



ATHERINOPS OREGONIA, NEW SPECIES.

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## DESCRIPTION OF THE YACHATS "SMELT," A NEW SPECIES OF ATHERINOID FISH FROM OREGON.

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We here describe a new species of Atherinoid fish, of the group known locally, but wrongly, as "smelt," on the Pacific coast of the United States. The type, now in the United States National Museum, is from the mouth of the Yachats River, where it was obtained by Mr. R. E. Clanton, secretary of the Oregon Fish and Game Commission. It is said that the species runs in large numbers into the Yachats River, which is a small stream emptying into the Pacific Ocean some 4 or 5 miles south of the Alsea Bay. It is a common food fish, locally known as "Yachats smelt."

### ATHERINOPS OREGONIA, new species.

Plate 46.

Head 5.6 in length to base of caudal; depth 4.6; depth caudal peduncle 13.3; length snout 3.5 in head; diameter eye 4.4; width interorbital space 2.7; scales in lateral series 67; dorsal rays VI-I, 12; anal rays I, 24.

Body deep, resembling that of *Atherinops affinis*, the common California species, except that it is arched behind the occiput and somewhat broader; head very small and pointed, shorter than that of related species; snout short; eye small; depth of caudal peduncle, width of interorbital area, width of mouth, and depth of head like that of *A. affinis* or *A. insularum*, the local species of the Santa Barbara Islands; 39 rows of scales between occiput and spinous dorsal; 10 rows between dorsals, 16 between spinous dorsal and anal, 5 between spinous dorsal and lateral stripe, and 4 rows between soft dorsal and stripe. Membranes of dorsal fins naked; anal with a low sheath of small, elongate scales; pectorals with a few fine scales on basal portion of the rays. Head entirely scaled except space before eye and edges of opercles. Teeth in single rows on the jaws; not quite evenly forked, the inner prong in most cases being somewhat

smaller and shorter. Gill-rakers on first arch 8+23, long and slender. Pectoral fins pointed, the upper rays longest, contained 5.3 times in the length. Ventrals 1.8 in head. Second and third dorsal spines highest, equal to snout in length. Anterior dorsal rays 1.7 in head; first anal rays somewhat longer than those of dorsal. Caudal deeply forked, the lobes acutely rounded; slightly shorter than pectoral. Dorsal fin inserted in advance of a vertical through anal opening, entirely anterior to origin of anal. Base of anal extending well beyond a vertical through last dorsal ray.

Color in spirits yellowish; a dusky stripe, 1 scale wide extending from occiput to base of caudal; a dusky (silvery in life) lateral stripe, 2 scales wide, extending from upper edge of gill-opening to caudal peduncle, where after narrowing somewhat it ends in a large circular spot at base of caudal. Head with a large dusky spot on opercle; occiput dusky.

This species appears to be related to *Atherinops insularum* or *A. affinis*, differing greatly from *A. regis* in having more symmetrical teeth. From *A. insularum* it differs principally in having a shorter head, a deeper and more robust body, a shorter snout, smaller eye, and one more dorsal spine; from *A. affinis* in having a smaller head, shorter snout, smaller eye, more widely spaced dorsal fins, smaller scales, and a larger number of dorsal and anal rays. These characteristics are best shown in the following table:

	<i>A. oregonia.</i>	<i>A. insularum.</i>		<i>A. affinis.</i>	
Length of body in millimeters.....	227	220	181	131	123
Length head.....	.18	.20	.20	.215	.22
Depth body.....	.22	.19	.20	.23	.22
Length snout.....	.05	.065	.061	.06	.06
Diameter eye.....	.04	.05	.052	.06	.061
Distance between dorsal fins.....	.115	.11	.125	.08	.075
Distance between ventral and anal.....	.21	.19	.19	.21	.19
Scales in lateral series.....	67	62 to 68		52 to 56	
Dorsal spines.....	6	5		5 to 6	
Dorsal rays.....	12	10 or 11		11	
Anal rays.....	24	20 or 21		22	

*Type*.—Cat. No. 74762, U.S.N.M., a specimen 11½ inches long, from Yachats River, Oregon, collected by Mr. R. E. Clanton.

The accompanying figure is drawn by Mr. W. S. Atkinson.