

A SPAWNING OF THE ORANGESPOTTED SUNFISH (Lepomis humilis)
by Matthew Sorensen, Kent, Washington

Ever since I was a young boy, I have always had a liking for sunfishes. I can remember sitting on the bank of a lake with a can of worms and just going crazy catching Bluegills and Pumpkinseeds. I was fascinated by the colors and shape, not to mention their disposition. Later, as I got into the aquarium hobby, I became obsessed with anything that had to do with sunfishes.

Now I live in Washington State, where we have only a few sunfishes--introduced non-natives, and two of the four species are located in isolated lakes in the far corners of the state.

As you can imagine, when someone offered me two pairs of Orangespotted Sunfish, I happily accepted.

When introduced into the tank, they seemed very shy, timid, and nervous, but generally peaceful. Their tank was a 45-gal.-long divided in half, with lots of plants and wood. Their tankmates were the Green Sunfish mentioned in another AC article ("Spawning of the Green Sunfish, Lepomis cyanellus," Fall '91).

The water had neutral pH (hardness not tested) and temperature was maintained at or near 70°F--room temperature. Lights stayed on 8-10 hours a day. There was weekly tank maintenance. Food was mostly frozen, along with occasional grasshoppers and redworms.

I was initially disappointed. I had seen pictures of Orangespotted Sunfish before, and my males seemed somewhat pale--a few orange spots on the body, not much color on the fins, face, and eyes. Kind of plain for a male sunfish, I thought.

The females were much smaller than the 3" males. I don't know if this is usual, as I don't really know too much about the species. The females also were very plain, as though camouflaged--pale yellow green, mottled or speckled with dark green. They reminded me of a young Black Crappie.

After a while, they loosened up and were seen more often. At feeding time, they emerged from their hiding places and scrambled for food. Aggressiveness was minimal, and general disposition was peaceful.

A few months later, I was given what were called "sunlamps." They replaced the standard aquarium lights. They were much brighter, and definitely enhanced the occupants and their surroundings. Almost immediately their habits and those of their neighbors changed.

One of the males began to be a little pushy. I thought this was odd, as they had always been gentle to each other. Then I noticed that only the females were chased. As this behavior intensified, I also noticed that one of the males was becoming increasingly brighter. The dorsal and anal fins were becoming tipped or edged with bright orange. The orange spots grew more intense. The eyes were much redder and the gill covers had a blue sheen to them.

Next he constructed a nest, conveniently located right by the aquarium front glass, so it was easy to see what he was up to--sweeping with his caudal fin, then inspecting, then chasing the females, then back to his nest-building.

I missed the first spawning; however, I saw eggs in the nest. Later they disappeared. I assume they were eaten, because the nest was clean.

A couple weeks later, the neighbors--the Greens--had spawned, and now my attention turned to them, though I couldn't help noticing that the same male Orangespotted was still sweeping and cleaning the same nest while a female hid in the corner. This kept up for about a week, at which time the male began to chase the females again. Now the other male was becoming increasingly aggressive, but the first male kept him at bay.

About two weeks had passed since the first spawning, and though things were a bit chaotic, they never seemed to get out of hand. Everything proceeded as expected. The breeding male had become almost fluorescent orange. And the eyes! They were so brilliantly red that they glowed. The blue on the cheek and gill covers also glowed. This was a beautiful color combination indeed.

I changed water and waited to see what would happen, hoping that this might speed things up. Indeed it did. Several hours later, the first pair was at it again. The breeders were inclined at 45° angles to each other while both shook and trembled violently. This recurred several times, though no eggs appeared. I thought that maybe this was some kind of foreplay. Anyway, I had to go to work, and when I returned, there they were--eggs everywhere, scattered almost the length of the tank, though most were in the nest.

The breeding male was left with the eggs, as he did a very good job of fanning and aerating them. On Day Three, I took the male out. A day later, what was left of the eggs that did not fungus had hatched. The fry were barely visible. I had to concentrate very hard to see movement, but every once in a while they'd hop or skitter across the bottom.

They were free-swimming the third day after hatching, and were concentrated near the surface, where there was a growth of small organisms which I thought might be used as the first food. Unfortunately, the fry died off rather quickly. They did not seem to eat the baby brine shrimp I added.

Next year I will try an infusoria or microworm culture. I am very disappointed at the result and hope to gather more information on rearing fry of the Lepomis species.

I hope that any readers knowledgeable in raising these wonderful fish will share their experiences with the rest of us.

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