

MOTTLED SCULPIN
(COTTUS BAIRDI)

Navajo/Federal Statuses: NESL G4 / not listed under the ESA. .

Distribution: Range includes most of eastern U.S. and Canada; also present in northwestern U.S. and a few tributaries of the Colorado River. On Navajo Nation, known only from New Mexico-reach of San Juan River; potential also in Utah-reach and the perennial tributaries of San Juan River.

Habitat: Prefer stream sections with coarse gravel and small-to-large rock substrates (usually riffle areas) are preferred, regardless of water depth. Adults rarely use areas with slow current and silt substrate; young typically use areas with little or no current, and may hide within silt of slow-water shorelines. Spawning occurs within shallow, scooped-out depressions under large rocks as eggs are adhered to the underside of rocks; water velocity is not criteria for spawning sites. Males attend eggs until hatching.

Similar Species: Unique species with eyes on upper surface of large flat head, and slender body of 10-15 cm.

Phenology:

- e.FEB-l.MAY: spawning (incubation period of eggs \leq 30 days)
- >m.APR: growth of young (reproduce at 2 yrs. of age)

Survey Method: Evaluations may be based on the presence of habitat. Electrofishing or seine surveys may be important if the proposed action may result in significant habitat alterations.

Avoidance: Within occupied habitat, no surface disturbance year-round within 30-60 m of top of stream bank (depending on stream category, per Navajo Natural Heritage Program, 1994), and prevent changes to water chemistry or quantity.

References:

- Minckley, W.L. 1973. Fishes of Arizona. Arizona Game and Fish Department, Sims Printing Co., Inc. Phoenix, AZ. (description p.261)
- Navajo Natural Heritage Program. 1994. Draft Guidance, Navajo Nation Aquatic Resources Protection Plan. Window Rock, AZ.
- Ryden, D.W. and F.K. Pfeifer. 1996. Adult fish community monitoring on the San Juan River, 1995 Annual Progress Report. US Fish & Wildlife Service, Grand Junction, CO.
- Zarbock, W.M. 1952. Life history of the Utah sculpin, *Cottus bairdi semiscaber* (Cope), in Logan River, Utah. Transactions of American Fisheries Society 81:249-259.