

The Red-Tailed Goodeid

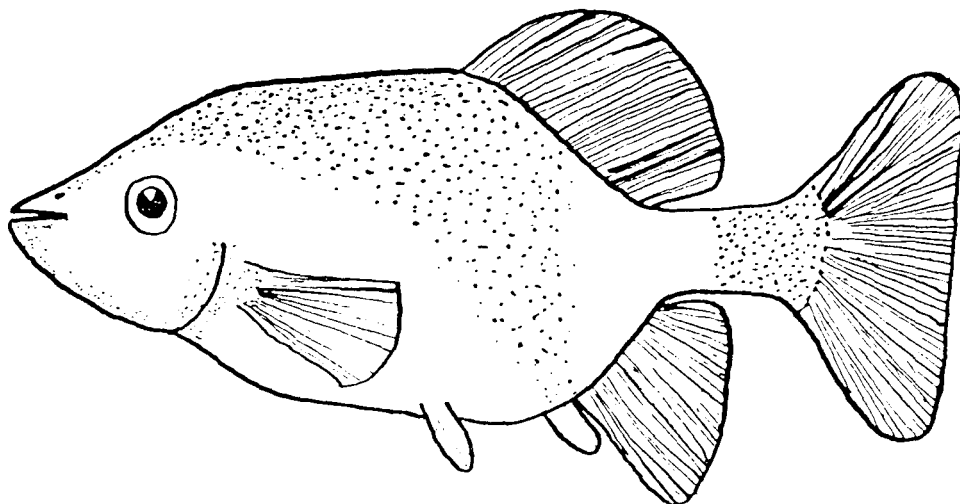
by Ed Parker

On April 7, 1977 I purchased four 3/4 inch red-tailed Goodeids at the Meritorious Spawning Program Auction. At the time, these fry were over thirty days old.

Red-tailed Goodeids (*Xenotoca eiseni*) are live-bearing carp. They are from the plateau and lowland tributaries of the Rio Grande de Santiago and Rio Paunco in Mexico. They are not listed in any aquarium reference book that is available to me, so my own description of the adult fish follows. The fins and over-all appearance are much like a female *Gambusia affinis*, but the body shape is more like that of a wag-tail platy (*Xiphophorus maculatus*). Both sexes are light brown with grey-green scale highlights and with a grey-green lateral line running from the eye to the caudal fin. All fins are virtually transparent. The female (1½ inch TL) has a heavy, fore-shortened body with a rounded belly and a large "gravid" spot. The male (2 inch TL) has a red-colored area just forward of the caudal fin; it is this red area which gives the species its common name. The most distinctive characteristic of this fish, however, is the exceptionally humped back that can be found in most males when they are fully mature.

When I took my fish home I placed them in a two-gallon plastic growing tank with an undergravel filter, and I fed them crumbled dry flake food. When the fish were three months old there was as yet no sexual differentiation. Under the false impression that all four were females, I acquired a fully mature male and put all five fish in a spawning tank in anticipation of future breeding. This tank was clean and well aged, with much algae. It contained an undergravel filter and several weighted nylon "killi" mops to serve as plants. I fed the fish live brine shrimp and dry flake food, and maintained the temperature at 70-72°F., although no heater was used. Except for cleaning and water changes, the tank was left alone until the fish spawned.

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As it turned out, my original four fish were two males and two females. By exposing the barely mature females to the fully mature male, it seems that breeding took place much earlier than it would otherwise. In fact, there were still no indications of distinctive male characteristics in the two young males (beyond the obvious comparison with the two pregnant females) when both females spawned at the age of four and one-half months (one on June 24 and the other on June 26). There were between twenty-five and thirty heavy-bodied fry, each roughly half an inch TL. I fed the fry sieved dry food and left them in the tank with the adult fish with no apparent loss from cannibalism. Now, at five weeks of age, they are approximately 13/16 inch TL.

I have kept ten young and one pair of adults as the nucleus of a ten-gallon colony. The remaining adult female from the original four spawned for the second time on August 10, making a five-week interval between spawnings. Thus, within the next six months I should be able to provide a ready source of red-tailed Goodeids for anyone who wishes to raise them.

The red-tailed Goodeid seems to be a hardy fish (I only lost two fry to natural causes). Its small size, prolific spawning habits, and need for little or no special care make it an easy fish to raise. I have no specific information on the disposition of these fish beyond my own observations, but I keep them in a tank by themselves as I suspect they would not co-exist in a community tank; they seem to have many of the same tendencies as other fin-nippers like the mosquitofish, *Gambusia affinis*. Through careful breeding (as Goodeids must be bred for each spawning), I have hopes that the red-tailed Goodeid will become a more colorful fish, very suitable for the home aquarium.

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(Editor's note: There are only a couple of points that I would like to interject into Ed's article--these will become apparent to Ed as he has a little more time to work with this species. a- the size will increase to 3-3½ inches for the males and almost 4 inches TL for the females. b- these fish (at least the males) will show considerable blue-green on the flanks if they are kept in hard (200 ppm), alkaline (pH 7.4-7.6) water and c- these fish do NOT do well in the normal community tank because they do pick at less aggressive fish but they can get along very well in a Malawi cichlid community. The cichlids only pick at them once--and when the Goodeids pick back the cichlids back down and everyone seems to get along quite well. P.S. - Thanks for sharing your experiences with us, Ed! Now if only a few other members will follow your example. --Alfred D. Castro, Consulting Editor, AMERICAN CURRENTS)