THE BEGINNER'S BUCKET

In Praise of Poeciliids Part I: *Heterandria* and *Gambusia*

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Like those old Warner Brothers cartoons of the 40s and 50s, there's more to poeciliids than most of us remember through the haze of our childhood sensibilities. If you watch a Looney Tunes short as an adult, you'll quickly see that they're filled with subtleties that fly high over the heads of most children.

Similarly, poeciliids—the livebearing guppies, mollies, and swordtails that many of us kept as kids—are definitely worth another look if you haven't kept them since childhood.

Poeciliids are a large and diverse clan, found in North, Central and South America. Since NANFA is concerned with North American species, in this two-part article I'll concentrate on just a few: least killifish, mosquitofish, sailfin mollies, swordtails, and platies.

The Least Killifish is not a Killifish

The tiny least killifish (*Heterandria formosa*) is found in much of the southeast, from southern North Carolina down along the Coastal Plain through to Louisiana. The name is a misnomer; least killies are not killies at all, but actually livebearers. I went into more detail about keeping least killies in a past Beginner's Bucket column, "The Least Amount of Trouble" (*American Currents*, Spring 2003). But since we're talking about appreciating the subtleties of poeciliids, some of the information is worth repeating here.

Least killies are a great aquarium fish because they don't take up much space and are so undemanding. Females will grow to an inch-and-a-half in length, whereas a large male would be lucky to reach half that size. They aren't particularly fussy about water chemistry, and will probably do alright if you keep them in water with some hardness. Since they're found in the southeast, it's probably a good idea not to let their tank temperature drop too far below the low 60s.

The great, underappreciated subtlety about the least killifish is how it gives birth. Unlike mollies, mosquitofish, and swordtails, which give birth periodically in a single large batch, least killies simultaneously incubate several fry at different stages of development. The fry are born one at a time, every few days.

Like other poeciliids, females store sperm and can give birth for months after mating. I once brought a female least killie home from a collecting trip and put her in a 40-gallon backyard tub in the early spring. By summer's end, I brought in at least 50.

Guppies Gone Bad

I have to admit that I haven't kept mosquitofish long enough to appreciate whatever subtleties they may have. But since most beginning native fish keepers are likely to encounter mosquitofish, they're worth talking about here.

These drab little livebearers have been introduced throughout the world because many believe they consume great quantities of mosquito larvae. Others bitterly dispute this view, contending that they not only don't eat that many larvae, but that they prey on the eggs and fry of other species, threatening native fish populatons.

The two most common species of *Gambusia* are the western mosquitofish (*G. affinis*) and the eastern mosquitofish (*G. holbrooki*), which, until fairly recently, had been recognized as a subspecies of *G. affinis*. The western mosquitofish is native to most of the south-central U.S., north to Indiana and Illinois, west to Texas, south to southern México, and

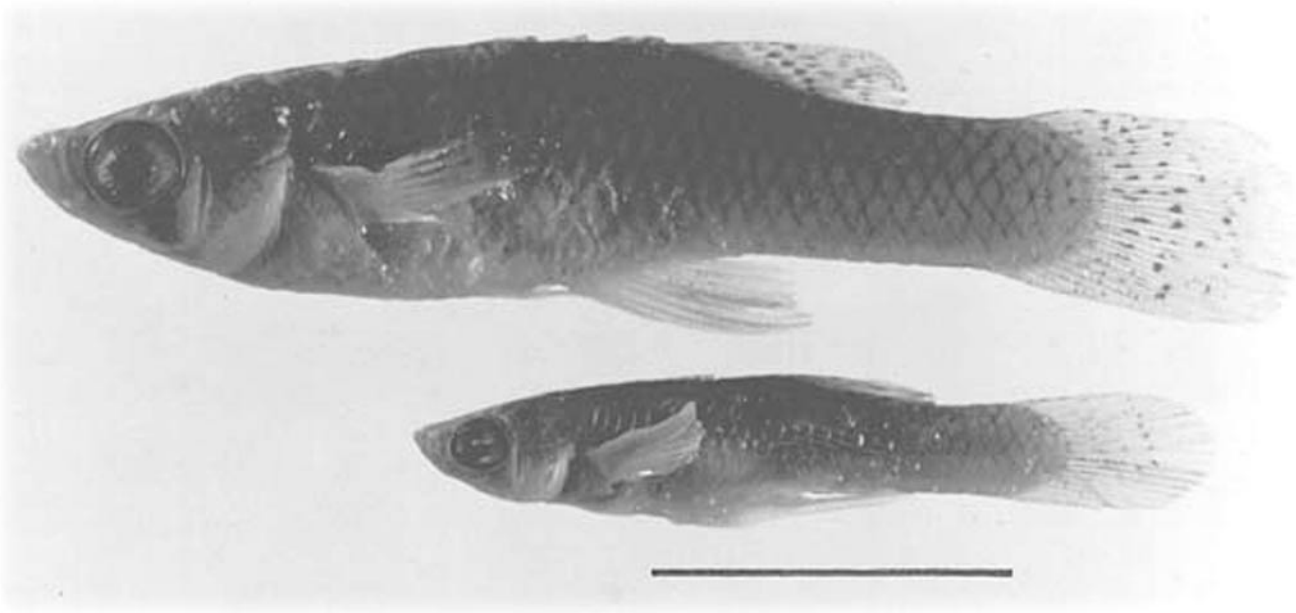

Fig. 1.
Eastern mosquitofish, *Gambusia holbrooki*. The upper fish is the female; note the gonopodium (a modified anal fin) on the male. Scalebar represents 1 cm. Photo courtesy Gambusia Control Homepage (www.gambusia.net).

east to the Mobile River system. The eastern mosquitofish is native to the southeastern U.S., east from the Mobile Bay drainage to Florida, north to southern New Jersey. Both species have been introduced far outside their native ranges.

Gambusia aren't much to look at. The females resemble oversize common guppies, and the males resemble common guppy males without the bright colors. In Florida, mottled males resembling marble mollies frequently occur.

I have to admit, though, that I've never taken the trouble to learn how to tell the two species apart, or to learn to recognize the other *Gambusia* species listed in my Peterson *Field Guide*. Although they may look like common guppies, this appearance is deceptive. I've kept them only briefly, having brought some back from trips to Florida and into the Maryland countryside. Like tiger barbs, they can be nasty little fin nippers. In fact, a few mosquitofish I had kept in a 10-gallon tank chewed the caudal fin off a blacknose dace several times their size.

In fairness to the mosquitofish, however, I have to admit that they didn't work out for me because I didn't give them the proper conditions: a species-only tank where they wouldn't bother tankmates.

But my failure doesn't mean they won't work out for you. If you provide them with a tank to themselves, you may observe subtleties about their behavior I had missed.

No introduction to North American poeciliids would be complete without a description on the two beautiful sailfin mollies found along the southeast Atlantic and Gulf coasts. I'll devote Part II of this column to these species and to the platy and swordtail species found in México.

How to join NANFA's email lists.

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majordomo@nanfa.org

You will be sent a follow-up confirmation email. A digest version, in which a day's postings are combined into one email, is also available. To join, send the phrase "subscribe nanfa-l-digest" to the same address as above.

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