Zuni bluehead sucker

Distribution

The Zuni bluehead sucker (Catostomus discobolus yarrowi) is one of New Mexico’s endangered fish. Historically it inhabited headwater streams in west-central New Mexico and east-central Arizona but is currently limited to small sections of the rios Nutria, Pescado and Agua Remora (formerly Radosevich Creek). In the 1960s several chemical treatments were made to remove green sunfish, fathead minnow and suckers from the Rio Nutria, presumably to aid the establishment of a rainbow trout sport fishery in reservoirs on the Zuni Indian Reservation. Luckily, a population of suckers in the Rio Nutria was maintained by fish surviving in upstream, untreated reaches.

Biology

The Zuni bluehead sucker prefers stream sections with abundant shade, lots of pool and riffle habitats ringed with cattails and with bottoms of bedrock, boulder and large cobble. It's rarely found in sections of stream composed mostly of sand and silt. Zuni bluehead suckers spawn from early April through early June when water temperatures reach 10-15 C. Individual fish are usually no longer than 250mm and live 4-5 years. They feed by scraping diatoms and algae from bedrock, boulders, and cobble in pool and pool-run habitats.

Conservation

This fish currently inhabits less than 10 percent of its likely historical range and its distribution within its current range its distribution is fragmented. It's fairly common only in four short sections of streams (less than 2 km each) in New Mexico and its status in Arizona is uncertain. The habitat in these areas is currently relatively free of human impacts although livestock grazing causes local disturbance through bank chiseling and increased soil erosion. Several nonnative species of predatory fish, like northern pike and green sunfish, have been introduced into the drainage and likely have contributed to the elimination of the Zuni bluehead sucker from several areas such as the Zuni River and lower sections of the Rio Nutria.

After it was declared an endangered fish in 1975, efforts increased to protect the species. In the 1980s the New Mexico Department of Game and Fish cooperated with the U.S. Forest Service in cooperatively fencing two reaches of the uppermost Agua Remora to exclude livestock. During the early 1990s the Pueblo of Zuni and the Department jointly surveyed the Zuni River drainage to identify reaches where the Zuni bluehead sucker might be restored following habitat improvements. In 1992, The Nature Conservancy purchased land that encompasses an area of critical sucker habitat. In 1996, the Department initiated efforts to develop a conservation plan involving the principal land owners and managers having occupied
The main threats to the Zuni bluehead sucker are too much sediment in the streams and predation by nonnative fish. High amounts of sediment in the stream harm the fish by covering up their food source (perilithic diatoms and algae) and smothering their eggs and larvae. Livestock grazing in much of the upper Rio Nutria watershed contributes to erosion and thus sediment in Zuni bluehead sucker habitat. Nonnative fish are rare in parts of the stream where suckers are currently found. Expanding the range of the Zuni bluehead sucker and reclaiming former habitat will be very limited as long as nonnative fish are living in stream habitats.