

# Colorado Squawfish

(*Ptychocheilus lucius*)—Endangered

## Description

Adult Colorado squawfish may reach lengths of 5 feet and weigh more than 80 pounds. This fish has a compressed body, and its head constitutes nearly one fourth of its entire length. The dorsal (top) and ventral (bottom) fins are set well back. The caudal (tail) fin is strong, and deeply forked. Squawfish range in color from bluish-gray coloring above to silvery gold below, and the young have a black spot in the middle of the caudal base. It has two weak lateral zones, an upper, dark one and a lower, pale line.

The young feed on aquatic insect larvae and crustaceans, turning to fish as they grow larger. Large adults feed primarily on fish but are opportunistic and have been known to take carcasses of small animals and birds.

## Distribution and Habitat

Colorado squawfish was originally found in the Colorado River basin from Wyoming to Mexico. Its current range is restricted to the

upper Colorado River drainage. Populations can now be found in the portions of the Green River, Gunnison, White, and San Juan Rivers. Squawfish prefer large rivers with strong to moderate current, deep pools, eddies, riffles, swift runs and quiet backwaters. Prior to dams, squawfish moved upstream in "spawning runs" sometimes up to 100 miles.

## Life History

Colorado squawfish may migrate 100 miles or more to spawning sites. Spawning sites are of two types. The first consists of deep pools or eddies where the fish rest and feed between spawning bouts, or where males gather around the females until they are ready to deposit eggs. The second area is located at riffles or shallow runs, and it is here that mating takes place. Spawning occurs when water temperatures reach 70° F. Spawning females may deposit over 100,000 adhesive eggs at random in riffle areas that consist of cobblestones. After the eggs are deposited no additional parental care is given.

Males squawfish mature at lengths of about 17 inches. At this time they are about 6 years of age. Females tend to mature a year later.

## Threats and Reasons for Decline

Changes in stream flow and water temperature, direct loss of habitat due to inundation by reservoirs, blockage of migration routes and the introduction of non-native fish are primarily responsible for the decline of the Colorado squawfish. Flaming Gorge Lake was once prime squawfish habitat. Before creation of the reservoir, the Green River in this area was a warm, turbulent river that exhibited violent fluctuations in flow. Once the reservoir was built, the river in this area became a deep, cold lake.

## Recovery Efforts

Colorado squawfish were originally listed as an endangered species by the U.S. Fish and Wildlife Service in 1967. This fish is currently protected under the federal Endangered Species Act of 1973. The Colorado River System Endangered Fish Recovery Program agreement, signed in January 1988, includes five basic steps to aid in the recovery of the Colorado squawfish:

1. Provision of instream flows
2. Habitat development and maintenance
3. Native fish stocking
4. Management of non-native fish species and sport fishing
5. Research, monitoring and data management

The goal of this program is to maintain and protect self-sustaining fish populations and sufficient

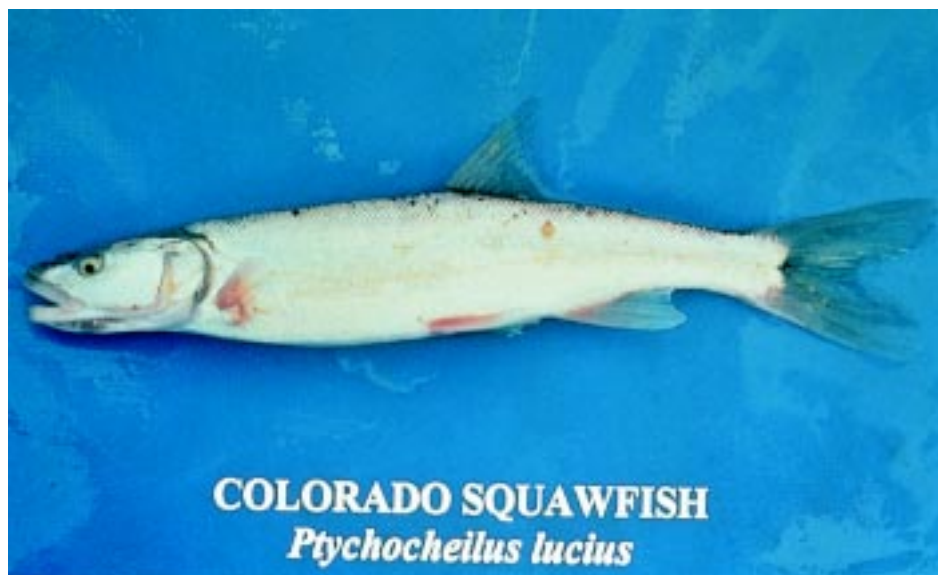


Photo courtesy of Utah Division of Wildlife Resources

natural habitat to sustain these populations. The program should be beneficial also to other endangered fish species sharing this habitat, including the razorback sucker, humpback chub, and the bonytail chub. There is currently a population of Colorado squawfish being maintained at Dexter National Fish Hatcheries in Dexter, New Mexico.



Colorado Squawfish distribution.




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## References

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