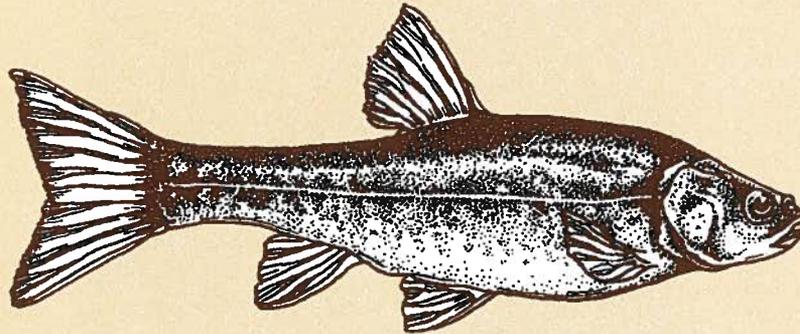


## NONGAME FIELD NOTES

# Gila Chub

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**SCIENTIFIC NAME:** *Gila intermedia*. *Gila* refers to the river basin from which this fish was first described. The specific epithet is from the Latin roots *inter* and *medi*, which mean middle or between.

**DESCRIPTION:** Body chunky. Scales large and thick. Coloration dark overall, sometimes lighter underneath. Adult females larger than males; the former reach lengths of 10 inches, the latter are rarely longer than 6 inches. Males in breeding color are orange-red on the belly and sides, with yellow on the cheeks, lips, and paired fins of larger fish.

**HABITAT:** Adults often associated with cienegas and deep pools in smaller headwater streams where cover is abundant. Juveniles occur among plants and debris in shallows and currents, becoming more restricted to pools as they reach maturity.

**DISTRIBUTION:** Historically, the Gila chub was found in most headwater streams of the Gila River drainage in Arizona and New Mexico, and within the Santa Cruz and San Pedro river systems of Arizona and Sonora, Mexico. Currently, it is thought to be extirpated from New Mexico. In Sonora, it was recently found in two cienegas near the headwaters of the San Pedro River. In Arizona, populations have been extirpated from Monkey Spring; Arnette, Cave, Fish, and Queen creeks; San Simon, San Pedro, and Santa Cruz rivers; and Post Canyon. The largest remaining U.S. populations are in southeastern Arizona.

**BIOLOGY:** A secretive fish, the Gila chub spends most daylight hours under cover such as undercut banks and thick, overhanging or aquatic vegetation. Gila chubs reach sexual maturity anywhere from the end of their first year through their third. Most populations breed primarily from late spring to summer, depending on conditions, although this species

has been known to breed from late winter through autumn. During breeding, larger females can be seen cruising over beds of aquatic plants in deep pools, followed by several smaller males.

Gila chubs are opportunistic omnivores, consuming aquatic and terrestrial insects, as well as smaller fish and filamentous algae. Although some studies indicate these fish are crepuscular (active mainly in twilight hours), others suggest most foraging occurs at night.

**STATUS:** The Department included the Gila chub on its list of Threatened Native Wildlife in Arizona (1988), as a threatened species. It is not listed by the U.S. Fish and Wildlife Service as endangered or threatened, however, nor has it been proposed for such listing. The most prominent threats are degradation of watersheds and aquatic habitats, continued development of water resources, and (in some waters) predatory and competitive non-native fishes. Extirpation of the population at Monkey Spring was attributed to predation by largemouth bass. Nevertheless, Gila chub populations are in better condition than many other native fishes. With adequate habitat protection and reintroductions into key, historically occupied streams, there is a good chance that this species will never require federal listing.

**MANAGEMENT NEEDS:** Further study of Gila chub life history is needed, as is a plan to prevent further loss of habitat, re-establish populations in their former range, and provide for managing this species along with sportfish (most of which occupy different habitats). Of prime importance is preservation of the few remaining streams containing Gila chubs. In areas that have been modified, steps should be taken to restore aquatic habitat. To reduce impacts from non-native fish, barriers might be built or enhanced to prevent invasions from downstream. ♣