

Adapted from the USFWS Division of Fisheries

Gila Topminnow, *Poeciliopsis occidentalis occidentalis*



The **Gila topminnow** is a small, live-bearing fish with a short snout that lacks dark spots on its fins. Breeding males are jet black and about half the size of females. It was listed as endangered by the U.S. Fish and Wildlife Service on March 11, 1967 (32 FR 4001). It is listed as threatened by the State of Arizona.

The Gila topminnow is found in small streams, springs, and cienegas below 4,500 feet in elevation, primarily in shallow areas with aquatic vegetation or debris.

It historically occurred throughout the Gila River system in southern Arizona and at the Frisco Hot Springs on the San Francisco River in New Mexico. It also occurred in most river systems through the State of Sonora, Mexico as far south as the Rio Mayo. Natural populations persist in the United States in Arizona in Redrock Canyon, Sharp, Monkey, Cottonwood Springs, Sonoita Creek, and the Santa Cruz River in Santa Cruz County; in Ash Creek and two springs near Bylas, Graham County; and in Cienega Creek, Pima County. Introduced populations exist in small streams and ponds in Santa Cruz, Graham, Gila, Pinal, Pima, Maricopa, Yavapai, and La Paz Counties, Arizona. Natural populations persist in several Sonoran watersheds.

Gila topminnow prefer shallow, warm, quiet waters associated with spring pools and runs. They can live in a wide variety of water types including springs, cienegas, marshes, permanent and intermittent streams, and along the edges of large rivers. They feed primarily on insect larvae, including mosquito larvae, but also on other small aquatic and terrestrial invertebrates. Topminnows live approximately 2 years.

The species is declining due to the introduction and spread of exotic predatory and competitive fishes, water impoundment and diversion, water pollution, groundwater pumping, stream channelization, and habitat modification. The topminnow has been declining since the late 1800s. The loss of aquatic habitats in the southwest due to man's activities have been well documented. The Gila River system contains only a small fraction of its pre-1860 aquatic habitat. Major rivers were essentially perennial streams with stable channels and expensive lagoons, marshes, and backwaters. The many springs,

marshes, cienegas, and backwaters formed the primary habitat for the topminnow. Channel downcutting, damming, and other manmade changes have lowered water tables changing the habitat structure of rivers and streams.

In the late 1800s, exotic fish species were introduced. Most preferred the swift, deeper mainstream waters and did not compete with the topminnow. However, in 1926, the mosquitofish, Gambusia affinis, was introduced. It utilized the same habitat as the topminnow and is aggressive and predatory, preying on young topminnows. they also harass the adults, damaging their fins, which in turn leads to stress, bacterial infection and eventually death.

Gila topminnow are currently being maintained at Dexter National Fish Hatchery and Technology Center, Dexter, New Mexico, as a refugia population and for repatriation efforts within its historic range.

The Proposed Action

The U.S. Fish and Wildlife agency is proposing to reintroduce the Gila Topminnow, an endangered native fish, to Sabino Canyon in conjunction with restoration efforts following this summer's wildfires. Because the fish is listed as endangered, management of Sabino Canyon's water resources will have to be altered. In addition to limiting future development around the mouth of Sabino Creek, recreation within the creek itself will be limited to below Sabino Dam. The Fish and Wildlife Service has called a public meeting to hear comments for revisions of the plan.

(Below is information about your character's role in the debate. This information should direct what your character says, how your character reacts and the way other groups perceive your character during the debate. Imagine yourself this person and what this person believes in. Please embellish these characters in a way consistent with the characters' core values—it will make the debate much more interesting.)

Mt. Lemmon Merchant's Association

Your group is opposed to the reintroduction of Gila Topminnow in Sabino Creek for two reasons. You believe that introducing another endangered species in the watershed will complicate and possibly limit rebuilding in Summerhaven