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Note on the Fishes of Family Bathymasteridae in Northern Japan¹⁾

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The fishes belonging to Family Bathymasteridae seem rather rare in the northern Pacific waters of Asia, as compared with other kinds. Hitherto only 3 species have been reported; *Bathymaster signatus* COPE, *B. caeruleofasciatus* GILBERT & BURKE and *B. derjugini* LINDBERG. These species described from a small number of specimen are also rare and have been almost neglected.

The present author has obtained three specimens of this family, one from Akkeshi, Hokkaido and two from Maoka, Saghalien. The following descriptions are based on them.

The author wishes to express here his particular obligation to Dr. T. Inukai, Hokkaido Imperial University, under whose guidance this work has been done.

***Bathymaster caeruleofasciatus* GILBERT & BURKE**

Bathymaster caeruleofasciatus, GILBERT & BURKE, Bull. Bur.
Fish., 30. 1910, p. 84, Fig. 29; SOLDATOVE & LINDBERG,
Bull. Pacif. Sci. Fish. Inst., 5. 1930, p. 477.

Single specimen, 225 mm in length, obtained from Akkeshi Bay, VII, 1937. (Fig. 1). This specimen looks like *B. caeruleofasciatus* GILB. & BURKE, though differing in some respects from current descriptions.

D. 45. A. 31. P. 18. V. 1,5 C. 4-10-4. L. L. 93

Head 4.17 in length; depth 4.90. Eye 3.91 in head; maxillary 2.35; snout 4.70; pectoral 1.20; ventral 1.95; highest dorsal ray

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2.08; highest anal ray 2.57; caudal 1.62. Distance from snout to anal 2.13 in length.

Body compressed, elongated, anterior profile convex from tip of snout to dorsal. Mouth gently oblique, the maxillary reaching to posterior margin of pupil. Snout shorter than eye, gently sharp. Lower jaw slightly included, symphysis of mandible with broad band of small conical teeth bordered in front and behind by series of strong canine like teeth, band rapidly narrowing laterally, the anterior series disappearing and posterior series of enlarged teeth continued laterally. Large conical teeth band in palatine and a single in vomer. Branchiostegal membranes scarcely connected. Margin of preopercle furnished with 5 conspicuous mucous pores,



Fig. 1. *Bathymaster caeruleofasciatus* GILBERT & BURKE

large pores on top and sides of head. Anterior nostril in a short tube, the posterior short slit alone in front of eye. Opercle ending in flap behind. Gill rakers short, the longest 5.1 in eye, and 5 + 12 in number.

Head entirely naked, pectoral and caudal with scales on basal portions not extending beyond the middle. Pectoral broad and fan-shaped, not reaching to front of anal. Origin of ventral spine inserted anterior to base of pectoral. First 2 dorsal rays simple and low, succeeding rays branched; anal rays similar to dorsal, but rather thick, the membrane cleft, leaving the distal $1/3-1/2$ of each ray free, about reaching to base of caudal rays, ending before vertical rays of dorsal. Lateral line not extending to base of caudal, extending only to base of posterior rays of dorsal.

Color of body in formaline almost uniform brown, but pale vistris lake on head, and belly pale; margin of branchiostegal membrane and upper part of opercle shaded dark; ventrals blackish, anal with blackish margin, however without distinct pattern, dorsal

and caudal with darkish, irregularly, no blotch on front of dorsal.

Remarks: This specimen differs from the description of Gilbert & Burke ('10) in the following points, viz the specimen has rather a small number of dorsal and anal rays and pores on lateral line. The shorter maxillary, snout, ventral and pectorals are also remarkable, but may be individual variation.

Distribution: Agattu Island and Petrel Bank, Aleutian chain; Medni and Bering Island; Akkeshi Bay.

Bathymaster derjugini LINDBERG

Bathymaster derjugini, SOLDATOVE & LINDBERG, Bull. Pacif.

Sci. Fish. Inst., 5. 1930. p. 478, Fig. 65.

Two specimens, collected from the fish market of Maoka, south Saghalien, on 26th VIII, 1935, measuring 167 and 172 mm in length. The description of the latter specimen is as follows (Fig. 2);



Fig. 2. *Bathymaster derjugini* LINDBERG

D. 42. A. 31-33. P. 18-19. V. 1, 5. C. 5-11-5. L. L. 81-85.

Head 3.47 in length without caudal fin; depth 4.56. Eye 4.66 in head length; maxillary 2.10; snout 4.60; pectoral 1.35; ventral 2.21; highest dorsal ray 2.10; caudal 1.61. Distance from nape to dorsal 5.24 in length, from snout to front of dorsal 4.59; from snout to ventral 4.59.

Body elongated, compressed, covered with scales. Head moderate, mouth gently oblique, lower jaw slightly included; maxillary reaching to the posterior margin of orbit. Upper jaw with broad band of villiform teeth with an anterior series canined, being narrowed laterally; lower jaw with a narrow band of small conical

teeth, bordered in front by series of strong canine like teeth at symphysis of mandible, laterally one or two rows enlarged teeth. Single series of conical teeth on vomer and palatine. Lateral line not reaching to base of posterior rays of dorsal fin. Gill membrane connected scarcely. Gill rakers twofolds; on moderately long 6 + 14, and another short, thick, with distal end covered with prickles 3 + 12 in number. Opercle ending in a flap behind. Pores on head, under eye and on the border of preopercle, 7 in number in the latter.

Head naked, a naked strip on the median line of nape to front of dorsal. Rays of dorsal, anal and ventral without scale, pectoral and caudal with scales, running ca. $1/3-1/2$ of the basal part of fin and not extending beyond the middle. Pectoral broad and fan-shaped, its lower rays smaller, reaching to 2nd or 3rd rays of anal, or scarcely to anal fin. Origin of ventral fin inserted anteriorly to base of pectoral. Dorsal about uniform height, higher than anal, posterior ray almost reaching to base of caudal rays, tip of posterior ray reaching to caudal; first 4 rays single and low, the others branched. Anal ray nearly reaching to base of caudal rays, ending before the vertical position of the posterior end of dorsal, posterior membrane cleft leaving about $1/3$ of each ray. See as in *B. caeruleofasciatus*, not shown at the figure of *B. derjugini* described by Soldatove & Lindberg. Caudal little convex.

Color of body in formaline almost uniform brown, but pale on lower side; anal and caudal fin with blackish margin, dorsal dusky. Ventral dusky, no black blotch on front of dorsal, a black blotch on opercle.

Distribution: Peter the Great Bay, Japan Sea; Maoka, Gulf of Tartary.
