## THE SAILFIN MINNOW, NOTROPIS HYPSELOPTERUS

by Dick Stober

Notropis hypselopterus are known to inhabit small streams along the Gulf and Atlantic Coastal Plains of the southeastern portion of the United States from Mississippi eastward across the southern part of Georgia, the northern part of Florida and on up into southern South Carolina.

It was one of those typical bright fall days and we were returning home from a week-end trip to Silver Springs, Florida. We stopped at a spring fed creek in Wakulla Springs and explored the area beside the road. My attention quickly focused on a wavy field of Giant Sagittaria on the bottom in about three feet of water. We brought home enough Sag for all of our friends without even making a dent in the patch. There was a luxuriant growth of a form of willow moss, Leptodictyum riparium, on the piers of the bridge. Also picked up some Riccia which could be found tangled amongst the vegetation in the shallow areas. Our two little girls played in the crystal clear water while my wife and I gathered aquatic plants and netted some of the fish we saw swimming in the current.

Upon returning home we surveyed our week-end catch of; bluefin, flier, F. chrysotus, F. cingulatus, E. okefenokee and N. hypselopterus. On most collecting trips in this area there is usually a bonus in the form of plants which this time was exceptionally good and included some beautiful radican swords as well as the plants mentioned earlier. The fish caught at Wakulla Springs as well as the rest were placed in quarantine and kept under close observation. In time I decided to turn the small shiners from Wakulla loose in a well planted 29 gal aquarium where their only tankmates were a dozen albino corydoras which I had been grooming for breeding stock. After careful study it became obvious that three of the shiners were N. hypselopterus and the others were a rather drab version of N. baylei which eventually became a meal for some large Longear sunfish. Texts for identification were; "Freshwater Fishes of Alabama" by William F. Smith-Vaniz and "Freshwater Fishes in Mississippi" by Fannye A. Cook.

The inch long trio of N. hypselopterus consisted of one male and two females and were obviously quite young. At first glance this species appeared very similar to the N. euryzonus which I had been observing, but after several months the finnage of the male was starting to develop into something spectacular. After observation for several months more it was noted that at least in this case that full grown males are considerably greater in size than full grown females with noticeably larger, more colorful fins. The males are distinctly different in shape and coloration which makes sex differentiation a bit more easy than for its' close cousins N. signipinnis and N. euryzonus where the sex characteristics are rather subtle.

(3)

The Sailfin has the typical broad lateral black stripe which starts at the lower lip, breaks for the eye, and extends to the base of the caudal where it is straddled by two spots of increased color intensity. The lateral stripe is not a parallelogram, the top deliniation is fairly straight following the lateral line and the bottom following the bottom contour of the fish body. Directly above the stripe is a rather thin rainbow like band with colors ranging from ice-blue irredescence to an orange. This band appears to change color under different lighting conditions, especially brilliant is the area following the dorsal and extending to the base of the caudal. The underside of N. hypselopterus is white. The male pelvics are noticeably large with the leading edge showing a trace of black over a yellow band. The color of the pelvics is a blending of orange hues. The pectorals are the same, however with diminished brilliance. The ventral fin has basically the same pattern also with the exception that approximately the first eight ray lines are traced in black. The caudal is strong and relatively large again with the same color scheme. The dorsal is sail like, hence the name Sailfin shiner. This fin appears to be slightly undercut and during courting it appears to jibe. The tip of the dorsal is black with another concentration of black close to the body in the forward area of the dorsal. Rays are traced in black which makes ray counting a rather simple matter.

N. hypselopterus swim midwater, run in schools, are very active, spawn readily in captivity and adapt easily to dry food. The trio was moved to a 20 L aquarium with a scattering of hornwort floating on the top. The set-up included an outside power filter, incandescent lighting, creekbed gravel and some driftwood. The water was quite soft, only 25ppm of dissolved minerals and quite alkaline with a Ph of 8.2. Temperature was maintained constant at 76 degrees F. No special conditioning diet was used, however; the females soon became full of spawn. It was pure pleasure watching the male frequently and unabashed performing his courting dance. Several weeks after introducing the trio to this new tank I noticed a school of slivers swimming in an eddy of the output of the power filter. Upon closer investigation many eggs were noticed scattered at random. The eggs appeared to be semi-adhesive and some were seen sticking to the plants including the floating ones. As close as I could figure the hatching period was approximately 72 hours. The greater portion of the eggs could be seen scattered all over the gravel. The parents did not make a concerted effort to seek out the fry, however they kept the number thinned down. A dozen have made it to maturity and are a beautiful sight there in the same aquarium.

(4)