

TESSELATED DARTER OBSERVATIONS

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During the third week of March, 1985, I caught four Tesselated Darters (Etheostoma olmstedii) in--of all things-- a minnow trap. Since I have a bad back and am not always physically able to push a seine through water or overturned rocks, I sometimes resort to lazy-man's fish-collection. I simply bait my trap and check it a few days later to see what's in it.

Generally, I use mealworms or redworms tied in a small nylon sack as bait. I was out of worms, so I set my trap with cooked rice and bread as bait. (This was simply what was left over from lunch.) When I checked the trap a few days later, much to my surprise and delight, there were four Tesselated Darters in it. This was unexpected because (1) darters are not as frequently trapped as are many other kinds of fishes, and (2) rice and bread are unlikely fare for these mostly carnivorous little fish. Maybe some meat flavor remained in the two kinds of starches; or, more probably, the darters were just looking for a place to hide.

My trap was set in the Cocalico Creek about a half-mile north of Brownstown, Lancaster County, Pennsylvania (Susquehanna drainage). It seems I could have caught Tesselateds in almost any stream in the area, because they are quite common.

I put the darters in a 20-gallon long aquarium along with some rocks I had collected. There was no holding these fish back! By 1:00 the next afternoon, they had started to spawn. The male stood vigil with the eggs, which the female had laid on the underside of a rock. There were approximately fifty to one hundred eggs in my darter tank, and I was as excited as a child with a new tricycle. Two days after the eggs were laid, five of them had fungused, and I feared the worst. The next day, the fungused eggs were gone and there were still nearly 100 viable eggs left. Although I didn't observe it, I believe the guardian male removed the bad eggs.

Three days after the eggs were laid, I could see dark eyes in the transparent embryos. Movement was noticeable in nearly all of the eggs. During the next week, the eggs became translucent and white. Exactly eight days after the eggs were laid, they began to hatch. The fry were transparent slivers about $\frac{1}{2}$ " long. I fed the fry commercial liquid food.

They lived for several weeks, but slowly died off. After one month, I had about ten surviving fry. After six months, none were left. I attribute this to poor food. This year, I will be ready with infusoria, baby brine shrimp, and microworms.

Seining while overturning rocks, not bait traps, is the preferred way to collect darters. Adult darters thrive on

frozen or live foods. They will survive over a large range of temperatures, but prefer cooler water. It seems anyone can get darters to breed; the real challenge is to raise the young. I feel that this year's project will be a total success. All spring and summer, you will find me seining for darters or perched (pun intended) next to my aquariums with my notebook and camera.

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