Austrorossia antillensis (Voss, 1955) Fig. 273

Rossia antillensis Voss, 1955, *Bulletin of Marine Science of the Gulf and Caribbean*, 5(2): 86 [type locality: Cuba].

Frequent Synonyms: None.

Misidentifications: None.

FAO Names: En – Antilles bobtail squid; **Fr** – Sépiole mignonne; **Sp** – Globito antillano.

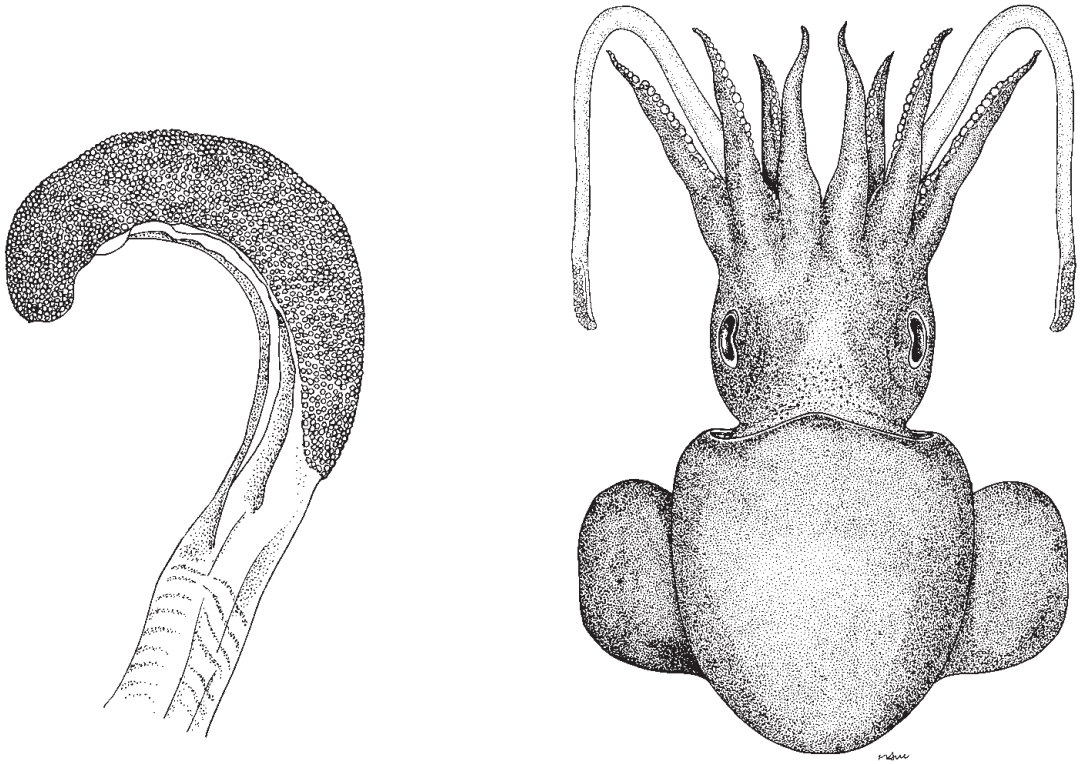


Fig. 273 *Austrorossia antillensis*

Diagnostic Features: Body soft, fleshy. Males mature at smaller sizes and do not grow as large as females. Mantle oval, short, saccular. Dorsal mantle free from head (not fused to head). Fins wide; ovate; short, do not exceed length of mantle anteriorly or posteriorly. Head slightly broader than mantle; eyes large. Male and female arms moderate length. Non-hectocotylized arm sucker arrangement same in both sexes: arm suckers biserial, suckers sparsely arranged; median arm suckers enlarged in males; larger than female arm suckers. Hectocotylus present, both dorsal arms modified: ventrolateral edge of proximal oral surface of hectocotylized arms bordered by swollen glandular crest, inner edge of which forms a deep furrow; **glandular crest extends over sucker rows 3 to 8**. Club slightly recurved, short; sucker-bearing face convex; tentacular club not expanded, same width as stalk; with **30 to 40 suckers in transverse rows**; all suckers of similar minute size; swimming keel of club extends slightly proximal to carpus. Anal flaps well developed. **Epirenal bodies and anal pads absent**. Ink sac well developed. **Colour:** Pinkish brown, with scattered dark purple chromatophores; fins pigmented the same as the mantle; dorsal pigmentation extends to ventral surface of fins.

Size: Up to 90 mm mantle length.

Geographical Distribution: Tropical western Atlantic: Caribbean Sea, Cuba, Dry Tortugas, and the Gulf of Mexico northward to the latitude of Tampa, Florida. Suriname (Fig. 274).

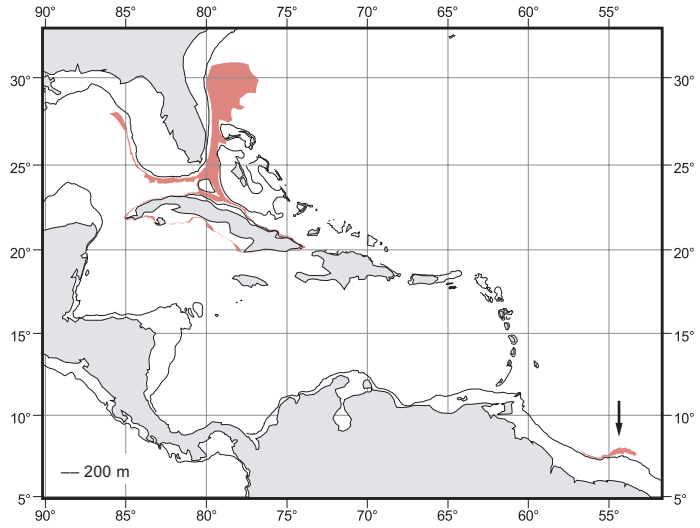


Fig. 274 *Austrorossia antillensis*
Known distribution

Habitat and Biology: Demersal; depth range from 540 to 700 m. This species is polytelic: ova ripen in small clusters, each individual spawning several times, probably throughout the year.

Interest to Fisheries: Undetermined, but it is likely to be consumed locally when captured as a bycatch of demersal trawl fisheries.

Remarks: ***Austrorossia antillensis*** is a large species in the genus. It is replaced by ***Rossia bullisi*** Voss, 1956 in more northerly waters.

Literature: Boletzky (1970), Roper *et al*. (1984), Okutani (1995).

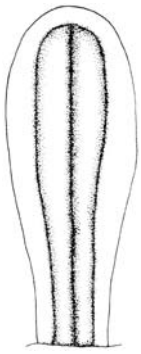
Austrorossia australis Berry, 1918 **Fig. 275**

Rossia (Austrorossia) australis Berry, 1918, *Biological Results of the Fishing Experiments carried on by the F.I.S. "Endeavour," 1909–14*, 4(5): 253 [type locality: southwestern Australia: Great Australian Bight southwest of Eucla, Western Australia].

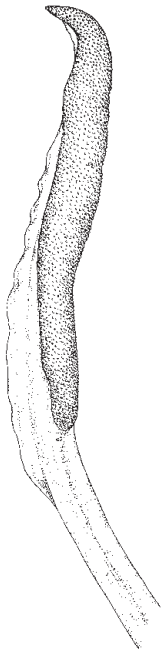
Frequent Synonyms: None.

Misidentification: None.

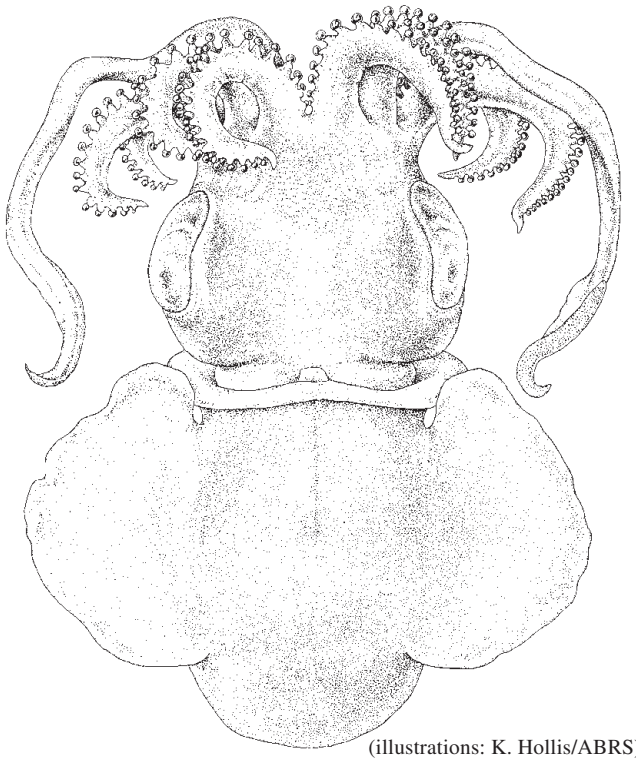
FAO Names: En – Big bottom bobtail squid; **Fr** – Sépiole australe; **Sp** – Globito austral.



nuchal-locking cartilage



tentacular club



(illustrations: K. Hollis/ABRS)

dorsal view of female

Fig. 275 ***Austrorossia australis***

Diagnostic Features: Body smooth, soft. Males mature at smaller sizes and do not grow as large as females. Dorsal mantle free from head (not fused to head). Nuchal cartilage oblong, rounded anteriorly, tapers to slightly narrower posteriorly. Fins wide, ovate, short, do not exceed length of mantle anteriorly or posteriorly; attached within anterior 2/3 of mantle. Non-hectocotylized arm sucker arrangement same in both sexes: arm suckers biserial; largest suckers on arms II and III larger than those on arms I and IV in both sexes. Hectocotylus present, both dorsal arms modified: ventrolateral edge of proximal oral surface of hectocotylized arms bordered by swollen glandular crest, inner edge of which forms a deep furrow; glandular crest **extends from sucker rows 4–6 to 8–11**. Club straight, slender, long; sucker-bearing face convex; **males 18 to 26 suckers in transverse rows; females 25 to 33 suckers in transverse rows**; all suckers of similar minute size. Anal flaps well developed. Ink sac well developed. **Epirenal bodies present in males only; anal pads present in both sexes**. Internal gladius present, chitinous; length approximately equal to mantle length; rachis extends almost to posterior tip of vane; **vane extends entire length of gladius**; shape lanceolate. **Colour:** Uniform pinkish to purplish brown.

Size: Males up to 34 mm mantle length; females up to 63 mm mantle length.

Geographical Distribution: Indo-Pacific: Australia, Queensland, Raine Island, 11º35'S 144º04'E, to Western Australia, Great Australian Bight, 34ºS 130º50'E (Fig. 276).

Habitat and Biology: Sandy and muddy substrates. Benthic; depth range from 131 to 665 m. This species is polytelic: ova ripen in small clusters, each individual female spawns several times, probably throughout the year.

Interest to Fisheries: Possibly minor fishery potential.

Remarks: A second ***Rossia*** species is found on the northwest shelf of Western Australia. While it has been shown to differ from ***R. australis***, primarily in quantitative characters, it cannot be distinguished from the African ***Austrorossia mastigophora*** (Chun, 1915). Further work is needed to clarify the status of this species.

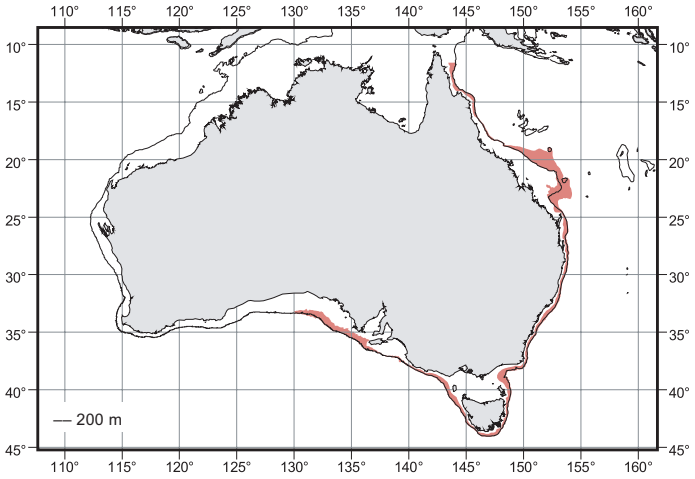


Fig. 276 ***Austrorossia australis***
Known distribution

Literature: Reid (1992), Okutani (1995), Reid and Norman (1998).

Austrorossia bipapillata (Sasaki, 1920) **Fig. 277**

Rossia bipapillata Sasaki, 1920, *Proceedings of the United States National Museum*, 57(2310): 190 [type locality: Japan, Suruga Bay, Shizuoka Prefecture].

Frequent synonyms: None.

Misidentifications: None.

FAO Names: En – Big-eyed bobtail squid; **Fr** – Sépiole à gros yeux; **Sp** – Globito ojos grandes.

Diagnostic Features: Body smooth, soft. Males mature at smaller sizes and do not grow as large as females. Dorsal anterior margin of mantle triangular, acute, blunt. Dorsal mantle free from head (not fused to head). **Nuchal cartilage oval**. Fins rounded, semicircular, short, do not exceed length of mantle anteriorly or posteriorly. Funnel organ strongly shouldered, with long extensions; ventral elements oval with acute anterior tips. Male and female arms subequal in length and long; female arm formula 3:2:1=4. Dorsal and lateroventral arms with low, but distinct keels. Non-hectocotylized arm sucker arrangement same in both sexes: arm suckers biserial, globular. Club straight, slender, or coiled; with **25 to 30 suckers in transverse rows**; all suckers of similar minute size. Anal flaps well developed. Ink sac well developed. **Epirenal bodies and anal pads present in both sexes**.

Size: Up to 57 mm mantle length.

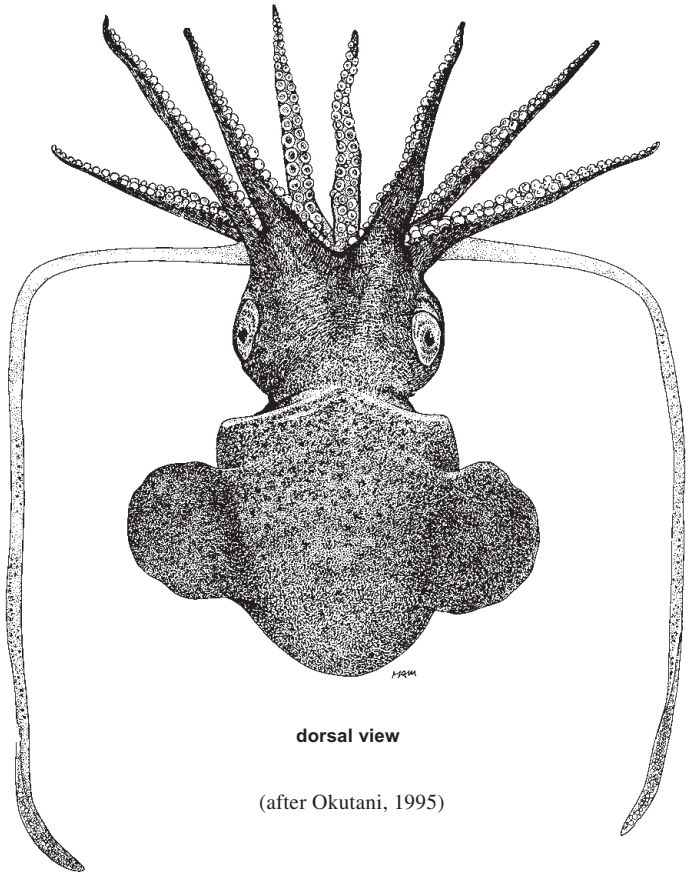


Fig. 277 ***Austrorossia bipapillata***

Geographical Distribution: Western Pacific: East China Sea, Japan (common on the lower shelf in Suruga Bay to Tosa Bay), Taiwan Province of China, Philippines (Fig. 278).

Habitat and Biology: Depth range 240 m in Suruga Bay, 432 m in the East China Sea. A polytelic species: ova ripen in small clusters and each individual female spawns several times, probably throughout the year.

Interest to Fisheries: Of minor interest to fisheries, it is usually caught as bycatch and is marketed fresh and frozen.

Remarks: This species differs from ***Austrorossia mastigophora*** (Chun, 1915) in the shape of the funnel organ, which is not so sharply angled in ***A. mastigophora***, and in the arm formula (***Rossia mastigophora***: 3:4:2:1). ***Austrorossia bipapillata*** differs from ***R. mollicella*** Sasaki, 1920 in possessing anal pads and in the number of tentacle-club suckers (8 in each transverse row in ***R. mollicella***). It differs from ***R. pacifica*** Berry, 1912 in having an oval, rather than elongate, parrallel-sided, nuchal-locking cartilage, and in the number of club suckers; the club suckers are arranged in 8 to 10 rows, and anal pads are lacking in ***R. pacifica***.

Literature: Sasaki (1929), Voss (1963), Okutani *et al*. (1987), Okutani (1995), Kubodera and Yamada (1998), Lu (1998b), Reid and Norman (1998).

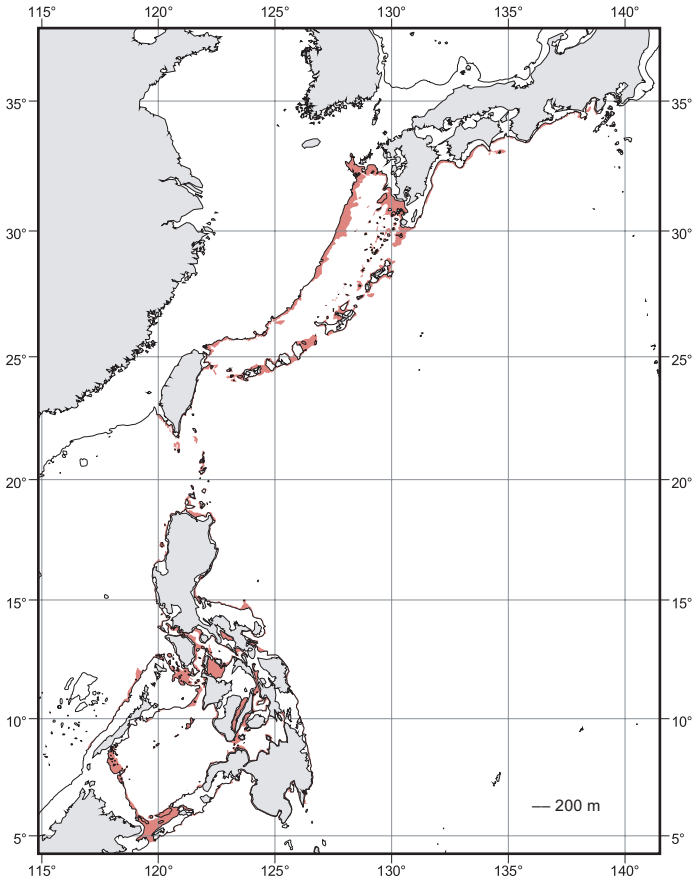


Fig. 278 ***Austrorossia bipapillata***
Known distribution

SPECIES OF NO CURRENT INTEREST TO FISHERIES, OR RARE SPECIES FOR WHICH ONLY FEW RECORDS EXIST TO DATE

Rossia brachyura Verrill, 1883

Rossia brachyura Verrill, 1883, *Bulletin of the Museum of Comparative Zoology*, 11(5): 110 [type locality: Caribbean Sea].

Geographical Distribution: Tropical western Atlantic: Greater and Lesser Antilles.

Literature: Joubin (1902b).

Rossia bullisi Voss, 1956

Rossia bullisi Voss, 1956, *Bulletin of Marine Science of the Gulf and Caribbean*, 6(2): 101 [type locality: Gulf of Mexico].

Size: Up to 45 mm mantle length.

Geographical Distribution: Tropical western Atlantic: northern Gulf of Mexico and Straits of Florida.

Literature: Roper *et al*. (1984).

Rossia glaucopis Loven, 1845

Rossia glaucopis Loven, 1845, *Ofversigt af Kongl. Vetenskaps-Akademiens Forhandlingar*, 2(5): 121 [type locality: Chile].

Geographical Distribution: Southeastern Pacific, Chile.

Literature: Joubin (1902b), Rocha (1997).

Rossia megaptera Verrill, 1881

Rossia megaptera Verrill, 1881, *Transactions of the Connecticut Academy of Sciences*, 5(6): 349 [type locality: northwest Atlantic Ocean].

Size: Up to 40 mm mantle length.

Geographical Distribution: Northwestern Atlantic: Davis Strait and western Greenland, Hudson Canyon, off New York. Depth range from 179 to 1 536 m.

Literature: Mercer (1968), Joubin (1902b), Okutani (1995).

Rossia moelleri Steenstrup, 1856

Rossia moelleri Steenstrup, 1856, *Kongelige Danske Videnskabernes Selskabs Skrifter, 5 Raekke, Naturvidenskabelig og Mathematisk*, 4: 198 [type locality: Greenland].

Geographical Distribution: North Atlantic and Arctic Ocean: eastward to the Laptev Sea, westward to Amundsen Bay, western and northeastern Greenland, northeastern Canada, Labrador, Spitzbergen, Jan Mayen and Kara Seas. Depth range from 17 to 250 m.

Literature: Mercer (1968), Joubin (1902b), Okutani (1995), Nesis (1999).

Rossia mollicella Sasaki, 1920

Rossia mollicella Sasaki, 1920, *Proceedings of the United States National Museum*, 57(2310): 189 [type locality: Japan, Wakayama Prefecture].

Size: Up to approximately 36 mm mantle length.

Geographical Distribution: Western Pacific: Japan, Pacific coast, south from Sendai Bay. Outer shelf and upper bathyal. Depth range from 729 to 805 m.

Literature: Sasaki (1929), Okutani (1995).

Rossia pacifica diegensis Berry, 1912

Rossia pacifica diegensis Berry, 1912b, *Bulletin of the Bureau of Fisheries*, 30(1910): 292 [type locality: California].

Geographical Distribution: Eastern Pacific: USA, California, Santa Catalina Basin(?) (see Remarks in ***R. pacifica pacifica***).

Literature: Mangold *et al*. (1998).

Rossia palpebrosa Owen, 1834

Rossia palpebrosa Owen, 1834, *In* J. Ross, *Narrative of a second voyage in search of a North West Passage, 1829–1833. (Volume II, Appendix, Natural History)*, xcii [type locality: "Arctic Regions"].

Size: Up to approximately 45 mm mantle length.

Geographical Distribution: Amphi-North Atlantic: from the Canadian Arctic, Baffin Bay, Greenland south to South Carolina (32°N) in the western Atlantic; from Iceland, Spitzbergen, Scotland, Berents Sea and Kara Sea to the North Sea and off Ireland (51°N) in the eastern Atlantic. Depth range from 75 to 549 m.

Literature: Joubin (1902b), Akimushkin (1963), Aldrich and Lu (1968), Mercer (1968), Boletzky (1970).

Austrorossia enigmatica (Robson, 1924)

Rossia enigmatica Robson, 1924a, *Proceedings of the Zoological Society of London*, 1924(2): 635 [type locality: South Africa].

Size: Types up to 27 mm mantle length.

Geographical Distribution: Southeastern Atlantic: South Africa, Namibia to Cape Province. Depth range from 276 to 400 m.

Literature: Voss (1962b), Roeleveld *et al*. (1992), Augustyn *et al*. (1995).

Austrorossia mastigophora (Chun, 1915)

Rossia mastigophora Chun, 1915. *Wissebschaftliche Ergebnisse der Deutschen Tiefsee Expedition auf dem Dampfer "Valdivia" 1898–1899*, 18(2): 405 [type locality: northwestern Indian Ocean, 0°27'S 42°47'E, near East African coast].

Size: Males up to approximately 31 mm mantle length; females up to 46 mm mantle length.

Geographical Distribution: Western, southern and eastern Africa: from Guinea and Somalia to the Cape of Good Hope. Chile (doubtful). Depth up to approximately 640 m.

Literature: Voss (1962b), Rocha (1997).

Semirossia patagonica (Smith, 1881)

Rossia patagonica Smith, 1881, *Proceedings of the Zoological Society of London*, 1881(1): 22 [type locality: Argentina: Patagonia].

Geographical Distribution: Southwestern Atlantic and southeastern Pacific: southern part of South America from Chile, Anegada Bay, Tierra del Fuego, Argentina, Falkland Islands.

Literature: Joubin (1902b), Rodhouse *et al*. (1992), Rocha (1997).

Neorossia leptodons Reid, 1992

Neorossia leptodons Reid, 1992, *Bulletin of Marine Science*, 49(3): 797 [type locality: South Australia: Great Australian Bight, 37º18.81'S 138º36.3'E to 37º17.76'S 138º35.01'E].

Size: Males up to 42 mm mantle length; females up to 77.5 mm mantle length.

Geographical Distribution: Southwestern Pacific: Australia, New South Wales, 32º08'S 153º07'E to South Australia, 33º58'S 131º22'E. Depth range from 130 to 1 110 m.

Literature: Reid (1992).

NEXT PAGE