

MEDDELELSER OM GRØNLAND

UDGIVNE AF

KOMMISSIONEN FOR VIDENSKABELIGE UNDERSØGELSER I GRØNLAND

Bd. 125 · Nr. 1

AN ANNOTATED LIST OF
THE FISHES COLLECTED ON THE SEVERAL
EXPEDITIONS TO GREENLAND,

THE FOX BASIN REGION, AND THE COAST OF LABRADOR
BY CAPTAIN R. A. BARTLETT, FROM 1925 TO 1935

BY

SAMUEL F. HILDEBRAND

U. S. BUREAU OF FISHERIES

PUBLISHED BY PERMISSION
OF THE U. S. COMMISSIONER OF FISHERIES

KØBENHAVN

C. A. REITZELS FORLAG

BIANCO LUNOS BOGTRYKKERI A/S

1939

PREFACE

The collection contains no specimens recognized as representing new species. It is valuable because the fish, as shown by the study of the specimens and literature consulted, are not well known and are from localities in which comparatively little or no collecting had been done. The species as now recognized, in large part, appear to be extremely variable. To determine the variations within the species and the relationship of the species will require much larger series of specimens than are now available. The Bartlett specimens form a commendable nucleus for building up a collection in the U. S. National Museum for a proper study of the far northern forms. Several specimens carry no more than the general label, Labrador. Captain BARTLETT has collected along this coast from Hawkes Bay in the south to Kamaktorvik Bay in the north, chiefly, however, in the vicinity of Saglek Bay.

The writer gratefully acknowledges the advice and assistance received from Dr. WILLIAM C. KENDALL, U. S. Bureau of Fisheries, retired, and Dr. VADIM D. VLADYKOV, Biological Board of Canada, in the identification of some of the difficult species.

Family *Salmonidae*. Salmon and Trout.

Salvelinus stagnalis (Fabricius).

Greenland Charr.

Salmo stagnalis Fabricius, Fauna Groenlandica, 1780, p. 175. Alpine ponds of Greenland.

The Greenland charr was taken in Lake Angmagssalik, eastern Greenland, 13 specimens, including 11 immature ones, partly from a connecting river; at Cape York, 8 specimens, from a small lake; Clavering Island, northeast Greenland, 4 specimens; "northeast Greenland", 1 specimen; Mill Island, Fox Basin, 2 specimens from tide pools; Hurd Channel, Melville Peninsula, Fox Basin, 6 specimens, from a brackish water stream; Cape Mumford, Labrador, 1 specimen, from a fresh water pool; and Lat. 59°35' N., Long. 63°50' W. (coast of Labrador), 2 specimens.

Some authorities regard *stagnalis* only as a subspecies of *altipinnis*. If that view were correct extremely great variation would have to exist within the species.

Range.—Greenland to Labrador and neighboring regions.

Family *Osmeridae*. The Smelts.

Mallotus villosus (Müller).

Capelin: Lodde.

Clupea villosus Müller, Prodr. Zool. Dan., 1776, p. 245. Greenland.

The capelin was taken at Angmagssalik, eastern Greenland, 3 specimens, "picked up dead on ice floe dredge"; and Saglek Bay, 3 specimens; Nain, 4 specimens "from the stomachs of 2 trout", and Hawks' Harbor, Labrador, 3 specimens, in bad condition, having been removed from the stomach of a finback whale.

Range.—Arctic seas; Alaska, Kamchatka, Greenland and south to Maine.

Family Macrouridae. Rat-tails.

Macrourus berglax Lacépède.

Macrourus berglax Lacépède, Hist. Nat. Poiss., III, 1802, p. 170. Greenland.

A large specimen, somewhat mutilated, about 65 cm. long, of this deep sea form was found on ice at Lat. 61°2' N., Long. 64°25' W. (off entrance to Hudson Strait). The longest ray of the ventral bears a short filament which is not mentioned in the descriptions nor shown in the figure consulted. A similar filament is present in a specimen taken off Grand Banks, Gloucester, Mass. with which the Labrador fish was compared.

Range.—Norway and Greenland to Massachusetts.

Family Gadidae.

Boreogadus saida (Lepechin).

Arctic pollack.

Gadus saida Lepechin, Nov. Comm. Acad. Sci. 1774, p. 512, Russia.

The Arctic pollack was taken at Murchison Sound, northern Greenland, 1 specimen in 17 fm.; Fox Basin at Lat. 66°47' N., Long. 79°24' W., 1 specimen in bad condition, picked up dead floating on shelving ice floe; Lyon Inlet, Melville Peninsula, Fox Basin, 3 specimens; Cape Penrhyn, Melville Peninsula, Fox Basin, 1 specimen, in 11 fm.; Charbock Inlet, north shore, Hudson Strait, 1 specimen, picked up floating on surface; and Ramatakvorik Bay, Labrador, 4 specimens.

B. pearyi Nichols and Maxwell (Copeia, No. 1, 1933, p. 26) apparently is not included in the collections.

Range.—Arctic seas; Greenland, Alaska, and northern Russia.

Gadus ogac Richardson.

Tomcod: Rockcod.

Gadus ogac Richardson, Fauna Bor.-Amer., III, 1836, p. 246. Greenland.

The collection contains 3 specimens from Saglek Bay, Labrador, all in rather bad condition, presumably having been recovered from the stomachs of fish or birds, which tentatively are referred to this species.

G. ogac has been considered a northern representative of the common cod by some recent authors. (See NICHOLS and MAXWELL, Copeia, No. 1, 1933, p. 26). However, the specimens here identified as *G. ogac* differ strongly from young cod in the narrower ventral fins with a longer filamentous second ray, and in the moderately rounded caudal. It seems

desirable, therefore, to recognize them as distinct and to refer them to *G. ogac* until variations (if that is what the apparent differences are) are better known.

Range.—Greenland to Labrador.

Gadus callarias Linnaeus.

Common Codfish.

Gadus callarias Linnaeus, Syst. Nat., Ed. X, 1758, p. 252. Baltic Sea, etc.

The common cod is represented in the collection by two small specimens from Labrador. Although reported from Greenland it apparently was not taken there on the expeditions herein reported.

Some recent writers have used the name *morrhua* for the common cod as that name is supposed to have been preferred by the first reviser. The writer declines to follow this change because, disregarding a more or less generally accepted rule of nomenclature, the name *callarias* has been used quite regularly for more than a century.

Range.—North Atlantic on both coasts; Greenland, Davis and Hudson Straits; abundant from northern Labrador to New Jersey, occasionally southward to North Carolina.

Family *Gasterosteidae*. The Sticklebacks.

Gasterosteus aculeatus Linnaeus.

Common stickleback.

Gasterosteus aculeatus Linnaeus, Syst. Nat., Ed. X, 1758, p. 295. Europe.

This stickleback was taken in a river at Angmagssalik, eastern Greenland, 1 specimen; and in Surnock Pond (about a third of a mile from the sea), Labrador, 14 specimens.

Range.—This extremely variable species, according to JORDAN, EVERMANN and CLARK (Rept. U. S. Com. Fish., 1928 (1930) Pt. II, p. 237) occurs in Arctic and Subarctic waters, in shallow bays and estuaries, and also ascends streams; known from Europe, Asia, and America; occurring on the Atlantic coast of America southward to Virginia.

Pungitius pungitius (Linnaeus).

Nine-Spined Stickleback.

Gasterosteus pungitius Linnaeus, Syst. Nat., Ed. X, 1758, p. 296. Europe.

Seven specimens, 35 to 65 mm. long were taken in Ducketts Cove, Hurd Channel, Fox Basin, in a small brackish water stream

joining two lakes. One specimen has 9, four have 10, and one has 11 dorsal spines.

Range.—Northern Europe; Arctic seas; and in America, in Alaska, Saskatchewan, and east and south to New York, occurring in both fresh and salt water.

Family *Cottidae*. **Sculpins.**

Icelus bicornis (Reinhardt).

Cottus bicornis Reinhardt, Kgl. Danske Vid. Selsk. Natur. og Math. Afh., VIII, 1841, p. LXXV. Greenland.

This sculpin was taken at Cape York, northern Greenland, 1 specimen immature, in 30 fm.; Parker Snow Bank, northern Greenland, 2 juveniles; South part of Fox Basin at Lat. 66°43' N., Long. 80°07' W., 1 specimen, in 32 to 37 fm., and "Labrador", 1 specimen.

Range.—Circumpolar, northern Europe and Asia, Alaska, and on the Atlantic coast of America from Greenland to Labrador. The general record, "Cape Cod", of JORDAN, EVERMANN and CLARK (Rept. U. S. Comm. Fish., 1928 (1930) Pt. II, p. 378) brought down from an earlier work, probably should be disregarded as BIGELOW and WELSH (Bull. U. S. Bur. Fish., XL, 1924 (1925) do not record it from the Gulf of Maine, and SUMNER, OSBURN and COLE (Bull. U. S. Bur. Fish., XXXI, 1911 (1913)) do not list it from Woods Hole, Mass. and vicinity.

Triglops pingeli Reinhardt.

Triglops pingeli Reinhardt, Kgl. Danske Vid. Selsk. Natur. og Math. Afh., V, 1832, p. LII. Greenland.

Two small specimens, provisionally assigned to this species, were taken on the coast of Labrador.

Range.—North Atlantic; Spitzbergen, Norway, Greenland, and probably Labrador. *Triglops ommatistius* Gilbert, following other American authors, is regarded as a distinct species, which ranges southward at least as far as Cape Cod.

Myoxocephalus scorpius (Linnaeus).

Cottus scorpius Linnaeus, Syst. Nat. Ed. X, 1758, p. 265. Atlantic Ocean off Europe.

This sculpin was taken at Cape York, 2 specimens, in 7 to 15 fm.; west side of Cape York, 1 specimen, in 10 fm., rocky bottom; Saunders Island, 1 specimen, in 10 to 12 fm.; Angmagssalik, eastern Greenland, 54 small specimens; Ponds Inlet, Baffin Land, 5 small specimens; Cobourg Island, Baffin Bay, 2 specimens, 8 to 13 fm., on rocky bottom;

Lat. 75°40' N., 78°55' W., 1 specimen, in 8 to 16½ fm., on rocky bottom; Lyon Inlet, Melville Peninsula, Fox Basin, 5 specimens; Cape Martineau, Melville Peninsula, Fox Basin, 1 specimen; and Saglek Bay, 3 specimens in rather bad condition, probably from the stomach of a fish or bird; and Hawk Harbor, Labrador, 1 small specimen, from the stomach of a finback whale; "Labrador", 6 specimen, 5 immature.

This species is variable. Some of the specimens listed, i. e., those from Cape York and Saunders Island, evidently belong to the variant, *groenlandicus*, considered a distinct species by some authors.

Range.—This species is recorded from the Arctic Seas, along the shores of Europe and Asia, south to England and to New York.

Oncocottus quadricornis (Linnaeus).

Cottus quadricornis Linnaeus, Syst. Nat., Ed. X, 1758, p. 264. Baltic Sea.

This arctic sculpin is represented by 1 specimen taken at Clavering Island, northeastern Greenland, caught in a net; and 1 from Barrow River, Melville Peninsula, Fox Basin.

This sculpin generally is described as having a slit behind the last gill arch. There is no such slit present in the specimens in the Bartlett collection, nor in a specimen examined from the general collection of the U. S. National Museum, which nevertheless seems to fit the description of the species in other respects. The fin ray counts agree in the two specimens in the Bartlett Collection. However, the Clavering Island specimen, a male, is more slender and has more numerous bony plates on the upper part of the side, and higher fins than the gravid female (taken Aug. 29, 1933) from Barrow River.

Range.—Arctic regions; principally Europe, south to the Baltic Sea and England; known from eastern Greenland, Hudson Bay and Hudson Strait, in America, and now recorded also from Fox Basin.

Gymnocanthus tricuspis (Reinhardt).

Cottus tricuspis Reinhardt, Kgl. Danske Vid. Selsk. Natur. og Math. Afh., V, 1832, p. LII. Greenland.

This sculpin was taken at Saunders Island, Wolstenholm Sound, 1 specimen, in 10 to 12 fm.; Murchison Sound, 1 adult female in 20 fm.; and Fine Ford, northern Greenland, 1 large male, in 6½ fm.; mouth of Barrow River, Fox Basin, 1 juvenile; and Saglek Bay, Labrador, 3 specimens (2 in bad condition, from stomach of a salmon).

The males differ from the females in several respects, especially in the much longer fins. The ventrals, for example, fail to reach the vent in females, whereas they reach to or past the origin of the anal in large males. The sexual dimorphism is fully discussed by PIETSCHMANN

(Meddel. Grønland, Bd. 92, No. 2, 1932, p. 27). VLADYKOF (Contrib. Canadian Biol. Fish., VIII, No. 2, 1933, p. 16) described a new subspecies, *hudsonius*, based on specimens from Hudson Bay. The single individual in the collection from Fox Basin may be of that subspecies. It is too immature, however, for definite determination.

Range.—Arctic and north Atlantic Oceans, south to Norway and to Maine.

Family *Cyclopteridae*. The Lumpfishes.

Eumicrotremus spinosus (Müller).

Spiny lumpfish.

Cyclopterus spinosus Müller, Prodr. Zool., Dan., IX, 1776, p. IX. Denmark.

The spiny lumpfish was taken at Herbert Island, Whale Sound, northern Greenland, 1 specimen, immature dredged in 4 to 25 fm.; Inglefield Gulf, northwestern Greenland, 1 specimen, immature, in 5 to 20 fm.; Frozen Strain, Fox Basin, 1 very small specimen, in 14 to 20 fm.; Lat. 59°31' N., Long. 63°50' W. (off northern Labrador), 1 specimen; Saglek Bay, Labrador, 1 specimen (in bad condition, probably from the stomach of a fish or bird); Turnavik Island, Labrador, 1 specimen.

Some of the specimens are quite small, two being only 13 mm. long. Even the smallest individuals already have indications of spiny tubercles.

Range.—Arctic and north Atlantic oceans, on both coasts, on the American side south to the Gulf of Maine.

Eumicrotremus derjugini Popov.

Eumicrotremus derjugini Popov, Trav. Soc. Nat. Leningrad (Sect. I. C. R.), vol. 56, 1926 (In Russian). Kara and Barents Seas.

This species is represented by a single specimen, 62 mm. long, taken in Saglek Bay, Labrador.

This spiny lumpfish is readily distinguished from the preceding one by the irregularly placed large bony tubercles on the back and sides of the body, which are not in straight rows as in *E. spinosus*. Furthermore, contrary to *E. spinosus*, they are missing on the chin and on the base of the pectorals.

Range.—In general, circumpolar; Kara and Barents Seas, Hudson Bay region, and now for the first time recorded from Labrador.

Family Liparidae. Sea snails.

Liparis tunicatus Reinhardt.

Liparis tunicatus Reinhardt, Overs. Kgl. Danske. Vid. Selsk. VI, 1836, p. CXI. Greenland.

Specimens were collected in Murchison Sound, 7 juveniles, in 17 fm., and off Northumberland Island, Murchison Sound, northern Greenland, 1 specimen, in 17 fm.; Lyons Inlet, Fox Basin, 1 specimen; and "Labrador", 1 specimen.

L. tunicatus was recorded from Greenland by NICHOLS (Bull. Amer. Mus. Nat. Hist., XXXVIII, 1918, p. 680) and by GILTAY (Bull. Mus. Royal Hist. Nat. Belgique, Vol. VI, No. 22, 1930, p. 8) who did not question the availability of the name. PARR (Bergens Mus. Årbok, Nat. rekke, No. 6, 1931, p. 23) thought, however, that *L. tunicatus* might be a synonym of *L. liparis liparis*. In that event the present species should stand as *L. arcticus* Gill.

Range.—Arctic and north Atlantic Oceans, south to Norway and to Eastport, Maine.

Family Ammodytidae. The sand Launces.

Ammodytes americanus De Kay.

Sand Launce; Sand eel.

Ammodytes americanus De Kay, New York, Fauna; Fishes, 1882, p. 317, Stratford, Conn.

This sand launce was taken in Saglek Bay, Labrador, 2 specimens; and Wolf Island, Labrador, 1 specimen.

Range.—Labrador to Cape Hatteras.

Family Zoarcidae. The eelpouts.

Lycodes reticulatus Reinhardt.

Lycodes reticulatus Reinhardt, Kgl. Danske Vid. Selsk. Natur. og Math. Afh., VII, 1838, p. 167. Greenland.

A single large example from the coast of Labrador is included in the collection. Anal rays 74; pectoral 20. Although this eelpout is known from Greenland, no specimens appeared to have been taken there by the Bartlett expeditions.

Range.—On both sides of the north Atlantic; Spitzbergen, Greenland and south to Narragansett Bay, Rhode Island.

Gymnelis viridis (Fabricius).

Fish Doctor.

Ophidium viride Fabricius, Fauna Groenlandica, 1780, p. 141. Greenland.

This eelpout was caught at Lat. 75°40' N., Long. 78°55' W., 1 specimen on rocky bottom, 6 to 8 fm.; Angmagssalik, northeast Greenland, 1 specimen, on rocky bottom, 20 fm.; 66°30' N., 80°00' W., in Fox Basin, 1 specimen; entrance to Fury and Hecla Straits, Fox Basin, 2 specimens; Cobourg Island in Baffin Bay, 1 specimen, dropped by a gull; Cape Mumford, Labrador, 1 specimen, with the note, "Fish Doctor"; Taken from Fish caught in fish trap: Stocks to body of fishes same as a leech."

More than one species may be included, as considerable variation was noticed among the specimens in the Bartlett collections, as well as among others contained in the general collection of the U. S. National Museum. There is much difference in the size of the eye, the length of the maxillary, the place of origin of the dorsal, and in color. More specimens are needed to determine definitely the value of the differences noted.

Range.—Arctic Seas; on the American coast from Greenland at least as far south as Labrador. Generally reported southward to Nova Scotia. However, VLADYKOV and MCKENZIE (Proc. Nova Scotian Inst. Sci., XIX, Pt. I, 1935, p. 111) found no definite locality record for that province.