

United States Department of Commerce. 1970. *Surface water temperature and density. Pacific coast, North and South America and Pacific Ocean islands.* 3rd edition. NOS Pub. 31-3. 88 p.

***Corbicula fluminea* Müller (Mollusca: Bivalvia) Established on Oahu**

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On 7 September 1992, in Kamooalu Stream adjacent to Kaneki Street, Kaneohe, Oahu, Hawaii, a live juvenile *Corbicula fluminea* Müller, 1774 [BPBM Acc. No. 1995.007; Cat. No. BPBM 250462] was collected and photographed. It was first reported from Hawaii being sold as food in an open market at Kailua, Oahu on 8 August 1977 (B.L. Burch, 1978, *The Nautilus* 92(1): 54–55). This is the first record of this species now being established in streams on the windward side of Oahu.

New Records of Deep-Water Bivalves from the Hawaiian Islands (Mollusca: Bivalvia)

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***Alectryonella plicatula* (Gmelin, 1791)**

This is a **new state record** of the tropical southwest Pacific oyster found growing on a stem of black coral (*Antipathes* sp.) by the NOAA National Marine Fisheries Service research vessel *Townsend Cromwell*.

Material examined. Cat. No. BPBM 250463, 1 live specimen, TC-090-10-204, 06/12/90, South Molokai [021°03.0'N, 157°02.0'W] [79 m].

***Neopycnodonte cochlear* (Poli, 1795)**

Twenty-five live specimens of this tropical Pacific oyster, which is a **new state record**, were found growing on black coral (*Antipathes* sp.) by the NOAA National Marine Fisheries Service Research Vessel *Townsend Cromwell* off Molokai in 79 meters [Acc. No. 1991.018] (only the valves attached to the coral were retained.) In addition, the *Townsend Cromwell* trawled 354 dead juvenile valves from 9 stations off Kahului, Maui [Acc. No. 1991.136, Cat. No. BPBM 250464].

Material examined. Cat. No. BPBM 250469, 1 valve, TC-033-09, 10/30/67, Hawaii [020°58.8'N, 156°48.2'W] [229-234 m]; Cat. No. BPBM 250470, 139 valves, TC-033-18, 11/01/67, Hawaii [021°03.7'N, 156°43.7'W] [245 m]; Cat. No. BPBM 250471, 8 valves, TC-033-37, 11/09/67, Hawaii [020°42.8'N, 156°42.1'W] [260-292 m]; Cat. No. BPBM 250472, 122 valves, TC-033-50, 11/13/67, Hawaii [021°00.4'N, 156°45.4'W] [210-241 m]; Cat. No. BPBM 250473, 5 valves, TC-033-

54, 11/14/67, Hawaii [020°57.3'N, 156°47.6'W] [214 m]; Cat. No. BPBM 250474, 36 valves, TC-033-55, 11/14/67, Hawaii [020°57.1'N, 156°47.1'W] [205-214 m]; Cat. No. BPBM 250475, 4 valves, TC-035-02, Hawaii [020°58'N, 156°46'W] [110 Fms]; Cat. No. BPBM 250476, 3 valves, TC-035-04, 03/28/68, Hawaii [020°59'N, 156°45'W] [110 Fms]; Cat. No. 250477, 10 valves, TC-036-19, 05/03/68, Hawaii [021°42.0'N, 158°05.0'W] [60 Fms]; Cat. No. BPBM 250464, 25 valves, TC-90-10-204, 12/06/90, South Molokai [021°03.0'N, 157°01.0'W] [43 Fms].

Verticordia aequicostata Howard, 1950

This is a **new state record** and is a range extension from the Pacific Coast of the Americas and the Galapagos Islands. Two intact and 13 valves of this deep-water septibranch (*Bivalvia*) were dredged by the Burch 32-foot salmon trawler, *Janthina VII*.

Material examined. Cat. No. BPBM 250465, 2 intact and 13 valves, BURCH-82064, 10/02/82, Mamala Bay, Oahu, [021°16.4'N, 157°52.4'W] [277m].

Verticordia deshayesiana (Fischer, 1862)

This is a **new state record** and is a range extension from the Atlantic and from Japan. This deep-water septibranch (*Bivalvia*) was dredged by the Burch 32-foot *Janthina VII*.

Material examined. Cat. No. BPBM 250467, 1 valve, BURCH-80093, 11/15/80, Mamala Bay, Oahu [021°16.9'N, 157°55.5'W] [199 m]; Cat. No. BPBM 250466, 9 valves, BURCH-82004, 01/10/82, Mamala Bay, Oahu [021°16.6'N, 158°01.2'W] [183 m].

Recent Observations of Endangered Hawaiian Monk Seals (*Monachus schauinslandi*) on the Main Hawaiian Islands

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Virtually all occurrences of the Hawaiian Monk Seal on land are from the Northwestern Hawaiian Islands. Sightings on the main islands (Kauai, Oahu, Molokai, Lanai, Kahoolawe, Maui, Hawaii) are relatively rare, and most of these are from Kauai (Tomich 1986).

In recent years, a surplus of adult male seals at 2 main breeding sites has led to many instances of "mobbing," where groups of males attack and injure (sometimes fatally) adult females and immature seals of both sexes. To mitigate the effects of mobbing, the Marine Mammal Research Program of the National Marine Fisheries Service removed the surplus adult males at one of the breeding sites in 1994. The males were tagged for individual identification and released around the main Hawaiian Islands. Biologists from around the state are cooperating to monitor these animals to determine their movements and, in particular, to determine if they return to the Northwestern Hawaiian Islands. In addition, 5 males were fitted with satellite transmitters, which send signals to satellites passing overhead and thereby allow additional tracking of these males.

To date, dozens of sightings of these males have been documented, and satellite observations provide approximately 50 additional locations where animals have hauled out onto the beaches of the main Hawaiian Islands. These sightings have occurred from South Point on Hawaii Island to Kilauea Point on Kauai. Importantly, most of the males appear to be staying in the area where they were released. However, the success of this