Rounding Up Razorbacks

Craig Springer

USFWS Fisheries, 500 Gold Ave. SW, RM 3118, Albuquerque, NM 87103 Craig_Springer@fws.gov

very spring, fish biologists from the U.S. Fish and Wildlife Service and several other federal and state resource management agencies gather on the lower Colorado River for the "Razorback Round-up." The round-up coincides with the spawning of razorback sucker (*Xyrauchen texanus*), a fish endangered with extinction.

With the aid of electrofishing gear and trammel nets, biologists collect sexually mature fish and haul them to Willow Beach National Fish Hatchery, Arizona, where they are spawned. Later, the adults are returned alive to the waters where they were collected.

Why it has to be done speaks to the problem of habitat loss and competition with non-native species.

"Razorback sucker populations took a heavy hit from habitat loss and the introduction of non-native fishes," said Manuel Ulibarri, manager of Willow Beach National Fish Hatchery. "Dams altered water temperature and inundated habitats necessary for survival. Those razorbacks that do spawn in the wild are disadvantaged by carp and other nonnative fishes that eat the eggs. The net result is a severely depleted native stock of mostly very old fish."

The oldest fish in the wild right now were probably hatched during the Eisenhower Administration. These fish do live a long time, up to 45 years—but presently without successful natural recruitment. Old fish make up most of the population, and the population gets smaller and smaller.

"Fully 90 percent of the world's razorback sucker population occurs in Lake Mojave," said Dr. Chuck Minckley of the Service's Arizona Fishery Resources Office. "That translates to a small number of fish in a small area. Our annual round-up helps us manage for a wild population that is increasingly becoming older."

In Lake Mojave this past spring, biologists collected 80 razorback suckers between Willow Beach National Fish



Razorback sucker are long-lived. The oldest fish in the wild right now were born in the 1950s. Photo: U.S. Fish and Wildlife Service.

Hatchery and Hoover Dam. Those fish yielded 300,000 eggs and the surviving young will be stocked throughout the Colorado River system when they are larger. Leading-edge captive breeding techniques, like sperm cryopreservation and egg storage, ensures a diversity of genetic material for future generations of razorbacks. Most of the young razorbacks are grown in predator-free waters for about 18 months when they reach about 10 inches. At that time biologists tag and release them to face the rigors of the wild. Downstream in Lake Havasu, 38 adult razorbacks were collected, all but one of which were tagged. That's a clear indication that repatriated razorbacks are surviving.

Dr. Minckley estimates that about 9,000 wild adult fish remain in Lake Mojave. To date, 38,000 razorbacks have been repatriated into Lake Mojave with an expected 50 percent making it to adulthood. In Lake Havasu, 19,000 razorbacks have been released with similar survival expected.

The annual round-up is a management tool that fish biologists use to conserve this species. Data collected during the round-up help biologists determine the distribution and population abundance of this imperiled fish.

"What we do is fundamentally no different than propagating peregrine falcon or California condor," said Minckley. "When things get too rough in the wild because of man's actions, man has the responsibility to step in and take corrective actions. If we didn't razorbacks might go extinct."