they ate greedily. Occasionally they were given live daphnia from my poor culture. Crushed snails were also given since the tank had many in it.

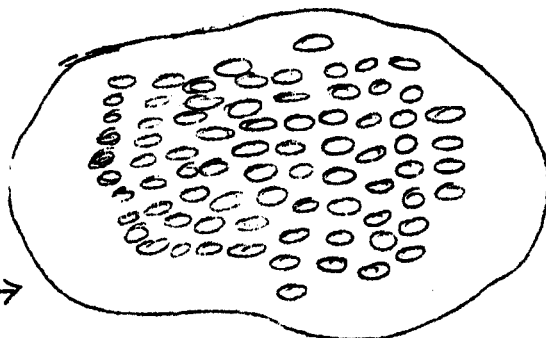
Eventually I was down to three fishes— two male and a female. The males constantly drove that female from one end to the other. Help for her came when the bigger male decided he wanted her all for himself. The chase soon transferred from the female to the little male. The little male soon refused to come out of hiding even to eat. Needless to say, he soon died. This development left me with an unproven pair. Their aquarium was slowly losing the plant life from the snails present, I also discovered hydra on the walls. There will be no spawning in this tank!

May and June came and went as the water temperature slowly climbed to 72°. The few references that I could find mentioned 76° as their spawning requirement. Mosquito larvae was now available and this became an occasional treat for my Fire minnows. July came and the temperature was still 72° in that tank.

My aquariums are set up on my west wall (in a spare bedroom) with a double window facing very slightly to northeast. This allowed the sun to shine into their tank as it rose (they received a shaft of sunlight for maybe an hour daily). You might say it was natural lighting, although my tropicals have 15½ hours of overhead lighting.

On July 12th as I was feeding them, I noticed what looked like eggs on a large piece of shale. They were placed there similar to a cichlid's manner. Since these two had a tank to themselves, I knew the eggs were theirs. According to the books, these fish scatter their eggs like Danios and have a semi-adhesive nature. "My" eggs looked as if they were placed there and they were more adhesive than supposed. Professor Sterba in his "FRESHWATER FISHES OF THE WORLD", describes the scattering of their eggs.

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DEVIATIONS (continued from page 22)

Not being ready to argue with a distinguished authority like Professor Sterba, I checked other sources (see references). Both of these implied that *Notropis lutrensis* were egg-scatterers, though I had proof to the contrary.

I removed the slate and placed it in a quart container of their tank water, adding a drop of Methylene blue with an air stone for aeration. The eggs started hatching on July 14th and finished on the 16th, when I removed the slate. There was approximately sixty-five eggs. On the 17th I began feeding "Liqui-Fry" Egg Layer to the fry by placing the drops in the airstream for better dispersal. Five days later, I began feeding baby live brine and supplements of Tetra-min "E" dry powder food. A month has passed and I have 45 fry still alive and prospering. They are of various sizes, probably due to some getting to the food before others.

Not wanting to set-up another tank, I switched the parents to the five-gallon that the young were growing in, placing them in the ten. When I put the young in the ten I noticed three newly-hatched fry in the ten. The snails had missed the eggs.

Today is August 20th and I noticed the parents are very active. "Dad" is also very brilliant and restless.

DEVIATION #2--- DAD'S tubercles are on his forehead, not his gills as noted in other information.

The fishes are really nervous, so I assume I'm about to be blessed with another spawn. To prove my first spawn as incorrect information, I placed some artificial anacharis in the aquarium with the slate to induce them. You guessed it -- they are in the front right hand corner spawning like crazy, (a good six to eight inches from the plants or slate). They swam back and forth in the front glass occasionally going to the corner and embracing (the male always on the left side of the female) expelling eggs on the right. They would run down the corner, as angels might do while placing their spawn, only in reverse direction. Upon closer examination, I found about seven eggs placed in the corner and about 35 eggs on the bottom near the corner.

While it cannot be classed as egg placing, it definitely can be considered choice of sight. Not having time nor space to save the eggs, I allowed the parents to devour them. The temperature was 79° for this spawning, with the aquarium on a North wall and no sunlight (in fact it rained this morning) with overcast skies.

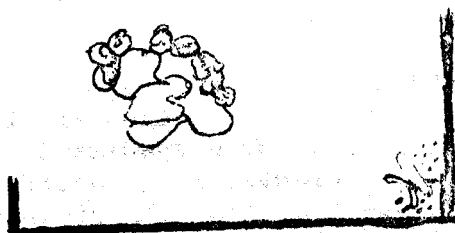
These experiences sort of make you wonder if the preparation of "breeding tanks" are worthwhile, since fishes can and do change their habits.

REFERENCES:

CASTRO, Alfred D., Steinhart Aquarium; THE ASIATIC FIRE BARB, an article appearing in the SEP-OCT issue of the Houston Aquarium Society's "Fish Fancier" as a reprint from "ANCHOR"-pages 31+33.

STERBA, Prof. Guenther; "FRESHWATER FISHES OF THE WORLD" - *Notropis lutrensis*, pages 328, 329; referred to *Chrosomus erythrogastor*, pages 326, 327 to *Danios* spp, pages 265, 266.

WALKER, BRAZ----- "ENJOY KEEPING NATIVE FISHES", chapter 5, Spawning native fishes, page 14, 1st paragraph.



SECOND ??
SPAWNING

