

- Godfrey, W. E.** 1966. The Birds of Canada. Natl. Mus. of Canada Bull. 203: 143. Ottawa.
- Munro, J. A. and I. McT. Cowan.** 1947. A Review of the Bird Fauna of British Columbia. B.C. Prov. Mus. Spec. Publ. No. 2, Victoria.

R. WAYNE CAMPBELL

Vertebrate Museum,  
Department of Zoology,  
University of British Columbia,  
Vancouver 8, B.C.

Received August 30, 1971

Accepted November 1, 1971

## Greater Scaup is Common Breeder on Northern Lake Winnipeg

A dozen Greater Scaup (*Aythya marila*) were observed by the senior author on a pond on Little George Island, 52°52'N, 97°47'W in Lake Winnipeg, Manitoba, during a visit by float plane on June 24, 1970 to the Caspian and Common Tern colonies there. The scaup were suspected to breed there, but there was then no time to search for nests. In 1971, the island was occupied by the two junior authors and visited by the senior author in June and July and 13 nests, plus one brood, of Greater Scaup were found. The scaup nested in tall grass and underneath shrubs between the pond and the tern colonies. Besides the Greater Scaup one nest each of a Pintail, American Widgeon, Common Goldeneye, Common and Red-breasted Merganser also were located. The Common Goldeneye nested in an open tree hollow, while the mergansers nested underneath an old cabin and underneath a shrub.

The Greater Scaup were identified independently by sight observations by the first two authors. The Greater Scaup may be confused with the Lesser Scaup, *Aythya affinis*. The senior author is very familiar with the latter species from studies in Alberta (Vermeer, 1968, 1970). The second author observed Lesser Scaup offshore Little George Island on four out of ten days in the first half of July with most birds being seen in a group of 17 on July 8.

This is a breeding record of Greater Scaup on Lake Winnipeg, which is about 300 miles south of the breeding boundary for this species as indicated by Godfrey (1966). However, the A.O.U. Checklist (1957:84) indicates that Greater Scaup breed in "North Dakota (rarely Lower Souris

Wildlife Refuge, probably Devils Lake), and southeastern Michigan (St. Clair Flats, one record)."

### Literature Cited

- American Ornithologists' Union.** 1957. The A.O.U. checklist of North American Birds. A.O.U., 1957, Baltimore.
- Godfrey, W. E.** 1966. The birds of Canada. Bull. 203, Ser. 73, Nat. Mus. of Can. 428 pp.
- Vermeer, K.** 1968. Ecological aspects of ducks nesting in high densities among larids. Wilson Bull. 80(1): 78-83.
- Vermeer, K.** 1970. Some aspects of the nesting of ducks on islands in Lake Newell, Alberta. J. Wildl. Mgmt. 34(1): 126-129.

[In this connection, there is an old assertion by E. B. Dunlop (1915, *Aux* 32(4): 500) that the Greater Scaup was then "... undoubtedly the most plentiful breeding duck mid-way up the west side of Lake Winnipeg". This statement has been ignored heretofore by most ornithologists apparently pending proof that Dunlop had not confused this species with the similar Lesser Scaup, *Aythya affinis*. It is now plain that Dunlop was right. — W. E. G.]

K. VERMEER  
D. R. M. HATCH  
J. A. WINDSOR

Canadian Wildlife, Edmonton

Received October 19, 1971

Accepted April 11, 1972.

## New Records of Sculpins (Cottidae) from the Coasts of British Columbia and Washington

**Abstract.** The known geographic ranges of the sculpins *Artedius meanyi* and *Radulinus boleoides* are extended to northern British Columbian waters while that of *Nautichthys robustus* is extended from British Columbia into the state of Washington.

Many species of marine fishes are now known to be more widely distributed on the Canadian west coast than previous literature records have indicated (Hart, in press). The following records of species from the coastal waters of British Columbia and Washington are indicative of this trend.

*Artedius meanyi* (Jordan and Starks), Puget Sound sculpin:

Rosenblatt and Wilkie (1963) recorded the known range of the Puget Sound sculpin (*Artedius meanyi*) from Puget Sound, the Strait of

Juan de Fuca, and Howe Sound. Since then, McAllister (in Hart, in press) recorded the species from lat.  $51^{\circ} 09' N.$  and long.  $127^{\circ} 55.5' W.$ , on the basis of a specimen (27.9 mm SL) deposited at the National Museums of Canada (cat. no. NMC68-373). Recently another specimen (NMC 67-346) caught at a depth of 45 fathoms (82 m) on August 9, 1967, from lat.  $53^{\circ} 52' N.$  and long.  $133^{\circ} 19' W.$  came to my attention. This specimen (20.4 mm SL) from off the Queen Charlotte Islands suggests the species may be found occasionally throughout the length of the British Columbia coast. The 82 m depth of capture also extends the 1.5 to 7.6 m depth range recorded by Rosenblatt and Wilkie (1963).

Although damaged, the specimen recorded here is readily identifiable from other members of the genus because of the distinctive scales distributed over the entire surface between the lateral line and dorsal fins and onto the caudal peduncle below the caudal raylets.

*Nautichthys robustus* Peden, shortmasted sculpin:

Previously, only eight specimens of the shortmasted sculpin (*Nautichthys robustus*) were recorded between Attu Island, Alaska, and the Queen Charlotte Islands, B.C. (Peden, 1970). Since then a misidentified collection containing nine more specimens was found at the United States National Museum. According to its museum label, the specimens were captured in the state of Washington at Albatross Stn. 2865 (lat.  $48^{\circ} 12' 00'' N.$  and long.  $122^{\circ} 49' 00'' W.$ ) at a depth of 40 fathoms (73 m) on September 6, 1888. Townsend (1901) recorded the temperature at the depth of capture to be  $51.7^{\circ} F.$  ( $10.9^{\circ} C.$ ) and the bottom to be composed of pebbles. The nine specimens reported here more than double the total number of known specimens of *N. robustus* and extend the known range more than 550 miles southward into northern Washington.

The counts of these nine specimens (cat. no. USNM 127026) are as follows:

Specimen no.	Standard length (mm)	dorsal rays	anal rays	pectoral rays	lateral line pores
1	26.8	IX-21	15	15	38 + 1
2	30.1	VIII-21	16	15	38 + 1
3	28.9	VII-20	15	15	36 + 1
4	28.6	VIII-20	15	15	37 + 1
5	25.4	VIII-21	14	15	38 + 1
6	27.0	IX-20	15	15	38 + 1
7	30.1	VIII-20	14	15	38 + 1
8	27.9	VIII-21	15	15	38 + 1
9	24.6	VIII-20	14?	15	37 + 1

Because all these specimens have fewer than 22 soft dorsal fin rays and possess pointed head spines, these characters are consistent with those Peden (1970) described as diagnostic for *N. robustus*.

*Radulinus boleoides* Gilbert, darter sculpin:

Although the rare darter sculpin (*Radulinus boleoides*) was known for many years from California and Washington (Bolin, 1944), only recently has a specimen been found in the marine waters off British Columbia (McPhail, 1970). On June 5, 1969, the late Dr. Clifford Carl captured a specimen of this species from a depth of 40 fathoms (73 m) near Langara Island (approximately  $54^{\circ} 12' N.$  latitude and  $133^{\circ} 00' W.$  longitude) while he was aboard the Fisheries Research Board of Canada's vessel *G. B. Reed*. This record extends the known range of the darter sculpin 300 miles further north and indicates the species must be considered a possible resident of suitable habitats along the entire coast of British Columbia.

The counts of this British Columbia specimen are: right pectoral rays, 18; left pectoral rays, 19; dorsal rays, X, 20; anal rays, 21; lateral line pores, 40. Because the right pectoral count falls only within the range recorded by Bolin (1944) for *Radulinus asprellus* and the other counts overlapped the ranges given for both *R. boleoides* and *R. asprellus*, identification proved difficult. In addition, the diagnostic measurements (i.e., snout length = 1.2 times orbit diameter and pelvic fin length = 1.2 times the pectoral fin base) were barely within the ranges listed by Bolin for *R. boleoides*; however, greater variation should be expected because Bolin only examined three specimens. Because the northernmost specimen recorded here possessed short rather than long nasal spines, more scales on the anterior region of the head, and a cirrus on the posterior part of each eyeball, the identification of the specimen agrees with Bolin's description of *R. boleoides* and not with that of *R. asprellus*. The specimen is now deposited in the collection of the British Columbia Provincial Museum. (cat. no. BCPM 69-9).

#### Acknowledgements

Dr. Josephine F. L. Hart provided some of the data on *Radulinus*. Dr. John L. Hart permitted use of his MS in press on B.C. fishes.

### Literature Cited

- Bolin, R. L.** 1944. A review of the marine cottid fishes of California. *Stanford Ichthyological Bulletin* 3(1): 1-135.
- Hart, J. L.** In press. Fishes of the Pacific Coast of Canada. *Bulletin Fisheries Research Board of Canada*.
- McPhail, J. D.** 1970. Two rare sculpins (Cottidae) new to the marine fauna of British Columbia. *Canadian Field-Naturalist* 83(4): 400-401.
- Peden, A. E.** 1970. A new cottid fish *Nautichthys robustus* from Alaska and British Columbia. *Publications in Biological Oceanography, National Museums of Canada* 2:1-10.
- Rosenblatt, R. H. and D. Wilkie.** 1963. A re-description of the rare cottid fish *Artedius manyi*, new to the fauna of British Columbia. *Journal Fisheries Research Board of Canada* 20(6): 1505-1511.
- Townsend, C. H.** 1901. Dredging and other records of the steamer Albatross with bibliography relative to the work of the vessel. *Report Commission of Fisheries 1900 (1901)*: 387-562.

ALEX E. PEDEN

British Columbia Provincial Museum  
Victoria, B.C.

Received April 5, 1972

Accepted April 9, 1972

## An Observation of Killer Whale Predation on a Dall Porpoise

**Abstract.** The behavior of two killer whales (*Orcinus orca*) was observed near a Dall porpoise (*Phocoenoides dalli*) grounded in shallow water. The whales waited at least 20 minutes until the porpoise was accessible in deeper water and then immediately captured it and swam farther offshore. After "playing" with the porpoise for several minutes, the whales disappeared with it.

On October 30, 1971, we observed two killer whales (*Orcinus orca*) preying upon a Dall porpoise (*Phocoenoides dalli*) near Auke Bay, Alaska. The observations were made between 9:00 and 9:30 a.m. on a beach on the east side of lower Lynn Canal, about 16 miles north of Juneau, Alaska. The weather was cloudy with occasional light rain showers. There was a very light wind and the resultant onshore waves were less than 1 foot high. The tide was flooding and was about half-way between low and high slack. The water appeared clear. The beach where the incident occurred is rock rubble and has a slope of approximately 10 degrees. Beyond the zero tide

level, the beach changes to sand and has a grade of approximately 5 degrees.

When we first saw the two killer whales, they were cruising parallel to shore about 30 to 40 feet off the beach in water probably no more than 6 to 10 feet deep. The dorsal fins and upper backs of the whales protruded above the water. The whales were probably a young male and a female; one had a moderately high, straight dorsal fin and the other had a slightly lower, curved dorsal fin. Immediately after we first saw the whales, we noticed a Dall porpoise moving feebly at the edge of the water directly inshore of the two whales.

The porpoise, about 5 feet long, was grounded and awash in about 10 inches of water. It was resting on its side against the bottom and was partly exposed above water; its primary motion was caused by the waves. Periodically the porpoise would right itself, breathe, then fall back to its previous position. It was bleeding slightly along the anterior edge of the pectoral limbs and flukes; the bleeding was probably from cuts sustained as the animal rubbed against the barnacle-covered intertidal rocks. The body of the porpoise was covered with scratches, but aside from these and the slight bleeding, no external injury was evident. We approached until we could touch the porpoise; the only visible reaction to our contact was a slight thrashing.

As we stood near the porpoise, the two killer whales swam slowly back and forth, at times parallel to the beach and at times shoreward and seaward. The movements of the whales during approximately 20 minutes, timed from our arrival at the scene were executed within an area extending about 50 to 70 feet north and south of the porpoise laterally along the beach and between 30 and 200 feet offshore. Their movements seemed slow and deliberate as they rolled, swam at the surface, or disappeared briefly from view. Two or three times the whales remained out of sight under water for 3- to 5-minute intervals. Several times they lay still at the surface, facing the beach, for as long as half a minute. Once one of the whales raised the front of its head out of the water while it was facing shoreward.

At the end of the 20-minute interval, the whales made a particularly close pass, about 30 feet from the edge of the water. Both whales had their backs well out of water as they moved from north to south parallel to the beach. By the time the whales made this close pass, the porpoise had moved free of the rocky bottom and had drifted parallel to the shore about 15 feet south of its



Peden, Alex. 1972. "New Records of Sculpins (Cottidae) from the Coasts of British Columbia and Washington." *The Canadian field-naturalist* 86(2), 168–170. <https://doi.org/10.5962/p.343565>.

**View This Item Online:** <https://www.biodiversitylibrary.org/item/89146>

**DOI:** <https://doi.org/10.5962/p.343565>

**Permalink:** <https://www.biodiversitylibrary.org/partpdf/343565>

#### **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>.