

DISTRIBUTION AND HABITAT.—*N. atrapiculus* is found along the eastern Gulf slope in the Escambia, Yellow, Choctawhatchee, and Apalachicola drainages of Alabama, Florida, and Georgia (Fig. 7). Within the Apalachicola drainage the species is widespread in the Chattahoochee system, but it is known from only a few geographically restricted localities in the upper Flint system. There are no records from the Chipola River system. Smith-Vaniz (1968:131) included *N. atrapiculus* (his *N. roseipinnis*, in part) in the fauna of the Blackwater River drainage. I have examined no specimens from that drainage, and a recent survey, now totaling more than 50 collections, has failed to disclose its presence there (J. D. Williams, pers. comm.). The two juveniles from the Perdido River system, reported as *N. bellus* by Howell (1957), probably were this species or *N. roseipinnis*. The specimens apparently are lost, and reasonable collecting effort in the Perdido has not otherwise yielded a species of *Lythrurus*.

The spurious Conecuh-Tallapoosa connection originated through the diversion of the upper Conecuh River, originally of the Escambia drainage, into the Tallapoosa River system of the Alabama drainage. The man-made diversion canal at the eastern edge of Union Springs (Bullock Co., Ala.) shunts water from the Conecuh River across a 35 ft. high waterfall (locally known as Conecuh Falls) into Old Town Creek of the Tallapoosa system (Monroe, 1941; Williams, 1965). The falls have been an effective barrier to upstream dispersal; but *N. atrapiculus*, native to the upper Conecuh River, has descended the falls and established a population in the plunge pool at its base (Williams, 1965; Smith-Vaniz, 1968: 125). Downstream movement beyond this point is blocked by severe pollution. Fishes reappear in Old Town Creek approximately 9 stream miles below the plunge pool. From this point downstream the creek is inhabited by *N. b. bellus*, which is native to the Tallapoosa system (Williams, 1965, and pers. comm.).

N. atrapiculus is obligatorily limited to the Coastal Plain province in the Escambia, Yellow, and Choctawhatchee drainages, but it exists both above and below the Fall Line in the Apalachicola drainage. It normally is found in small (5 ft. wide) to moderate-sized (35 ft. wide) streams usually composed of pools alternating with shorter stretches of riffles or runs. Stream gradients are moderate. Bottom materials are principally sand, occasionally with some silt, clay, or gravel also present. Water ranges from colorless to brown stained. The species probably is not tolerant of continuous turbidity, but it is often collected in streams temporarily roiled by recent rains. Vegetation may be present or absent.

N. atrapiculus, like its close relatives, is primarily an inhabitant of