AMERICAN CURRENTS SWAMP KILLIE Leptolucania onmata

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THE SWAMP KILLIE (Leptolucania ommata) 1

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Recently I received three pairs of Swamp Killies from a NANFA member in South Carolina. I've kept the little animals several times over the years. They have been challenging, but gratifying.

Swamp Killies occur mainly in northern and central Florida and coastal Georgia; also in Southern Alabama and Mississippi. The Atlas does not locate them in South Carolina, but there is a likely possibility.

Frey succinctly describes the Swamp Killie's appearance: "Of elongate and slender build, with big, vivacious eyes and small mouth..."

Their most notable physical distinction is their smallness. Good adult size is $1\frac{1}{4}$ "; females are supposed to grow a little larger than males, a tad over $1\frac{1}{2}$ ".

It is easy to tell the sexes apart, at least when the fish are adults. Males have one dark ocellus per side (caudal peduncle); females have two (caudal peduncle, and just above and ahead of the anal fin).

Males have longer unpaired fins. They have faint vertical bars on the rear half of the body, and even fainter vertical bars in the caudal fin. When backlit, they are generally yellowish brown; in incident light, they are often bright yellow of body and fins, accounting for another common name: Lemon Killie. Also in incident light, there may be a blue sheen to the body and a blue lining to the dorsal.

Females are less colorful, but have a more interesting pattern. They look better in black-and-white photos than males. They give the impression of having a broad, dark brown lateral stripe with subtle gold stripes above and below it; and then there are the two very dark spots, which sometimes are swallowed up by the dark band. The belly is white.

Swamp Killies are not the easiest fish to carry or keep. I've lost a number in transit. Then, once the fish are safely entanked, feeding becomes a problem.

That small mouth is the reason. The fish often cannot swallow standard-size tubifex worms. Big daphniae also exceed their limited capacity. Small daphniae, small tubifex, cyclops, baby mosquito larvae, and live baby brine shrimp are the most practical foods. I periodically introduce a clump of Dichelyma moss, unwashed, from a nearby fishless pond, hoping the fish will dig out the moving morsels--and not be attacked by them.

The other half of the feeding problem, beside the need for small food, is the need for live food. The books say that's all they should be fed. Perhaps they could be converted to fresh-frozen baby brine shrimp, but introductions would have to be sparing to avoid fouling the tank. Snails and perhaps a small catfish would be a necessity. In summary, feeding non-live food would seem to be as much difficulty as feeding live food is.

What about water? Since I regard the fish as delicate, from my own experience, I keep them in mainly soft, acid water; that's the type of water in which I've always found them. I also add hard, alkaline tapwater every so often as a matter of convenience, but the pH and DH in the tank stay low. Because of the Swamp Killies fairly broad range, and the species' access to brackish water, it is possible--probably--that these little fish are tougher and more flexible than I give them credit for. Neither Frey nor Sterba have anything to say about pH or DH. Frey says only that the water should be clear, and Sterba emphasizes only the need for frequent water changes. 4

Frey's discussion is surprising in one regard: he says that the fish is "a little in need of warmth," and recommends 75° and up. Surely fish in little ponds in the sun have to endure heat at times; yet the water in the Southeast can become quite cold. In the unusually cold Florida winter of 1978--coming back from a NANFA meeting, in fact--I watched some of the little fish flit around like dace in swollen, flowing stream water in Northwest Florida. The kidney-wringing water was frozen in stiller parts.

That is not to say that the fish <u>like</u> temperatures in that range, but they can survive. I cannot imagine ever heating their tank above room temperature, unless to prolong spawning or to induce it in winter.

Despite the wintry fastwater sighting, Swamp Killies most often occur in quiet water--ponds, swamps, and roadside ditches. A lot of the time, they are still--particularly when there are somewhat intimidating tankmates of other species. They have a distinctive swimming rhythm--moving for a couple of inches, then pausing a moment, then darting another couple inches. In a small photo tank, they are restless and move jerkily; they're a bit frustrating to work with.

Swamp Killies indicate fairly clearly when they are in spawning condition. Females become fuller in the belly. Males quiver in front of females to entice them into the weeds, or swim closely alongside. Then they go to the weeds together. Spawning is said to be most likely in plants toward the bottom, but they are capable of spawning at any depth, especially in bushy floating plants.

Babies can survive in well-planted parental tanks. I have never set about consciously to breed Swamp Killies;

some babies just survived. They must have had a hard time finding food at first, and many probably starved or were eaten. My current half dozen have never produced any babies, probably because they can patrol every square inch of their $5\frac{1}{2}$ -gallon tank; snails and stray cyclops probably don't help much either. The adults are always engaging in spawning activity, however.

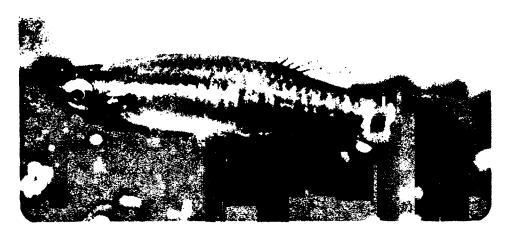
Swamp Killies are harmless and unaggressive. Their greatest aquarium virtue, though, is their smallness. Miniaturization in aquaria permits more fish in less space. The ideal Southeastern miniature tank would contain several pairs of Swamp Killies; Everglades or Okefenokee Sunfish (Elassoma evergladei and E. okefenokee); and Dwarf Mosquitofish (Heterandria formosa). This would form a perfect, perfectly natural community.

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NOTES

- 1. The species name has been spelled "omata" but two m's are probably correct. That's the overwhelming choice.
- 2. David S. Lee et al., Atlas of North American Freshwater Fishes, North Carolina Museum of Natural History, 1980.
- 3. Hans Frey, The <u>Illustrated</u> <u>Dictionary of Tropical Fishes</u>, TFH Publications, Jersey City, 1961.
- 4. Gunther Sterba, Freshwater Fishes of the World, The Pet Library, New York, 1966.

Also, Charles M. Breder, Jr. and Donn Eric Rosen, Modes of Reproduction in Fishes, TFH Publications, Jersey City, 1966.



A male Swamp Killie. The cover photo is a female of this species.