

The Smallest Fish in North America, *Heterandria formosa*

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by

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If you're looking for a small—make that tiny—challenge, try our dwarf native fish *Heterandria formosa*. Known variously as the least killifish (the preferred common name), dwarf topminnow, midget, mosquito fish, and striped livebearer, you can keep this fish in a two gallon bowl since the males grow to less than an inch and the females slightly more than that. In fact, *H. formosa* is the smallest fish (and vertebrate) native to North America.

I first obtained my *H. formosa* from a pet store in New York City over 45 years ago, although I have added to my stock from time to time as I've run into other people who have had them. Their natural range stretches from Florida to Louisiana.

Their color is a symphony of browns with darker bars and stripes. Their belly is white and there can be a red and/or yellow dot on their dorsal fins. Being a livebearer, it's easy to distinguish between the sexes as the males have a modified anal fin called a gonopodium.

*H. formosa* like quiet tanks at room temperature. I know people who have kept them outside all year in southern California and in un-air-conditioned apartments in Phoenix. Most filters will suck up and kill the babies, and heavy aeration will beat up the adults, so I forego aeration and filtration altogether. Instead, I maintain water quality with weekly 30% water changes. Larger water changes seem to hurt them. Due to their small size (making them a potential meal for everyone), they inhabit heavily vegetated bodies of water in their native biotope.

In captivity they prefer small tanks with good growths of algae and/or plants. Since I always find newborn babies on the bottom, I have small stones in my tanks for them to hide among. They also seem to do better if I do not siphon much of the debris off the bottom.

For feeding, I use baby brine shrimp, either freshly hatched or frozen. I also put earthworms into a blender with a little water and whirl it up into a soup. I then freeze this mixture in ice trays that have tiny cocktail cubes. (Do this when the spouse and kids are not home.) Periodically drop a cube into the tank.

*H. formosa* represent a phenomenon called superfecundation. That is, at any one time there are a number of differently formed (matured) babies within the female. She will give birth to one or two babies per day for a couple of days. A month later she may be able to repeat the process. There has also been evidence that the female nourishes the unborn babies.

Of course, once the babies are born the tables are turned, as females will eat their young.

Give *H. formosa* a try. They are an active fish and not shy if the conditions are right. All you need to enjoy them is a small bowl and small weekly water changes.

Not to mention very good eyesight.

*Illustration of female Heterandria formosa from Jordan and Evermann, The Fishes of North and Middle America (1896-1900).*

