FIELD NOTES ON THE SHEEPSHEAD MINNOW (Cyprinodon variegatus)

by Linn Blanchard
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2 May '82-- drainage ditch southwest of Bayou Bienvenu

large groups of female Sailfin Mollies (Poecilia latipinna), occasional male with blue tail; Sheepshead Minnows (C. variegatus); Diamond Killies (A. xenica) with a reddish tint, in groups of 3-8, mostly male; several larger unknowns which poke in the mud, have a red chest, black-bordered caudal fin - can't catch one.

Water sample: pH=9+ DH=30+ S.G.=1.002

20 June '82-- Chalmette State Park, bayou bordering picnic area

enormous catfish; crabs scurrying along the edges of the muddy bottom; occasional mollies and gambusia; a fish similar to the unknown near Bayou Bienvenu, but the chest isn't red: he has a black-edged caudal fin, an irridescent blue inverted "V" from eyes to first dorsal ray, closely guards a 20-inch patch of mud, runs only from the crabs, too smart to be netted.

Water sample: pH=8 DH=14 S.G.=1.000

25 July '82-- shell road west of LA 23, south of Belle Chasse

mollies; gambusia; catfish; Sheepshead Minnows; the unknown fish again, only smaller, with the inverted blue "V" on the head, red lower jaw, black-edged caudal fin, protecting a patch of mud from all comers; still too hard to catch.

Water sample: spilled in the car, but there were lots of tadpoles-- ? freshwater

21-22 August '82-- Bayou Segnette at Lapalco Bridge

"that" fish is here too, in abundance; after two days' stalking am ready to scream.

Water sample: pH=9 DH=13 S.G. 1.000

29 August '82--southwest of Bayou Bienvenu

long, hot summer, the water's low; the culvert broke and the ditch is isolated now and drying up; two large

crabs are enjoying easy pickings as hundreds of fish are forced into shallow pools: mollies, gambusia, and oh-my-gosh-I-don't-believe-it--THE FISH! scooped up 21 at one pass; blue inverted "V", orange bellies, black-edged caudal...and vertical black barring! Sheepshead Minnows!

Water sample: pH=9+ DH=30+ S.G.=1.004

Such are the joys of discovery for an amateur. C. variegatus has a varied appearance. The only ones I recognized on sight were the females netted along with mollies or Diamond Killies by accident and observed from the side; the barred flanks are unmistakeable. Males are solitary, hug the bottom, and are very intelligent. All those hours of forced observation were instructive, however. The most reliable field mark is the black-edged caudal fin, because the blue isn't always visible if the light isn't right. The red jaw or orange belly is also variable with location, light, and water color. When frightened, all bright color fades and the distinctive vertical barring on the flanks is not visible from above.

All the listed sites provided a mud/sand substrate, no submerged vegetation, unobstructed sunlight, water depth to thirty inches. Water flow was sluggish to non-existent, and at least one locale was contaminated with highway run-off. Most sites had an adequate to abundant growth of algae.

At home in a brackish (S.G.=1.005) tank, several other observations have been made. Twenty-one fish were reduced to 19 almost immediately because two were disproportionately large and terrorizing all the others. Those nineteen squabbled incessantly but produced no fin damage nor did any go hungry. Introduced to cichlid pellets on the bottom, they ate within 24 hours and have never stopped: whatever hits the water disappears and they eat a large variety of flake and freeze-dried food.

Four males were removed and given to Bob Syracuse (NANFA Treasurer) who has successfully adapted them to a marine tank. The remaining fifteen were again culled after one month in the tank. All had a dark spot at the base of the dorsal fin, and their heads had the characteristic blue inverted "V". Three had become larger than the rest, but have never exhibited a black margin on the caudal fin. They are as darkly barred on the flanks as the known males, but are presumed to be females. Ten had the black-edged caudal, but one has always had the darkest edge, retained the orange cast to the belly, and assumes residence in the center of the tank. He is presumed to be the dominant male. At

present, there are three females, three males, and two I'm not sure about. These eight still squabble, but don't pair off or single out one or two to intimidate.

After eating everything in sight at the surface, they proceed to pick the gravel until the next meal. Algae doesn't stand a chance, so vegetable flakes are fed several times a week. When frightened, all color fades except the caudal edge of the dominant male. They huddle on the bottom in a tight group. When they see food coming, they churn the water at the surface as they squirm like a group of puppies, tails wagging, pushing each other out of the way.

This many Sheepshead Minnows in a tank is probably not a representative situation. They were immature when caught in a severely constricted habitat. Probably by late winter, other arrangements will have to be made to placate the dominant male. Females seem to tolerate neighbors more readily, but prefer a respectful distance among themselves. None of the nettings under normal circumstances produced more than one Sheepshead at a time. Juveniles probably school to some extent, but adults are lone wolves.
