

## HYPOTHETICAL LIST

Positive identification of the following species was not achieved but the species are given here as possible members of the bird fauna of the inlet.

GOSHAWK *Accipiter gentilis*

One observation on February 25.

SEMIPALMATED SANDPIPER *Ereuntes pusillus*

Fourteen seen on July 3 and July 10.

SHORT-BILLED GULL *Larus canus*

Eight seen in early August.

DOWNY WOODPECKER *Dendrocopos pubescens*

Singles were observed on February 6 and 13.

AMERICAN GOLDFINCH *Spinus tristis*

Eight were seen on April 24. On June 19 and August 9, a single pair was observed.

## REFERENCES

- Bretherton, Bernard J. 1896. Kodiak Island, a contribution to the avifauna of Alaska. Ore. Nat. 3:45-49, 61-64, 77-79, 100-102.
- Kortright, Francis H. 1943. The ducks, geese and swans of North America. American Wildlife Institute.
- Munro, J. A., and I. McT. Cowan. 1947. A review of the bird fauna of British Columbia. British Columbia Provincial Museum.

Received for publication 11 March 1958

## RECORDS OF MARINE FISHES FROM FRESH WATER IN BRITISH COLUMBIA

DON E. McALLISTER

Institute of Fisheries, University of British Columbia, Vancouver 8  
British Columbia

THE EXCELLENT checklist of the fresh water fishes of Canada and Alaska by Scott (1958) has prompted the publication of some additional records of marine fishes entering fresh water in British Columbia. These are as follows:

SPINY DOGFISH *Squalus acanthias* Linnaeus. This species has been observed in fresh water in British Columbia (Gunter, 1942) and was also recorded from fresh water in Denmark (Feddersen, 1879). The spiny dogfish of the Pacific, *Squalus suckleyi*, has been synonymized with the Atlantic *Squalus acanthias* (Bigelow and Schroeder, 1948).

HERRING *Clupea harengus pallasii* Valenciennes. Occasionally the herring is stranded near river mouths in fresh water in B.C. when it comes up on the beaches to spawn<sup>1</sup>. It has been taken in California at a chlorinity of .81 (Hubbs, 1947). The herring of the North Pacific has been regarded as a distinct species, *Clupea pallasii*. In his revision of the Clupeidae, Svetovidov (1952) reduces it to a subspecies of the North Atlantic herring, *Clupea harengus*.

<sup>1</sup>These species were recorded by Gunter (1956), without locality, as occurring in both fresh and pure salt water. In reply to my inquiry Dr. Gunter wrote that these fish had been reported in fresh water in British Columbia. The author is grateful to Dr. Gunter for this information. Thanks are also due to Dr. C. C. Lindsey of the Institute of Fisheries, University of British Columbia; Dr. R. R. Miller of the Museum of Zoology, University of Michigan; Dr. W. B. Scott of the Royal Ontario Museum; Nancy McAllister and Clarence L. Smith of the University of Michigan for reading the manuscript.

**YELLOW SHINER** *Cymatogaster aggregata* Gibbons. The yellow shiner has been recorded from fresh water in British Columbia<sup>1</sup> as well as in California (Hubbs, 1947 and Gunter, 1942). The species name has been written with a *us* ending, but since the generic name is feminine, the species name must end in *a* (Tarp, 1952).

**SHARPNosed SCULPIN** *Clinocottus acuticeps* (Gilbert). The sharpnosed sculpin was seined by the author and his wife in a small creek entering Lyell Harbor from Saturna Island on the southern coast of British Columbia. The collection was made at low tide in the upper reaches of the tidal zone of the creek; since the water was shallow and running there can be no doubt that the fish were in fresh water. According to Clemens and Wilby (1949), this sculpin inhabits tide pools and as such a habitat is subjected to dilution by rain and seepage, fresh water tolerance by this species is not surprising. The specimens are now in the museum of the Institute of Fisheries, University of British Columbia (Catalogue No. BC56-81).

**CABEZON** *Leptocottus armatus* Girard. The cabezon was taken with *Clinocottus acuticeps* in fresh water at Saturna Island (BC56-81). It has also been taken in fresh water in British Columbia in the Serpentine River at Cloverdale, 6 miles from the sea but within tidal influence (BC55-262). Another collection at the Institute of Fisheries is from fresh water on Kodiak Island, Alaska. Gunter (1942) recorded this form in fresh water in Washington and Alaska, and Hubbs (1947) has recorded it in California at a chlorinity of .57. The cabezon is a tidepool-inhabiting species (Clemens and Wilby, 1949).

**STARRY FLOUNDER** *Platichthys stellatus* (Pallas). The starry flounder is well known for its ability to enter fresh water. Clemens and Wilby (1949), Orcutt (1950), and Gunter (1942) all affirm that it is euryhaline. Hubbs (1947) has taken it at a chlorinity of .57 in California. The author has seined specimens in shallow water in the Pitt River, a lower tributary of the Fraser, more than 20 miles from the sea (BC58-70).

#### REFERENCES

- BIGELOW, H. B., and W. C. SCHROEDER. 1948. Sharks. In *Fishes of the western North Atlantic*. New Haven, Memoirs Sears Foundation for Marine Research, No. 1, Part 2.
- CLEMENS, W. A., and G. V. WILBY. 1949. Fishes of the Pacific coast of Canada. Bull. Fish. Res. Bd Canada 68.
- FEDDERSEN, V. A. 1879. *Gadus morrhua* in fresh water. Translation by T. H. Bean. Amer. Nat. 14:525-526.
- GUNTER, G. 1942. A list of the fishes of the mainland of North and Middle America recorded from both fresh water and sea water. Amer. Midl. Nat. 28:305-326.
- GUNTER, G. 1956. A revised list of euryhaline fishes of North and Middle America. Amer. Midl. Nat. 56:345-354.
- HUBBS, CLARK. 1947. Mixture of marine and fresh-water fishes in the lower Salinas River, California. Copeia (2):147-148.
- ORCUTT, H. G. 1950. The life history of the starry flounder, *Platichthys stellatus* (Pallas). Calif. Div. Fish Game Fish. Bull. 78.
- SCOTT, W. B. 1958. A checklist of the freshwater fishes of Canada and Alaska. Royal Ontario Museum, Division of Zoology and Palaeontology.
- SVETOVIDOV, A. N. 1952. Fishes: Herrings (Clupeidae). (In Russian). Fauna S.S. S.R. 2(2).
- TARP, T. H. 1952. A revision of the family Embiotocidae (surfperches). Calif. Div. Fish Game Fish. Bull. 88.



McAllister, Don E. 1959. "Records of Marine Fishes from Fresh Water in British Columbia." *The Canadian field-naturalist* 73(1), 13–14.

<https://doi.org/10.5962/p.341753>.

**View This Item Online:** <https://www.biodiversitylibrary.org/item/89326>

**DOI:** <https://doi.org/10.5962/p.341753>

**Permalink:** <https://www.biodiversitylibrary.org/partpdf/341753>

#### **Holding Institution**

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

#### **Sponsored by**

Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

#### **Copyright & Reuse**

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: Ottawa Field-Naturalists' Club

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.