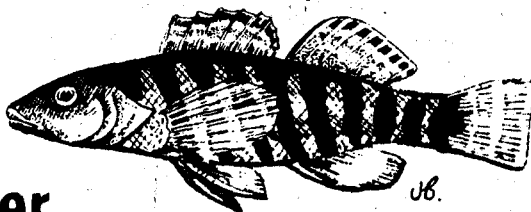


# Spawning the Rainbow Darter



by John Beaulieu Barrie, Ont. Canada.

The keeping of native fishes is becoming an important part of the aquarium hobby here in Canada, but very little is known of many of the fishes we are catching and maintaining. The most popular of the native fishes here in the Toronto area are Pumpkinseed Sunfish, Darter, Dace and Sticklebacks.

With regards to breeding, I have had the most luck with the Darters - Rainbow Darters in particular.

My Darters are housed in a 10 ft. diameter children's wading pool (in the basement) with a water depth of 10 ins. Filtration is accomplished by a submersible water pump pulling the water through a box filter with glass wool or polyester. This also creates a circular current in the pond much to the enjoyment of the Darters.

For spawning, I set up a long tank 6 x 1 x 1 ft. with one end being heavily aerated and the other end relatively calm. The turbulent end has a much greater depth of gravel making the water shallower (4 ins.). This shallow end simulates the natural flowing riffles of a stream which the males would stake out as breeding grounds. The males are introduced one week before the females. I find it takes native fishes longer to adjust to changes and moves than it does for most of our regular aquarium fishes. These males always choose the riffled area to spend most of their time. When females are finally added (six males and 6 females) they mostly stay in the calm end, and all fishes are conditioned on generous amounts of live food (white worms, daphnia and young minnow fry.)

When ready to spawn, the female enters the riffles with her attendant ripe and rival male, and after a period of courtship, wiggles head first into the gravel. The male moves over the female, his caudal region depressed beside hers. They vibrate briefly, the female extrudes a few eggs, (less than 10), the male exudes milt, fertilizing the eggs. The female moves out of the gravel, leaving the eggs buried. The same female may move around in the riffle, repeating the performance a few or several times, before returning to the quiet end. Spawning continues until the total egg complement, up to 800 eggs, is deposited. Ripe eggs average 1.5 - 1.8 mm. in diameter and hatch in 10-12 days at temperatures of 17-18.5 c. The water temperature in the breeding tank had been raised a few degrees during the conditioning period.

Young darters could reach 45 mm. in 5-6 months. The largest Darter I have seen was 65 mm. When the young darters begin to feed, I start with a liquid fry food and then get them going on live newly hatched baby brine shrimp. Some of the young grow at a faster rate

than others and one must be careful that they do not snatch all of the food or that they do not start to feed on their smaller brothers and sisters.

Of course there is not much of a market for Darters as they are so plentiful in the streams, but I'm sure they would be an instant sellout if they were labelled "South American" Rainbow fish.

Aquarists don't realize that the grass is really pretty green in their own back yards too!

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