

CONFIRMATION OF THE NORTHERN RANGE OF THE SNUBNOSE SCULPIN (*ORTHONOPIAS TRIACIS*)

DOUGLAS J. LONG

Department of Integrative Biology
and the Museum of Paleontology
University of California
Berkeley, CA 94720

The current published range of the snubnose sculpin (*Orthonopias triacis*) Starks and Mann 1911, extends from San Geronimo Island, Baja California, north to Monterey, and possibly to the Farallon Islands (Miller and Lea 1972, Follett and Ainley 1976). The type specimen was trawled from Cortez Bank off southern California at a depth of 11 to 16 fm (Starks and Mann 1911). The northern limit of the snubnose sculpin's range was established from a second specimen trawled in shallow water near Pacific Grove in Monterey Bay (Gilbert 1914), later from four specimens collected at Point Lobos and Pacific Grove (Hubbs 1926), and from several more specimens collected from the southern end of Monterey Bay at Mussel Point (Point Cabrillo), Pacific Grove, and Pebble Beach (Bolin 1944). Follett and Ainley (1976) recorded eight snubnose sculpins as prey items of pigeon guillemots (*Cepphus columba*) collected in or near their nests on Southeast Farallon Island, but their records are problematical because these bird-transported specimens cannot accurately indicate where the sculpins originated, or even if they were caught around the nesting sites at the Farallones at all.

A specimen collected off the Farallon Islands National Wildlife Refuge (Fig. 1) reconfirms the northern record for the snubnose sculpin and extends the verified range of this species about 160 km farther north than previously reported. While fishing about 0.5 km south of Southeast Farallon Island at lat 37° 42' N, long 123° 00' W on the morning of 16 November 1991, I landed a 18 cm sl female Pacific sanddab (*Citharichthys sordidus*) from a gravel bottom at a depth of about 30 m. Examination of the sanddab's stomach revealed a complete snubnose sculpin in perfect condition. Since the sculpin showed no signs of digestion and its colors were still bright, I believe the sculpin was ingested less than a few hours earlier, and lived in the same general area that the sanddab was caught.

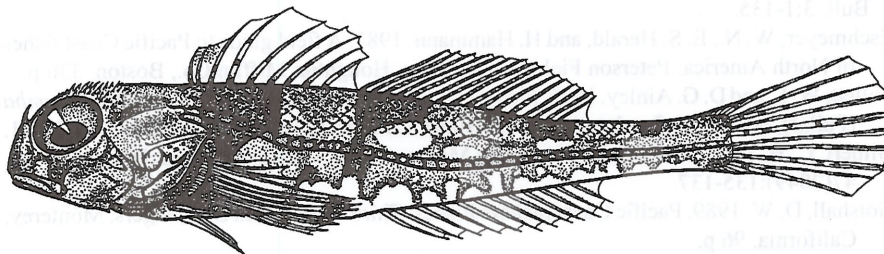


Figure 1. Illustration of the sub-adult snubnose sculpin (*Orthonopias triacis*) (CAS 77379) collected off Southeast Farallon Island (38.2 mm standard length). Drawing by the author.

The snubnose sculpin can be distinguished from other Pacific coast sculpins by the combination of a blunt head with a large orbit; a single thin, sharp preocular spine; dense scales on the top of the head and dorsum; an upper preopercular spine with 2 or more points; and an anteriorly placed anus, usually nearer the pelvic fins than the anal fin (Eschmeyer et al. 1983). This sub-adult specimen (Fig. 1) measured 38.2 mm sl; fin ray counts are as follows: D-IX+16; A-12; Pect. 15; Pelvic I,3. The specimen had four distinct dark saddles on the dorsum. The color (before preservation) was an overall orange with white below, a maroon head, dark brown saddles with a brick-red center in the third saddle, pink between the first and second dorsal saddle, and brown-orange between the second and third saddle. The dorsal and caudal fins had orange barring. The dusky spot at the anterior of the first dorsal fin was indistinct. Based on descriptions and illustrations by Hubbs (1926), Bolin (1944), Miller and Lea (1972), Eschmeyer et al. (1983), and Gotshall (1989), colors and patterns of this species can be quite variable. Although this immature specimen is thinner than adult individuals illustrated by previous authors and lacks the conspicuous anterior dorsal fin spot, it possesses all other morphological characters attributable to *Orthonopias triacis*. This specimen is deposited in the Department of Ichthyology, California Academy of Sciences (CAS 77379).

This offshore record verifies the northernmost known limit of the snubnose sculpin. The species is not restricted just to the continental coast of California, but is also known from several Channel Islands off southern California and from islands off northern Baja (Bolin 1944, Miller and Lea 1972); the specimen from the Southeast Farallon Island reaffirms the coastal and insular distribution of this species in northern California as well.

I thank both Peter Pyle and Denise Hardesty for help in acquiring this specimen during my stay on Southeast Farallon Island, and the United States Fish and Wildlife Service and the Point Reyes Bird Observatory for permission to stay on the Farallon Islands National Wildlife Refuge. I also thank Tomio Iwamoto of the Department of Ichthyology, California Academy of Sciences. This note is also contribution #551 of the Point Reyes Bird Observatory.

LITERATURE CITED

- Bolin, R. L. 1944. A review of the marine cottid fishes of California. Stanford Ichthyological Bull. 3:1-135.
- Eschmeyer, W. N., E. S. Herald, and H. Hammann. 1983. A field guide to Pacific Coast fishes of North America. Peterson Field Guide Series. Houghton Mifflin Co., Boston. 336 p.
- Follett, W. I., and D. G. Ainley. 1976. Fishes collected by pigeon guillemots, *Cephus columba* (Pallas), nesting on Southeast Farallon Island, California. Calif. Fish and Game 62:28-31.
- Gilbert, C. H. 1914. Two cottid fishes from Monterey Bay, California. Proc. U.S. Nat. Mus. 47(2049):135-137.
- Gotshall, D. W. 1989. Pacific Coast Inshore Fishes. Third edition. Sea Challengers, Monterey, California. 96 p.
- Hubbs, C. L. 1926. Descriptions of new genera of cottid fishes related to *Artedius*. Occ. Pap. Mus. Zoology, Ann Arbor, Michigan 170:1-15.

- Miller, D. J., and R. N. Lea. 1972. Guide to the coastal marine fishes of California. Calif. Dep. of Fish and Game, Fish Bull. 157:1-249.
- Starks, E. C., and W. M. Mann. 1911. New and rare fishes from Southern California. Univ. of California. Pub. Zoology 8:9-19.

Received: 1 June 1992

Accepted: 21 September 1992

