WILD SAILFIN MOLLIES (Poecilia latipinnis), Part II

by Linn Blanchard
Gretna, LA

Jean Lafitte would never recognize Bayou Barataria today. It has been tamed and deepened to carry heavy barge traffic near the Intracoastal Waterway. Consequently the surrounding swamp is slowly but surely drying up. Roads apparently don't seriously interrupt the dynamics of a swamp or marsh area, but deeper channels for barges or oil- and gas-well maintenance drastically alter the environment.

La. Hwy 3134 to Lafitte, LA cuts through a freshwater swamp that is being drained in this manner. Squeezed between encroaching suburbia and the heavy traffic of Bayou Barataria, the native species are increasingly disappearing. Cypress trees are dying, submerged plants are overrun by bog plants, bog plants are replaced by field plants. When dry weather extends into weeks, the aquatic fauna in many locations have no deep swamp to retreat into; the swamp is no longer continuous.

In a typical roadside collecting site observed over a one-year period, the mollies and gambusia have endured while the Golden-ear Killies (Fundulus chrysotus)and Heterandria formosa have greatly diminished. This has coincided with the steady drop in water level and a consequent loss of aquatic plants as well as simple reduction in size of habitat. Past a certain point, the hornwort favored by the Heterandria becomes dehydrated. The Golden-ear possibly doesn't favor the higher temperatures of very shallow water; it is usually in the deeper water of any site where I've collected it.

Mollies are very adaptable. Where there is abundant underwater vegetation (hornwort, foxtail), they can be found in and around it. In areas where emergent vegetation predominates (sagittaria, ludwigia), they graze on the algae attached to stems and roots. Where floating plants provide a maze of roots (water hyacinth, azolla, duckweed), they are at home, nibbling at the roots. In brackish areas where there are few plants in the water, they are satisfied with the various types of algae. Any object remaining in the water long enough to have algae attached attracts the mollies.

Females tend to group together, often with the largest leading their search for food. Males cruise alone in roughly defined territories, occasionally warning off other males. Confrontations are mostly flamboyant displays of finnage and quick nips at the opposing caudal peduncle. One leaves the area, none the worse for battle.

Mollies are surface-dwelling, and swim freely in open areas, but not over great distances. They open their mouths at the surface like goldfish, usually spitting out whatever they take in. I can't explain the purpose of this unless it is in response to the lower levels of oxygen in warm water or the more obvious hope of an unexpected morsel of food. Observations to date indicate that they spend more time doing this in shallower water and in water which is presumably contaminated with waste run-off. They can be seen poking at the mud at the very edge of the water, but don't spend a great deal of time on the deeper bottom as the Sheepshead Minnows (Cyprinodon variegatus) do. Molly fry keep together in loose schools at the edges of the water. They may or may not be hidden by overhanging vegetation. They nibble at algae and anything that looks interesting, including my net. Their chief enemies are water beetles and dragonfly larvae.

Because of their preference for remaining near the surface, mollies are easily netted, as described previously. They are easily transported, since they don't mind warm temperatures and aren't quarrelsome. They adapt quickly to aquariums because they remain in fairly circumscribed areas in the wild. Mollies discover flake food immediately because they constantly test the surface with their mouths open. Household temperatures suit them perfectly, so cool water isn't required; nor is a strong current. All incoming captives are transferred to my five-gallon isolation tank by the slow-drip method. They are dosed with Clout® for five days, on the advice of NANFA member Bill Newell. Then 50% of the water is changed and they are observed an additional two weeks. "Ich" has not been a problem, but white worm-like parasites were observed emerging from the skin before I found out about Clout®.

What must be provided in the aquarium is sea salt and algae (or a vegetable flake food; lettuce won't do). Mollies live in fresh water in the wild, but quickly succumb to fungus infections in a freshwater aquarium. NANFA member Bob Baxter warned me of this, and my experience bears him out. The conclusion I've reached is that it isn't the salt in the sea salt that's required, but the minerals. A particular type of water-hardness must be necessary, and brackish water provides this. My tanks are maintained in a range of S.G. 1.003-1.007. Three walls are allowed to cover with algae. A male and three to five females can live happily in a five-gallon tank if you constantly thin out the fry. I've never observed parents eating their fry--they ignore them. But big fry will pick on little fry.

Each batch of fry stays loosely together and they grow so fast you can tell which group was born which day. A bunch of fontinalis (or similar type of plant) provides a

peaceful refuge for birthing and a source of first food: trapped particles of flake food, minute algae, infusoria. A water temperature above 75° requires good aeration and filtration. Mollies are active, eat algae constantly, and rival goldfish with the amount of waste produced. They respond well to frequent large water changes. In that five-gallon tank, I change two gallons per week; in a ten-gallon tank, 20-25% per week. If a tank becomes crowded with fry before I can get them out, I change water more frequently. No fungus, no shimmy, and endless litters of fry.

Tank-raised mollies do not develop as large a sailfin as do wild ones, and the vivid reds and blues are not present. Sexual development is precocious even in the presence of a large wild male, which I hoped would modify this. (So much for theory.) But these mollies are lovely silver and green/gold, small enough for small tanks, and make good neighbors for Diamond Killies (Adinia xenica). I find them more pleasing than the huge monochrome creations of selective breeding available at the pet store.
