

Note

First Report of Dealfish, *Trachipterus arcticus* (Lampriformes: Trachipteridae), from Canadian Waters

CRAIG F. PURCHASE

Department of Biology, Memorial University, St. John's, Newfoundland and Labrador A1B 3X9 Canada; email: cfpurchase@mun.ca

Purchase, C. F. 2017. First report of Dealfish, *Trachipterus arcticus* (Lampriformes: Trachipteridae), from Canadian waters. Canadian Field-Naturalist 131(4): 325–327. <https://doi.org/10.22621/cfn.v131i4.1912>

In November 2014, a recently dead specimen of the meso-pelagic Dealfish, *Trachipterus arcticus*, was found on a fjord beach in northern Newfoundland. This represents the first record of the species in Canadian waters.

Key Words: Dealfish; *Trachipterus arcticus*; Newfoundland; range extension

Dealfish, *Trachipterus arcticus* (Brünnich, 1788), is a large but rarely seen meso-pelagic lampriform from the North Atlantic (Wheeler 1969) and one of ten species in the family Trachipteridae (ribbonfishes). Here, I report the first instance of this species in Canadian waters.

In November 2014, a large silver fish was noticed on the beach below a 10-m cliff on the south side of Northern Arm in the Bay of Exploits, Newfoundland, Canada (49.156061°N, 55.363428°W; Table 1). It was there at least 3–4 days (~5°C) before being retrieved by Greg Mercer and was apparently in very good condition (i.e., recently dead). The next day, it was brought to my attention, but, before pictures could be taken, birds had inflicted serious damage to it. However, enough of the animal remained (Figure 1) for a positive identification (Wheeler 1969; Palmer 1986), which was subsequently

supported by Lou Van Guelpen (curator of fishes, Atlantic Reference Centre) using photographs.

The specimen is scaleless, and the lateral line has forward-directed spines. It is long and extremely compressed, with a long dorsal fin. The pectorals are very small and the pelvic fins could not be located. Although the exact length of the animal cannot be determined, it exceeds 75 cm, and the isopropyl preserved eye is 63.6 mm in diameter. Its live appearance is illustrated in Figure 2.

Trachipterus arcticus does not appear in the records of Atlantic Fishes of Canada (Scott and Scott 1988) nor Fishes of the Gulf of Maine (Collette and Klein-MacPhee 2002). Previous sightings have been concentrated in the northeast Atlantic, from Norway and Iceland south to Madeira Island (Palmer 1986). The Global Biodiversity Information Facility (2017) indicates that

TABLE 1. Occurrences of Dealfish (*Trachipterus arcticus*) in North American waters.

Year	Month	Location	Latitude, °	Longitude, °	Source	Collection record
2014	11	Northeast Newfoundland	49.16	55.36	Dead on beach	The Rooms Provincial Museum Division*
2003	8	Atlantic coast of Florida	29.28	81.06	Dead on beach	Florida Museum of Natural History
2003	5	Southeast of Cape Cod	39.95	67.79	Research survey	Museum of Comparative Zoology, Harvard University
2003	5	Southeast of Cape Cod	39.87	67.26	Research survey	Museum of Comparative Zoology, Harvard University
2002	12	Gulf of Mexico	29.00	86.00	Tuna longliner†	Florida Museum of Natural History
2002	11	Gulf of Mexico	29.00	86.00	Captured at sea‡	Florida Museum of Natural History
1966	3	Gulf of Mexico	28.95	94.78	Unknown	Natural History Museum of Los Angeles County
1953	10	Long Island, New York	40.98	72.09	Dead on beach	American Museum of Natural History

*Provincial Museum Division, The Rooms Corporation of Newfoundland and Labrador (NFM).

†Caught using monofilament leaders at night.

‡Also captured at night.

Sources: Froese and Pauly (2017); Global Biodiversity Information Facility (2017).



FIGURE 1. Remains of Dealfish (*Trachipterus arcticus*) found in northern Newfoundland in November 2014. The carcass was in good condition before being consumed by birds. Photos: C. Purchase.



FIGURE 2. Artist reconstruction of the Dealfish (*Trachipterus arcticus*) carcass showing missing parts (top, mouth open) and drawing of a fresh specimen of this species (bottom, mouth closed). Illustrator: Marco Graziano.

11 specimens were collected in Greenland from 1890 to 1967, but exact locations are not available. Seven specimens have been reported from United States waters (Table 1); Robins and Ray (1986) suggest these could be a separate species, although they give no reasons. Three of these were caught in the Gulf of Mexico, two off the continental slope southeast of Cape Cod, and dead specimens were found on beaches on the Atlantic coast of Florida and on eastern Long Island (New York). The specimen from Newfoundland was ~1400 km northeast of the captures offshore of Cape Cod. It has been preserved and is held by the Provincial Museum Division, of The Rooms Corporation of Newfoundland and Labrador (accession number NFM PI-118).

Acknowledgements

I thank Greg Mercer for retrieving the fish from the beach and noticing that it was something special, Jamie Dean for bringing it to my attention, and Frank Purchase for freezing it. Marco Graziano did the illustrations for Figure 2. Comments received during the review process improved an earlier version of the manuscript.

Literature Cited

- Collette, B., and G. Klein-MacPhee.** 2002. Bigelow and Schroeder's Fishes of the Gulf of Maine. Third edition. Smithsonian Institution Press, Washington, DC, USA.
- Froese, R., and D. Pauly.** 2017. *Trachipterus arcticus*: occurrence records. In Fishbase: World Wide Web electronic publication. Accessed 7 March 2017. <http://www.fishbase.ca/museum/OccurrencesList.php?genus=Trachipterus&species=arcticus>.
- Global Biodiversity Information Facility.** 2017. *Trachipterus arcticus* (Brünnich, 1788). GBIF Secretariat, Copenhagen, Denmark. Accessed 7 March 2017. <http://www.gbif.org/species/2400507>.
- Palmer, G.** 1986. Trachipteridae. Pages 729–732 in Fishes of the North-eastern Atlantic and the Mediterranean, Volume 2. Edited by P. J. P. Whitehead, M. L. Bauchot, J. C. Hureau, J. Nielsen, and E. Tortonese. United Nations Educational, Scientific and Cultural Organization, Paris, France.
- Robins, C. R., and G. C. Ray.** 1986. A Field Guide to Atlantic Coast Fishes of North America. Houghton Mifflin Company, Boston, Massachusetts, USA.
- Scott, W. B., and M. G. Scott.** 1988. Atlantic fishes of Canada. Canadian Bulletin of Fisheries and Aquatic Sciences 219. Department of Fisheries and Oceans, Ottawa, Ontario, Canada.
- Wheeler, A.** 1969. Ribbon-fish, Deal-fish and Opah. Pages 190–192 in The Fishes of the British Isles and North-west Europe. Macmillan, London, United Kingdom.

Received 9 March 2017

Accepted 31 August 2017