

Sabia conica (Schumacher) on the Pacific Coast of North America

BY

I. McTAGGART COWAN

(1 Plate)

THREE SPECIMENS OF *Sabia conica* (Schumacher, 1817) from the Queen Charlotte Islands were taken by Dr. Frank Bernard of the Canada Department of Environment, Biological Station, Nanaimo, British Columbia, on August 17, 1963, at Tasu Harbor, Q. C. I., British Columbia.

The 3 specimens were attached to a living abalone (*Haliotis kamtschatkana* Jonas, 1845). No others have been found in the examinations of many hundreds of live-taken specimens of *Haliotis* and other mollusks from the coast of British Columbia.

Two of the *Sabia* specimens retain the larval shell; one of these preserves the surface detail (Figures 1 and 2). Comparisons of these specimens with the large series representing other species in the Atlantic and Pacific faunas reveal some unique features. However, the resemblance to *Sabia conica* of the Indo-Pacific region is so close that, until additional living specimens are secured, I do not feel justified in naming a new species.

GRIFFITH (1967) reported *Hipponix tumens* from Table Island, Queen Charlotte Sound, British Columbia, on the basis of a single specimen taken alive attached to a stone in the intertidal zone. She has permitted me to examine the specimen. It is clearly not *H. tumens* (Figure 3) but seems to me to be an adult shell of *S. conica* (COWAN, 1974). It differs from specimens of this species from the tropical Pacific in whitish rather than brown colour, slightly larger and more clearly defined muscle scars and in some minor details of sculpture. Details of form, sculpturing and colour of the specimens from Tasu Harbour are within the range of variation of *S. conica*.

Thus *Sabia conica* is now reported from two localities, separated by more than 160km, on the British Columbia

coast of the N. E. Pacific Ocean. The areas of occurrence are close to that in which CLARKE (1972) has recorded another Indo-Pacific gastropod, *Clanculus microdon ater* Pilsbry, 1911.

The northward distribution of *Sabia conica* elsewhere in the Pacific extends to Hawaii (TINKER, 1958) and to about the 43rd parallel (southern Hokkaido) along the coast of Japan (KURODA *et al.*, 1971).

The British Columbia localities are in year round cold water (mean annual absolute maximum and minimum 12 $\frac{2}{3}$ ° C and 6 5/9° C) and beyond the normally understood tolerance of the species. Tasu Harbour, Q. C. I., is the location of a metal mine that has exported much of its product to Japan on Japanese vessels. These could have introduced larvae to the locality. The Table Island site could have received an introduction from passing ships – many Japanese vessels ply the adjacent strait.

Literature Cited

- CLARKE, ARTHUR H., JR.
1972. *Clanculus microdon ater* Pilsbry in British Columbia. Canad. Field Nat. 86 (2):
COWAN, I. McTAGGART
1974. The West American Hipponicidae and the application of *Mal-luvium*, *Antisabia* and *Hipponix* as generic names. The Veliger 16 (4): in press
GRIFFITH, L. M.
1967. The intertidal univalves of British Columbia. B. C. Prov. Mus. Handb. No. 26: 101 pp.
KURODA, TOKUBEI, TADASHIGE HASE & KATURA OYAMA
1971. The sea shells of Sagami Bay. Maruzen Co., Tokyo: 489 pp.
TINKER, SPENCER WILKIE
1958. Pacific sea shells; a handbook of common marine mollusks of Hawaii and the South Seas. 240 pp.; illust. C. E. Tuttle Co., Vermont and Tokyo

Explanation of Figures 1 to 3

Figure 1: *Sabia conica* from Queen Charlotte Islands, British Columbia, external features of shell 4.8mm

Figure 2: *Sabia conica* larval shell showing longitudinal sculpture below

Figure 3: *Sabia conica* Table Island, British Columbia (mature specimen)



McTaggart-Cowan, Ian. 1974. "SABIA-CONICA ON THE PACIFIC COAST OF NORTH AMERICA." *The veliger* 16, 290–290.

View This Item Online: <https://www.biodiversitylibrary.org/item/134247>

Permalink: <https://www.biodiversitylibrary.org/partpdf/93995>

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

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

Rights Holder: California Malacozoological Society

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

Rights: <https://www.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>.