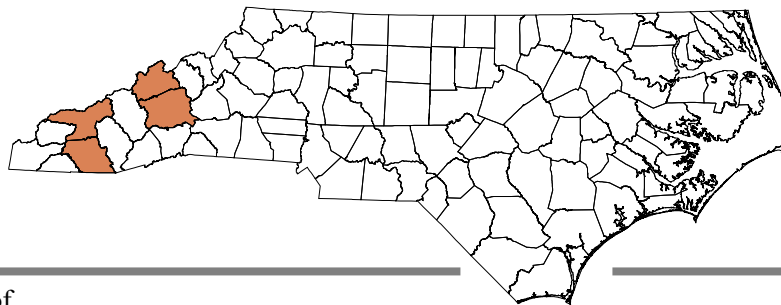


Spotfin chub

Cyprinella monacha

Threatened (September 9, 1977)



Description: This small fish grows to a maximum size of about 3.7 inches (9.2 cm) standard length. The body is elongate; the mouth inferior; usually there is one pair of minute, terminal labial barbels (like a short droopy whisker); the scales are moderate to somewhat small in size; a distinctive large black spot is present in the caudal region. Juveniles and adult females are olive above with the sides largely silvery and the lower parts white. Large nuptial males have brilliant turquoise-royal blue coloring on the back, side of the head, and along the mid-lateral part of the body; lesser blue is found in at least some fins; all fins are tipped with satiny white during peak development of color.

Life History: Based on observations and morphological comparisons, it appears that the spotfin chub is a sight feeder, selecting minute insect larvae from clean substrates. An examination of nine specimens revealed that diptera were the dominant food items, with the remaining food items consisting of immature mayflies, stoneflies, and caddisflies. Its maximum life span is suspected to be less than 4 years. Spawning begins in May and extends into mid-August. They lay their eggs in boulder crevices (where they are highly vulnerable to the effects of siltation, as well as other pollutants).

Habitat: The spotfin chub inhabits moderate to large streams 50-230 feet (15-70 meters) wide with a good current, clear water, and cool to warm temperatures. These streams have pools frequently alternating with riffles. The fish generally occupies areas with moderate to swift current with a wide variety of substrates, although rarely, over sand or silt substrates.

Distribution: This once widespread species was historically known from 24 streams in the upper and middle Tennessee River system. It is now extant in only four rivers/river systems: the Buffalo River system in central Tennessee, the Emory River system in eastern Tennessee, the Holston River and its tributary, the North Fork Holston River, in northeastern Tennessee, and the Little Tennessee River in Swain and Macon counties in North Carolina. Formerly found in the French Broad River system in North Carolina. Found in Buncombe*, Macon, Madison*, and Swain counties.

Threats: The reasons for the decline in some populations are uncertain. However, most populations have been impacted by a number of factors (e.g., dams, runoff from coal mining operations and poor land use practices, municipal and industrial wastes).

Management Recommendations: Protect extant populations by enforcing existing natural resource protection laws and regulations. Improve habitat of extant populations and restore habitat of historical populations. Gain a better understanding of the species life history and habitat needs. Reintroduce populations into restored historical habitats.

* No record has been reported in this county in the past 20 years.

Sources: Biggins and Fridell pers. com., Cooper et al. 1977, Jenkins, et al. 1984, USFWS 1983, USFWS 1992a.

