June Sucker

(Chasmistes liorus)—Endangered

Description

The coloration of the June sucker isblack or brown above, fading to a flat white on the belly. The most distinguishing characteristics of adult fishare weakly developed lips, with widely separated lower lobes and an oblique subterminal mouth. The body is robust and the head is large. Scales are very large,numbering55to62inthe lateral series. There are 10 to 12 raysin the dorsal fin and 7 rays in theanal fin. Breeding males may have a red lateral stripe. June suckersaretypicallyslowgrowing and long lived. Historically, adults reach lengths of approximately 2 feet and may weigh up to 6 pounds. Current age and growth data for June sucker are not available.

Distribution and Habitat

Junesuckersoccur only in Utah Lakeand its major tributary, the Provo River. Utah Valley settlers provided valuable insight into characteristics of the lake's June sucker population. Early accounts indicated that Utah Lake was a pristine lake that supported an enormous population of these fish. In the 1850s, June sucker were caught during their spawning runs and were widely utilized as fertilizer and food. Native Americans and white settlers, captured and dried spawning fish for food.

Except during spawning, adult June sucker remain in Utah Lake at depths of 12 to 14 feet. Historically, June sucker probably inhabited the entire lake and were found throughout the water column. Current populations, especially young, are much reduced and inhabit more restricted areas of the lake.

Life History

Junesuckersprimarily spawn in one section of the Provo River below the Tanner Racediversion. This diversion creates a permanent upstream barrier. Peak spawning activity is over a brief period of time between June 1 and June 29 when water temperatures exceed 55 degrees F.

Spawningactivity is greatest during midday from approximately 11 a.m. to 2 p.m.

June suckers have been observed resting in the deeper pools of the lowerProvoRiverandmoving intoshallowrifflestospawn. Spawning occurs by small groups of three to six individuals, generallyafemaleaccompaniedby several males. The females release eggs and males fertilize them. Water depths at spawning sites range from 1 to 25 feet, with a mean depth of 1.7 feet. Substrate in spawning areas is a mixture of coarse graveland cobble-sized stones. June sucker donot spawn in sand, silt, or calm backwater areas. During spawning, mean daily water temperatures range from 53 degrees to 55 degrees F. Eggs of June sucker are pale yellow, with a mean diameter of 0.02 inches. At a mean temperature of 70 degrees F, they hatch in 4 days. Newly hatchedlarvae, averaging 03 inches in length, remain on the bottomandenterthewater columnapproximately10days after hatching. Larval and juvenile June sucker remain near the mouth of the Provo River during June and July. Areas frequented are shallow, calm backwaters with depths of 3 to 8 inches. Larvae form large schools of several hundred to several thousand. They begin to range into swifter, deeperwaterafterchangingto adult forms.

Data on the food habits of the June sucker are lacking. It is probably an opportunistic omnivore, feeding on zooplankton, aquatic in sects, and algae.

Threats and Reasons for Decline

The first major reductions in the number of June sucker were noted in association with the



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development of Utah Valley. In the late 1800's, an estimated 1,500 metric tons of spawning suckers were killed when about 21 miles of the Provo River was dewatered. Hundreds of tons of suckers were also lost when Utah Lake was nearly drained dry during a 1932-35drought. After the drought, suckerpopulationsgradually increased. Due to the combined impacts of drought, over exploitation, and habitat destruction, the population has never returned to itshistorical level.

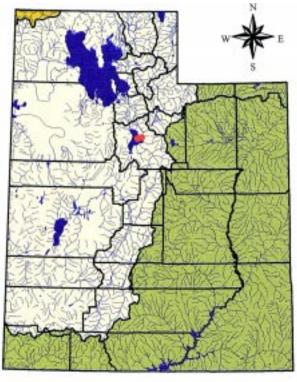
The species was federally listed as an endangered species with critical habitat in 1986. Included ascritical habitat was the lower 4.9 miles of the main channel of the Provo River, from the Tanner Racediversion downstream to Utah Lake. The species had a documented wild population of fewerthan 1,000 individuals at the time of listing. The current population is estimated at approximately300individuals

The June sucker was federally listed as endangered due to:a) their localized distribution; b) failure to recruit new adult fish: andc)threatstotheir continued survival. Decline in abundance of **June suckers can be attributed to** habitatalteration through dewateringstream channels and degradingwaterquality,competition and predation by nonnative species, commercial fishing and killing of adultsduringthespawningrun.

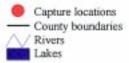
Recovery Efforts

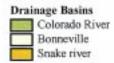
The June sucker was listed by the U.S. Fish and Wildlife Service as an endangered species in 1986. The U.S. Fish and Wildlife Service has given the species a high recovery priority. This species has a high threat of extinction, a low recovery potential, and the presence of conflict. Water developmentandsportfish managementaretheprimary impediment to June sucker recovery.

Therecovery of these fishes and the ecosystem they depend upon will require the input and coop-



June Sucker distribution.





eration of numerous federal, state, county, city, as well as local organizationsandindividualswho own or manage land and water resources. Implementation of this **Recovery Planmay improve**

sportfishing management and opportunities within Utah Lake, enhance aquatic resources, including trout populations, in the ProvoRiver, and benefit wetland, riparian, and other water-related resources in the Utah Lake area.

References

Sigler, W.F., and S. W. Sigler. 1996. The Fishes of Utah. University of Utah Press, Salt Lake City, UT.

"U.S. Fish and Wildlife Service Division of Endangered Species" U.S. Listed Vertebrate Animal Species Index: 06/04/98. http:// www.fwsgov/r9endspp/Isppinfo.html>(4June1998).