



First records of the rare eelpout *Lycenchelys xanthoptera* Anderson, 1991 (Teleostei, Zoarcidae) in the Ross Sea, Antarctica

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Six eelpout species (Zoarcidae) are currently known from the Ross Sea and adjacent areas: *Dieidolycus leptodermatus* Anderson, 1988; *Lycodichthys dearborni* (DeWitt, 1962); *Ophthalmolycus bothriocephalus* (Pappenheim, 1912); *Pachycara brachycephalum* (Pappenheim, 1912); *Seleniolycus pectoralis* Møller & Stewart, 2006 and *Seleniolycus robertsi* Møller & Stewart, 2006 (Anderson, 1990, 2006; Møller & Stewart, 2006). Zoarcidae is thereby one of the most diverse non-Notothenoid fish families in the Ross Sea.

Recent collecting by New Zealand Ministry of Fisheries Observers and the Museum of New Zealand Te Papa Tongarewa (Te Papa) Natural Environment's Fish Team in the Ross Sea has resulted in many specimens registered into the National Fish Collection (NFC) at Te Papa. Examination of the zoarcids in this valuable new material (44 lots, 56 specimens) revealed 6 specimens assignable to the genus *Lycenchelys* Gill, taken from stomach samples of toothfish (*Dissostichus* spp.) and Antarctic starry skate (*Amblyraja georgiana*) caught on baited longlines. The zoarcids match the description of *Lycenchelys xanthoptera* Anderson, 1991, which is only known from the five type specimens taken from a single location in the Weddel Sea. In the present paper we provide new morphological and meristic data for this rare species and discuss the possible disjunct distribution pattern.

Methods and abbreviations

During the austral summers of 2001-02 and 2004-05, fish specimens were acquired as either by-catch or toothfish stomach contents, on exploratory commercial longlines using baited 9/0 hooks. Specimens were frozen on capture and returned to New Zealand where they were thawed and registered into the NFC at Te Papa. Fish specimens were fixed in 10% formalin and stored in 70% ethanol. All specimens were radiographed. Measurements were made with dial calipers to the nearest 0.1 mm. Definitions of character states and measurements follow those of Anderson (1982, 1994). Measurement abbreviations: SL = standard length; HL = head length. Institutional abbreviations: NMNZ = Museum of New Zealand Te Papa Tongarewa; ZMH = Zoological Museum, Hamburg.

Materials

Ross Sea: NMNZ P.038575, 269 mm SL, male, Antarctica, Ross Sea, Iselin Bank, 71° 19.00'S, 177° 10.00'E, depth 1249–1254 m, retrieved from gill slits of *Amblyraja georgiana* captured on a longline, FV *San Aotea II*, C. Morrish, OBS 1595A/083, 28 Feb. 2002; NMNZ P.038578, 270 mm SL, female, Antarctica, Ross Sea, Iselin Bank, 72° 33.00'S, 176° 50.00'E, depth 1131–1185 m, retrieved from stomach contents of *Dissostichus* sp. captured on a longline, FV *San Aotea II*, C. Morrish, OBS 1595A/050, 14 Feb. 2002; NMNZ P.038579, 268 mm TL, male, Antarctica, Ross Sea, Iselin Bank, 72° 26.00'S, 176° 18.00'E, depth 1067–1316 m, stomach contents of *Dissostichus* sp. captured on a longline, FV *San Aotea II*, C. Morrish, OBS 1595A/045, 12 Feb. 2002; NMNZ P.038637, 243 mm TL, female, Antarctica, Ross Sea, SE of Pennell Bank, 75° 4.00'S, 176° 0.00'W, depth 844–1225 m, probably stomach contents of *Dissostichus* sp. captured on a longline but not recorded in database, FV *Janas*, T. Brunning, OBS 1593A/045, 02 Feb. 2002; NMNZ P.038650, 245 mm SL, female, Antarctica, Ross Sea, SE of Pennell Bank, 75° 8.00'S, 175° 13.00'W, 1200–1375 m, stomach contents of *Dissostichus* sp. captured on a longline, FV *Janas*, T. Brunning, OBS 1593A/088, 19 Feb. 2002; NMNZ P.041373, 286 mm SL, female, Antarctica, Ross Sea, SE of Pennell Bank, 75° 7.00'S, 175° 30.00'W, 1172–1311 m, stomach contents of *Dissostichus* sp. captured on a longline, FV *Janas*, Jamie Williamson, OBS 2012/055, 2 Jan. 2005. **Weddel Sea:** ZMH 25116/ ISH 1-1991, paratype, 193 mm SL, immature male, off Kapp Norvegia, Queen Maud Land, 71°06.2'S, 12°53.8'W, 771–793 m, bottom trawl, FFS *Polarstern*, 20 Feb. 1989.