



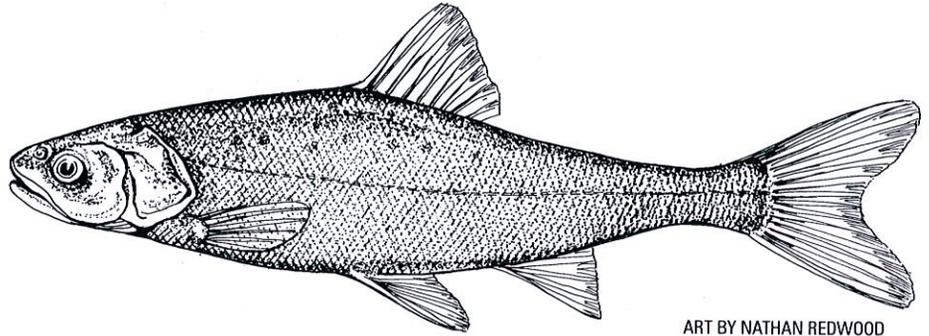
ROUNDTAIL CHUB

SCIENTIFIC NAME: *Gila robusta*. The genus *Gila* refers to the Gila Indians and to the central Arizona river from which the genus was first described. The Latin *robusta* means robust, referring to the thick, robust body.

DESCRIPTION: Thick bodied and moderately streamlined. Adult lengths range from 6 to 26 inches; weights can exceed 3 pounds. Sometimes mottled or blotched with olive-gray above, white or silver below. Scales small, thin, and sometimes locally absent. Both males and females develop red-orange coloration on the stomach and paired fins during breeding season, although this is most pronounced in males.

DISTRIBUTION: Tributaries and portions of main-stem rivers of the Colorado River Basin from Wyoming south through Colorado, Utah, Nevada, New Mexico, and Arizona, continuing into the Rio Yaqui Basin south to Rio Piaxtal, Sinaloa, northwest Mexico. In Arizona, known from the Colorado River Basin, including the Bill Williams, Verde, Gila, Little Colorado, and Salt river drainages.

HABITAT: Roundtail chubs typically inhabit cool to warmwater, moderate-sized streams and a variety of habitats. In Arizona, they occur at elevations ranging from 1,500 to more than 6,000 feet. Adults are often found in deep, near-shore pools adjacent to swift riffles and runs, usually near cover. Young chubs generally occupy shallower slow water, near overhead bank cover. However, both adults and juveniles are often captured in eddy pools, riffles, and shoreline runs.



ART BY NATHAN REDWOOD

BIOLOGY: As opportunistic feeders, roundtails eat diverse foods, primarily insects, fish, and plant material. Breeding occurs during the spring and early summer, typically in pool-riffle habitats. Females become reproductive at 2 or 3 years of age and 6 to 7 inches in length. Several males escort a single female in spawning formation, which culminates in the release of eggs and milt over sand or gravel substrate.

STATUS: The roundtail chub is included on the Department's draft list of *Wildlife of Special Concern in Arizona* (AGFD in prep.). The Department designated the roundtail chub a sport fish in 1995, limiting legal take to one fish daily statewide, with a minimum size of 13 inches. The state hook-and-line record is an 18.5-inch fish that weighed just under 4 pounds. It was taken from the lower Salt River in 1984.

In Arizona, roundtail chubs are now rare to uncommon in the Little Colorado River Basin, and in the Gila, San Francisco, upper Salt, and lower Verde rivers. During Department lake renovation efforts at Lyman Reservoir in 1951, roundtail chubs were the second most common fish species removed (several tons). Today, roundtails occur in only a handful of locations within the entire Little Colorado River Basin. Their disappearance from the upper Salt River (above Roosevelt Lake) is due to

predation by the nonnative flathead catfish, introduced there in 1975. Overall, reasons for population declines include habitat alteration such as impoundment, diversion, groundwater pumping, and channelization; predation and/or competition from nonnative fishes; and possibly nonnative fish parasites.

MANAGEMENT NEEDS: Roundtail chub management needs are the same as those recommended for most native aquatic species, including native fishes, amphibians, and invertebrates: a comprehensive and systematic approach to management: 1) determine status of populations rangewide, and identify causes of population declines; 2) identify key watershed management units for "native aquatic species" conservation; and 3) formulate and implement necessary management activities within each watershed unit. Management actions will depend on specific issues but will probably include activities such as removal or suppression of problem nonnative species, stream habitat restoration, stocking of desired species, and monitoring. The current trend seems clear: Without attention, roundtail chubs appear headed toward Federal listing under the Endangered Species Act. With considerable proactive effort, it may be possible to reverse the trend and alleviate the need for Federal listing of this species. 🦋