

MOLLUSC TREASURE IS TRANSFERRED TO BISHOP MUSEUM

By BEATRICE L. BURCH

The Bernice P. Bishop Museum of Honolulu has acquired an outstanding miscellaneous marine invertebrate collection which is now being curated at the Hawaiian laboratory of the U.S. National Marine Fisheries Service (NMFS). The majority of the specimens were taken by the NMFS oceanographic and research vessel *Townsend Cromwell* from about 1960 to the present.

The collection — which is particularly strong in Hawaiian material — includes nearly all invertebrate phyla, primarily those represented at depths of 200 to 500 meters on soft bottoms. Animals were obtained during exploration for commercial beds of bottom-dwelling shrimp, using trawls and traps, from pelagic midwater gear testing for tuna larvae, and from plankton tows taken near the surface for tuna eggs and juveniles.

Bishop Museum's Division of Invertebrate Zoology is responsible for the overall curating, with support from the National Science Foundation for the separation, sorting and identification. The NMFS in Honolulu is providing preservatives and facilities for initial curation of the specimens.

Sorting at the NMFS facilities here is being accomplished under the direction of the present writer as collection manager. I am aided by three students from the University of Hawaii Marine Options Program — Annette Young, Allison Chun and Alex Steele — with assistance from Bishop Museum staff members Georgia Tien and William Haus.

On completion of our project, parts of this large deep-water collection are to be deposited at the Bishop Museum, at the NMFS and at other designated institutions.

During the first few months of operation under the NSF grant, emphasis was on preparation of echinoderms for study. At the same time, however, 246 species of 65 higher taxonomic categories from most invertebrate phyla also were rinsed from shipboard preservatives and dried or stored in alcohol.

Townsend Cromwell collected mostly in Hawaiian waters, although in oceanographic studies it ranged over the equatorial Pacific. Exploratory hauls were usually over several miles and sometimes took several hours per station. Thus, while catches of certain groups were large, they might represent



either a thinly and widely scattered or a concentrated locally abundant fauna.

Late in the 1880s and early 1900s, the U.S. Bureau of Commercial Fisheries research steamer *Albatross* worked on deep-water fauna of the Pacific, making about 400 hauls in the Hawaiian Islands. The gear used included tangles as well as Tanner and Blake benthic trawls that resulted in significant biological catches.

This material was deposited in the Museum of Comparative Zoology at Harvard University and at the U.S. National Museum-Smithsonian Institution in Washington, D.C. Both had scientists aboard *Albatross*.

Not all invertebrate groups have been identified yet. Some groups, however, were studied immediately after being collected, in response to the interests and abilities of the investigators involved. From this *Albatross* material, many species of corals, crustacea, echinoderms and molluscs have been described and named.

Recent *Townsend Cromwell* exploratory cruises have been based on the results of the *Albatross* trawling. The early faunal distribution information was used to locate shrimp beds. So the recent acquisition by the Bishop Museum is valuable also as confirmation of fauna present in certain areas 80 to 100 years ago.

Much of the *Albatross* molluscan material was worked on by Dr. William Healey Dall, a geologist with the U.S. Geological Survey, who curated the U.S. National Museum's collection of molluscs for many years.



Save the Best Until the Last

By OLIVE SCHOENBERG

Since I am a *Terebra* fancier, if anyone had asked me what shell I wanted to find more than any other, I would have said, "*Terebra succinea* Hinds, 1844 — of course."

But no one ever asked me. It was just as well, I guess, because I knew I was never going to find one.

Eight years ago, a member of our HMS group visiting Fiji stumbled on a gorgeous specimen on the Suva Reef at low tide. It vanished mysteriously just before we were to leave for home. Ever since then I had wanted one.

The late Bob Browne of the Suva Shell Club felt sorry for me and sent me one. I tried for a long time to get another — writing letters all over the world — to no avail. No one even knew where the elusive *Terebra* lived. One man suggested, "In deep water off Australia." That didn't help me any.

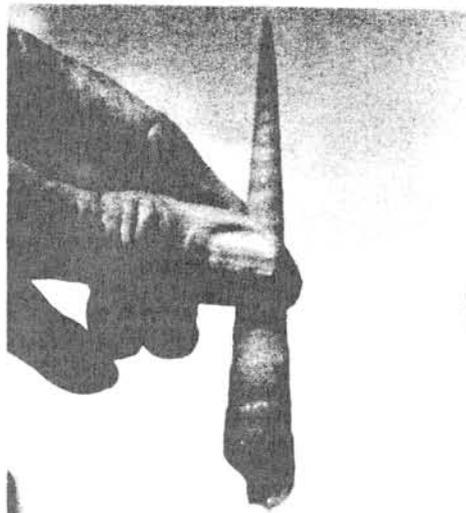


Photo: Schoenberg

But a *succinea* was waiting for me! After diving (twice a day) for almost a month in every patch of sandy bottom around Nagada, Papua New Guinea, and dredging Hansa Bay off Laing Island, believe it or not I made contact.

The lovely golden *Terebra* advertised itself by drawing a long, pronounced trail in clean sand on a reef slope. I was on my last dive of our last day, and was swimming back to the dive boat with barely 100 pounds of air left in my scuba tank when I saw it! I swam back down to the sand, followed the trail to a bump at the end, and lifted that beauty out.

At long last I had found a *Terebra succinea*, to me the world's rarest prize.

Beatrice Burch and Annette Young examine material that the U.S. National Marine Fisheries Service recently turned over to the Bishop Museum in Honolulu. Some specimens have been waiting nearly 100 years for curating. Above, Mrs. Burch, manager of the project, at her desk.