NORTHERN REDBELLY DACE IN WISCONSIN

by Ray Katula, San Jose, California

Located on the Black River in western Wisconsin is Lake Arbutus. The beautiful recreation area surrounding it is a native-fish-collector's dream; within several miles there are numerous and varied habitats in which to collect. The lake itself offers many species as well as excellent sportfishing. The area has maintained a pristine appearance.

When I was about 13 years old, I discovered a locale for Northern Redbelly Dace (Phoxinus eos). My friend and I were walking through the woods on the east side of Lake Arbutus where we happened upon a bog pond. Curiosity arose as to what fish it might contain, so we did some drag-seining through the pond. With the first sweep of the seine, we had about 50 beautiful Redbelly Dace jumping in our net. Some specimens had both yellow and red, though some had only red, in their sides and belly. The obvious females had only cream white besides the typical stripes running along their sides.

Other fish caught were Central Mudminnows (Umbra limi) and Brook Sticklebacks (Culaea inconstans). More sweeps of the net turned up only more of the same, so we kept about a dozen of the best specimens and walked back to camp. Walking through the woods, we saw large mounds of sand almost as tall as myself. I had no idea what they were until I sat on one to rest. After being bit by some angry ants, I realized they were anthills.

Upon taking the fish home and trying to acclimate them, I learned two lessons about Northern Redbelly Dace: they are very prone to fungal infections and they are adept jumpers. As a result, I lost a lot of my first specimens. Fortunately, there were more to catch in the bog. One thing that puzzled me was that sometime in July, most adult Redbellies would disappear from the bog. Perhaps they swam into small tributary streams.

In setting up a tank for Northern Redbellies, it appears that they favor some aquatic vegetation. Also, a little aeration is beneficial. Since they like to school, they should be provided with a roomy tank. And, as indicated above, a good aquarium cover is necessary. Room temperature seems sufficient for their well-being.

In 1984, I went back to Lake Arbutus in order to collect some specimens. My intent was to breed some in my tanks in California. It was late July and adults could not be seen anywhere. Near the pond's surface, I

did spot juveniles. I caught about six with a dipnet. All survived the trip to California, where I placed them in a 50-gallon hexagon. They were all doing fine until I placed some California Suckers (Catostomus occidentalis) in with them. The suckers harbored anchor worms, and soon most of the Redbellies became infected. Treatment with potassium permanganate rid them of anchor worms, but secondary infection killed all but a pair. These grew well on a diet of brine shrimp, live tubifex worms, vegetable flake food, and a commercial color-enhancing flake food.

Later, the fish were put into a 55-gallon aquarium, where they enjoyed schooling with Red Shiners (Notropis lutrensis). It was at this time (first winter) that the obvious female began swelling noticeably. The male showed various intensities of red, depending upon mood and condition. More often than not, he was a brilliant blood red.

When it became obvious that they were swimming into the vegetation to spawn, I set up a 30-gallon aquarium for them. Lots of artificial plants were positioned in back of the tank, the substratum was black gravel, and undergravel filtration was used. When the female became swollen, I placed the pair into the spawning tank. A heater was provided to assure slightly warmer water, which appeared to trigger spawning. This method worked several times, but with one big problem--the parents apparently liked to devour their own eggs. After every spawning, I would search the tank intently for eggs and would find some, but hardly enough worth saving.

Later, I watched them spawning. The pair would swim into the plants and the male would shudder against the female as three to ten eggs at a time were laid. After each spawning step, the parents would search for the semi-adhesive eggs and consume them. This was frustrating for me. After spawning was finished, I would have maybe ten eggs left, not enough for me to spend the time and space of raising the resulting brood.

I hope that this article provides some insight for anyone attempting to raise these beautiful fish. Warmer temperatures, 72-76°F, and a vegetable diet seemed to trigger spawning. During spawning, the water was left slightly acid, reflecting my pH readings in their natural habitat.