

Little Colorado Spinedace

DESCRIPTION: Native to Arizona, this silvery minnow grows up to 4 or 5 inches in size. It has darker coloration on top with a light-colored belly, and typically has a dark spot at the base of its tail fin.

DISTRIBUTION: Little Colorado spinedace are found in northern Arizona, in the Little Colorado River and its north-flowing drainages along the Mogollon Rim and in the White Mountains. Between 1939 and 1960, many of the historic spinedace populations were lost. Currently, spinedace are found in the East Clear Creek watershed, Chevelon Creek, the upper Little Colorado River and (up until 1997) in Silver Creek.

HABITAT: Mountain streams that have moderate depths, gravel substrates, and clear, flowing pools with slow to moderate currents are preferred habitat for Little Colorado spinedace. Spinedace seek cover provided by undercut banks or large rocks, which helps them avoid predation from other fish. During low flows and drought conditions, these fish survive in isolated pools and spring-fed refuges.

BIOLOGY: Little Colorado spinedace are omnivorous and feed on midge larvae, small flies, filamentous green algae and small crustaceans (amphipods). Spinedace typically spawn between late spring and early summer, but may continue through early autumn.

STATUS: In 1987, Little Colorado spinedace were listed as threatened and critical habitat was designated under the federal Endangered Species Act. The species also is identified as a “species of greatest conservation need” in Arizona’s State Wildlife Action Plan.

Thanks to the Heritage Fund ... an existing pond at the wildlife area is being renovated and lined to help establish a new home for this rare fish.

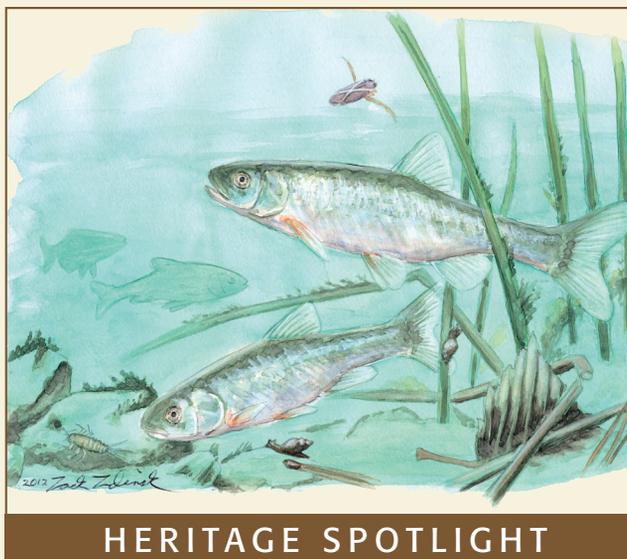


ILLUSTRATION BY ZACKERY ZDINAK

HERITAGE FUNDING SPOTLIGHT: In autumn 2011, the Arizona Game and Fish Department used Heritage Fund dollars as a match for a Desert Fish Habitat Partnership grant and other federal funds to help improve habitat for Little Colorado spinedace at the Raymond Wildlife Area, east of Flagstaff. Thanks to the Heritage Fund and the awarded grant monies, an existing pond at the wildlife area is being renovated and lined to help establish a new home for this rare fish.

MANAGEMENT NEEDS: Spinedace populations face a number of threats that put them at risk. Groundwater pumping, surface water diversions, dams and continued drought have resulted in a loss of permanent water habitats. The illegal stocking and presence of nonnative fish and crayfish also have impacted spine-

dace populations by increasing predation and competition for food and shelter.

Recovery efforts include the establishment of refuge populations that are secure from threats. Spinedace populations are being established at the Grasslands Wildlife Area, Winslow High School Pond and Raymond Wildlife Area.

Land and water rights have been secured at several wildlife areas owned by the Arizona Game and Fish Commission (Becker, Chevelon, White Mountain Grasslands, Sipe White Mountain and Wenima), providing stream flows and refuge areas for the fish.

Conservation partners are working on riparian restoration efforts along a portion of Nutrioso Creek, where a recent safe harbor agreement with the EC Bar Ranch will provide stewardship protection and management of spinedace-occupied habitat. Fuels reduction projects in East Clear Creek will assist in watershed rehabilitation and reduction of wildland fire risk to spinedace habitat. The Fish and Wildlife Service and Game and Fish Department are working with the Apache-Sitgreaves National Forest to determine what long-term watershed restoration actions to take to improve habitat impacted by the Wallow Fire in Nutrioso and Rudd creeks. Supplemental stocking of spinedace into Bear, Dane and Yeager canyons in the East Clear Creek drainage was completed in recent years, and a new population was created in West Chevelon Creek through translocation in 2007. 🦈

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