

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Animal Abstract

Element Code: AFCKA01090

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Ictalurus pricei*

COMMON NAME: Yaqui Catfish, Price's Catfish

SYNONYMS: *Villarius pricei*, *Ameiurus pricei*, *Amiurus pricei*, *Haustor pricei*, *Ictalurus pricei*

FAMILY: Ictaluridae

AUTHOR, PLACE OF PUBLICATION: Rutter, 1896, Proceedings California Academy Science, 6: 245-67.

TYPE LOCALITY: San Bernardino Creek, just south of international border (in extreme southeastern AZ), Sonora, Mexico (Rutter 1896).

TYPE SPECIMEN:

TAXONOMIC UNIQUENESS: "Only known ictalurid native to the Pacific Slope of North America" (Minckley 1973).

DESCRIPTION: "Coloration dark gray to black dorsally, white to grayish beneath. Barbels jet-black except on chin, where they are gray to whitened. Body is usually profusely speckled" (Minckley 1973). A reddish coloration is prominent beneath the head, and on the fins and tail. Adult size up to 57.0 cm (22.4 in.).

AIDS TO IDENTIFICATION: Similar to the channel catfish but has shorter pectoral and dorsal spines. "Far darker over-all than either the channel or blue catfishes" (Minckley 1973).

ILLUSTRATIONS: Color photo (Rinne and Minckley 1991:31, fig. 62).

TOTAL RANGE: Rio Yaqui system in Sonora and Chihuahua. Formerly in extreme southeast Arizona. Re-introduced to the Rio Yaqui on the San Bernardino National Wildlife Refuge November 1997.

RANGE WITHIN ARIZONA: Historically occurred in San Bernardino Creek as far up as San Bernardino Ranch, Arizona (has been taken just south of the border in Sonora). An introduced population existed in the Monkey Springs Reservoir system from 1899 until the 1950's. The stock presumably came from the Rio Sonora basin of Sonora, Mexico, where the species is thought to still live (Miller and Lowe 1964; Minckley 1973). A small population

(350 fish) was re-introduced into the Rio Yaqui on the Northern most portion of the San Bernardino National Wildlife Refuge in November 1997.

SPECIES BIOLOGY AND POPULATION TRENDS

BIOLOGY:

REPRODUCTION: The Yaqui catfish spawns in late spring. Females lay their eggs in nests constructed on the bottom of a creek bed. These nests are then guarded by the males, who in turn incubates the eggs by fanning away the silt. This action supplies oxygenated water to the eggs. Hatchlings collect in small schools, which the male protects (Hendrickson 1980, Miller 1977).

FOOD HABITS: A bottom feeder, their diet also consists of other fish, insects, larvae, crustaceans, and plant and detritus matter.

HABITAT: *Ictalurus pricei* occupies ponds or streams, primarily in larger rivers, but also in small stream reaches where it prefers quiet, clear pools. They are most common in larger rivers in areas of medium to slow currents over sand/rock bottoms (Hendrickson et al. 1979). Streams flow intermittently in the dry season, and the catfish seeks refuge in permanent, often spring fed pools.

ELEVATION: From the delta to highlands approximately 2,100 m (6,890 ft.). Introduced sites on the San Bernardino NWR and Johnson Historical Museum, are elevations of 3,730 and 3,780 ft (1138 and 1,153 m) respectively (AGFD, unpublished data accessed 2001).

PLANT COMMUNITY:

POPULATION TRENDS: The Yaqui catfish survived in San Bernardino Creek until spring flows diminished because of groundwater pumping and the creek dried up. Remaining habitat there, was severely trampled by drinking livestock, making it uninhabitable (Hendrickson 1980, Miller 1977). Introduced in 1899 into the Santa Cruz River System (in reservoir fed by Monkey Spring) where they persisted until the 1950's. Was extirpated from United States according to Minckley in 1973, until a small population was re-introduced onto the San Bernardino National Wildlife Refuge in 1997.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: LT with Critical Habitat (USDI, FWS 1984)
STATE STATUS: WSC (AGFD, WSCA in prep)
[State Endangered AGFD, TNW 1988]

OTHER STATUS:

No Forest Sensitive Status (USDA, FS Region 3 1999)
[Forest Service Sensitive, USDA, FS Region 3 1988]
Determined Subject to Special Protection in Mexico (Secretaría De Medio Ambiente 2000)
[Listed Rare, Secretaría de Desarrollo Social 1994]
SC, American Fisheries Society

MANAGEMENT FACTORS:

Threats: aquifer pumping; reduction in stream flows; water diversion; drought; hybridization, competition and predation by nonnative fishes.

Management needs: protect San Bernardino aquifers, and Leslie Creek and Black Draw watersheds to ensure adequate perennial flow; ameliorate effects of nonnative fishes; reintroduce into suitable habitats within historical range; stabilize and protect populations in Mexico.

PROTECTIVE MEASURES TAKEN:**SUGGESTED PROJECTS:**

Continue reintroduction into ponds at San Bernardino Ranch once non-native fish are removed and habitat is restored.

LAND MANAGEMENT/OWNERSHIP: FWS - San Bernardino National Wildlife Refuge; Johnson Historical Museum.

SOURCES OF FURTHER INFORMATION**REFERENCES:**

- Arizona Game and Fish Department. 1988. Threatened Native Wildlife in Arizona p. 6.
Arizona Game and Fish Department. In prep. Wildlife of special concern in Arizona. Arizona Game and Fish Department Publication. Phoenix, Arizona. 32 pp.
Hendrickson et al. 1979. Rept. U.S. Fish and Wildlife Service, Albuquerque, New Mexico.
Hendrickson, D.A., W.L. Minckley, R.R. Miller, et al. 1980. Fishes of the Rio Yaqui Basin, Mexico and United States. Journal of the Arizona-Nevada Academy of Science 15(3):78,79.
Lowe, C.H. ed. 1964. The vertebrates of Arizona. University of Arizona Press, Tucson. p. 145.
Miller, R.R. 1977. Composition of the native fish fauna of the Chihuahuan Desert Region. In Wauer and Riskind, eds, Transactions of the symposium on the biological resources of the Chihuahuan Desert Region. Transactions of proceedings series No.3. U.S. Department of the Interior, Washington D.C..

- Minckley, W.L. 1973. Fishes of Arizona. Arizona Game and Fish Department, Phoenix. pp. 179-180.
- Rinne, J.N. and W.L. Minckley. 1991. Native fishes of arid lands: a dwindling resource of the desert. U.S. Department of Agriculture, Forest Service, General Technical Report RM-206. Rocky Mountain Forest and Range Experiment Station, Fort Collins, Colorado. pp. 30-31.
- Secretaría de Desarrollo Social. 1994. Diario Oficial de la Federacion. p. 52.
- Secretaría de Medio Ambiente. 2000. Diario Oficial de la Federacion, PROY-NOM-059-ECOL-2000. p. 46.
- USDA, Forest Service Region 3. 1988. Regional Forester's Sensitive Species List.
- USDA, Forest Service Region 3. 1999. Regional Forester's Sensitive Species List.
- USDI, Fish and Wildlife Service. 1984. Endangered and Threatened Wildlife and Plants; Final Rule to Determine the Yaqui Chub to be an Endangered Species with Critical Habitat and To Determine the Beautiful Shiner and the Yaqui Catfish to be Threatened Species with Critical Habitat. Federal Register 49(171):34490-34497.

MAJOR KNOWLEDGEABLE INDIVIDUALS

Bill Radke - USDI, Fish and Wildlife Service, San Bernardino National Wildlife Refuge, Manager.

ADDITIONAL INFORMATION:

Revised: 1994-06-15 (DBD)
 1997-11-14 (SMS)
 2001-10-12 (SMS)

To the user of this abstract: you may use this entire abstract or any part of it. We do request, however, that if you make use of this abstract in plans, reports, publications, etc. that you credit the Arizona Game and Fish Department. Please use the following citation:

Arizona Game and Fish Department. 20XX (= **year of last revision as indicated at end of abstract**). X...X (= **taxon of animal or plant**). Unpublished abstract compiled and edited by the Heritage Data Management System, Arizona Game and Fish Department, Phoenix, AZ. X pp.