SPAWNING GILA ORCUTTI

by Ella Pittman, Mulino, Oregon

I first encountered the Arroyo Chub (Gila orcutti) in a little creek in the hills north of Los Angeles. It runs from Lake Hughes into Castaic Lake, a large recreational reservoir which drains into the Los Angeles basin. When I first saw these fish, I thought they must be Creek Chubs or Fathead Minnows that, as released bait fish, had become established.

As soon as I had captured some and was able to view them from the side, I knew that they were neither of the fish mentioned. But what were they? After carefully going over the minnows, the Cyprinidae family, in the Eddy book on freshwater fishes, the closest I could come was the Gila genus. All other fish even distantly resembling mine were of Eastern origin and just didn't look quite right. The only hitch was that all the Gilas pictured reached sizes of seven to twelve inches. Mine were young fish, but in three years I have had them, none have exceeded four or maybe four--and-a-half inches.

Some time after getting these fish, I noticed a listing in the AMERICAN CURRENTS Trading Post from a Los Angeles member for Gila orcutti. I looked the species up in the book and found a short reference under "Other varieties from streams in southern California." I reasoned that if they were being offered as aquarium fish, they probably weren't extra large, and the location was right. To confirm my suspicion, I called on NANFA member Don Buth of Los Angeles, an ichthyologist at UCLA. He was very accommodating, going so far as to send me a preserved specimen. That fish was the mirror image of my own. Identification confirmed!

They are very hardy and adaptable. I brought seven or eight of them back with me to Western Oregon. They ranged in size from one inch to a little over two. They survived three or four days in the trailer during the return trip. All that I had available when I arrived home was a two-gallon tank which I set up in my kitchen. I added a little gravel, some hornwort, and an airstone. Within hours, they were ready to eat, and soon came begging for food upon seeing me. They ate frozen brine shrimp, dry fish food, cat food, and bits of greens--in fact, almost anything I threw in to them.

I never noticed them picking on each other. The bigger ones didn't even bother the little ones. As soon as I had my 30-gallon community tank set up in the living room, I put them in with a variety of other fish. They were peaceful, even though they were as big as--or bigger than--most of their tankmates. They are very active fish, cruising the

tank in the manner of danios. About the only minus is that they are not very colorful. They have basically a silvery to colorless body with a dusky to black lateral line. They look much like the Tui Chub (Gila bicolor), but are not as large.

I have had these fish over three years. During this time, their number has slowly diminished. I don't know what caused the deaths. It could have been water conditions or nippy tankmates, or possibly rough action during spawning. I know that they have spawned in the community tank. I am very familiar with spawning actions of minnows, and at one time when I had a Dwarf Gourami pair spawning in the tank, I found a few minnow babies in the bunch of Dwarf Gourami babies.

This spring I was down to three fish. Again, having worked much with minnows, it was easy to see that they were two males and a female. Just out of curiosity, I decided to see if I could spawn them. I set up a ten-gallon tank. I put gravel in one end and creek rocks about 1½" in diameter in the other end, where the light was brightest. Water was fairly hard and pH rather high; this is what my tapwater is like. I put in a big bunch of hornwort and then the three fish. They were fed in the gravel end. After a few days, I thought I could detect some spawning action. I took a turkey-baster and siphoned around the rocks, but I found no eggs. After another few days and more action, I finally pulled out five fairly large ones. They were about the size of the "O" of this type but completely round.

I was a little disappointed in the small number of eggs; much can go wrong during incubation, and a large number improves the odds of getting some good fry. On the second or third day, the eggs began to hatch, and long, very slim fry were visible. They were about ¼" long and threadlike. They skittered about the bottom of the hatching container, and after a day or so began working their way up the sides in the fashion of most minnows. About this time, the parents had resumed spawning. Hoping for more eggs, I got out the baster again. I found three more, one stuck to a small piece of hornwort. Was it possible they were somewhat adhesive and deposited in the greens instead of scattered over the rocks? I took out the hornwort and examined each piece. Sure enough, there were eggs stuck to the greens, and the ones I had found were the few that fallen down. I picked off about 30 eggs and put them in a small hatching tank, about one-gallon size. As with the first eggs, they hatched in a couple days, and fry were free-swimming in a little less than a week. They were so slim that I opted for infusoria as a first food. It took three or four days before they were large enough to begin eating newly hatched brine shrimp.

I now have about 30 young fish about an inch long. I don't know what I am going to do with them yet. I can't release them here, and they get too large to keep them all. I don't know what the normal life span of these fish is. Three or four years is pretty long for many of the small minnows normally kept in aquariums. Maybe I can enjoy mine for some time yet.

One of the challenges of natives is that often very little is available in books or other publications about their habits, especially spawning. Most texts dismiss small species as economically unimportant. Small native fish, therefore, hold many surprises. Some prove very nice aquarium inhabitants. Most can be spawned once one figures out their habits.

###