

New range data for five Trochiform gastropods (Seguenziida & Trochida) from Alaska

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ABSTRACT New range data is presented for four species of Vestigastropods from Alaska. *Bathybembix bairdii* (Dall, 1889) is confirmed from Alaska for the first time.

KEY WORDS Eucyclidae, Calliostomatidae, *Calliostoma*, *Bathybembix*, *Cidarina*, Alaska.

INTRODUCTION

The off-shore waters of Alaska are rarely sampled, and the mollusk fauna is poorly known. Resource assessment trawl surveys in Alaska by the National Marine Fisheries Service (NMFS), Alaska Fisheries Science Center have brought to light numerous new distribution records for marine mollusks. Records for five species in the orders Seguenziida and Trochida are reported upon herein.

McLean, 1996 placed *Bathybembix bairdii* (Dall, 1889) and *Cidarina cidaris* (Carpenter, 1864) in the family Trochidae Rafinesque, 1815, subfamily Calliotropinae. Bouchet, *et. al.*, 2017 transferred these to the family Eucyclidae Koken, 1896, in the order Seguenziida.

NMFS station data is as follows, first two or three numbers refer to the vessel, the next six numbers are the year and cruise number, and the last numbers are the station number. All specimens are in the R.N. Clark collection. Vouchers to be deposited at the Santa Barbara Museum of Natural History (SNMNH), and the Los Angeles County Museum of Natural History (LACM).

Family: Eucyclidae Koken, 1896

***Bathybembix bairdii* (Dall, 1889)**, previously reported from Isla Cedros Baja California, Sur, Mexico (28°) to the Queen Charlotte Islands, British Columbia, Canada (54°) (McLean, 1996).

New records: Gulf of Alaska, W of Noyes Island, Alaska (55°44.77 N, 135°24.55W) (NMFS 134-200501-223), 712 m on mud. Bottom Temperature 3.7°. (*leg.* Duane E. Stevensen, R/V Ocean Explorer, 11 July, 2005). Three specimens: 34.6-37.8 mm. (Figure 1 A).

Gulf of Alaska, W of Noyes Island, Alaska (55°44.76N, 135°21.79) (NMFS 143-201701-289), 671 m on mud. Bottom Temperature 4°C. (*leg.* NMFS, R/V Sea Storm, 2 August, 2017). Two specimens: 32.8 mm and 35.5 mm.

These new records extend the known distribution of *Bathybembix bairdii* 160 km to the North.

***Cidarina cidaris* (Carpenter, 1864)**, previously reported from Isla Cedros, Baja California Sur, Mexico (28°N) to Prince William Sound, Alaska (60°N) (McLean, 1996).

New record: Gulf of Alaska, South of Alaska Peninsula (55°36.81N, 159°11.82 W) (NMFS 159-200901-60), 107 m on mud/stones. Bottom Temperature 2.9°C. (*leg.* R.N. Clark, R/V Pacific Explorer, 8 June, 2009). Six specimens: 32.5-40.6 mm. (Figure 1 B).

This new record extends the known distribution of *Cidarina cidaris* approximately 1,000 km to the Southwest.

Family: Calliostomatidae Thiele, 1924

***Calliostoma platinum* Dall, 1890**, previously reported from San Diego, California (33°N), to Moresby Island, Queen Charlotte Islands, British Columbia, Canada (53°N) (McLean, 1996).

New records: Gulf of Alaska, SE of Forrester Island (54°38.46 N, 133°15.66 W), 371 m. Bottom Temperature 5.5°C (NMFS 143-201701-307) (*leg.* NMFS R/V Sea Storm, 6 August, 2017). One specimen: 25.1 mm.

Remarks: This is an unusual specimen with prominent spiral lirae. (may represent an undescribed species). (Figure 1 D).

Southeastern Alaska, Prince of Wales Island, Cholmondeley Sound, West arm (55°15 N, 132°20 W) (*leg.* Carmelita Zwick, November, 1990). One specimen: 30.7 mm.

Gulf of Alaska, South of Icy Bay (59°17.61 N, 141°56.04 W) (NMFS 100-199601-231), 231 m on gravel. Bottom Temperature 5.2°C. (*leg.* R. N. Clark, F/V Golden Dawn, 18 July, 1996). Two specimens: 18.5 mm (LACM152739) and 34.31 mm (RNC) (Figure 1 C).

These new records extend the known distribution of *Calliostoma platinum* approximately 1,000 km to the North.

***Calliostoma annulatum* (Lightfoot 1786)**, previously reported from Isla San Jerónimo, Baja California, Mexico (29°50 N), to Forrester Island, Alaska (55°N) (McLean, 1978).

New record:

Gulf of Alaska, East of Afognak Island (58°18.13 N, 151°09.93 W) (94-200101-221), 86 m on rocks/gravel. Bottom Temperature 6.8°C. (*leg.* R.N. Clark, 11 July, 2001). Two juvenile specimens 14.0 and 14.2 mm. (Figure 1 E).

This new record extends the known distribution of *Calliostoma annulatum* approximately 1,200 km to the Northwest.

***Calliostoma variegatum* Carpenter, 1864**, previously reported from Isla Cedros, Baja California Sur, Mexico (28°N) to Forrester Island, Alaska (55°N) (McLean, 1996).

New record: Gulf of Alaska, East of Afognak Island (58°18.13 N, 151°09.93 W) (94-200101-221), 86 m on rocks/gravel. Bottom Temperature 6.8°C. (*leg.* R.N. Clark, 11 July, 2001). Three juvenile specimens 9.8 to 12.6 mm. (Figure 1 F).

This new record extends the known distribution of *Calliostoma variegatum* approximately 1,200 km to the Northwest.

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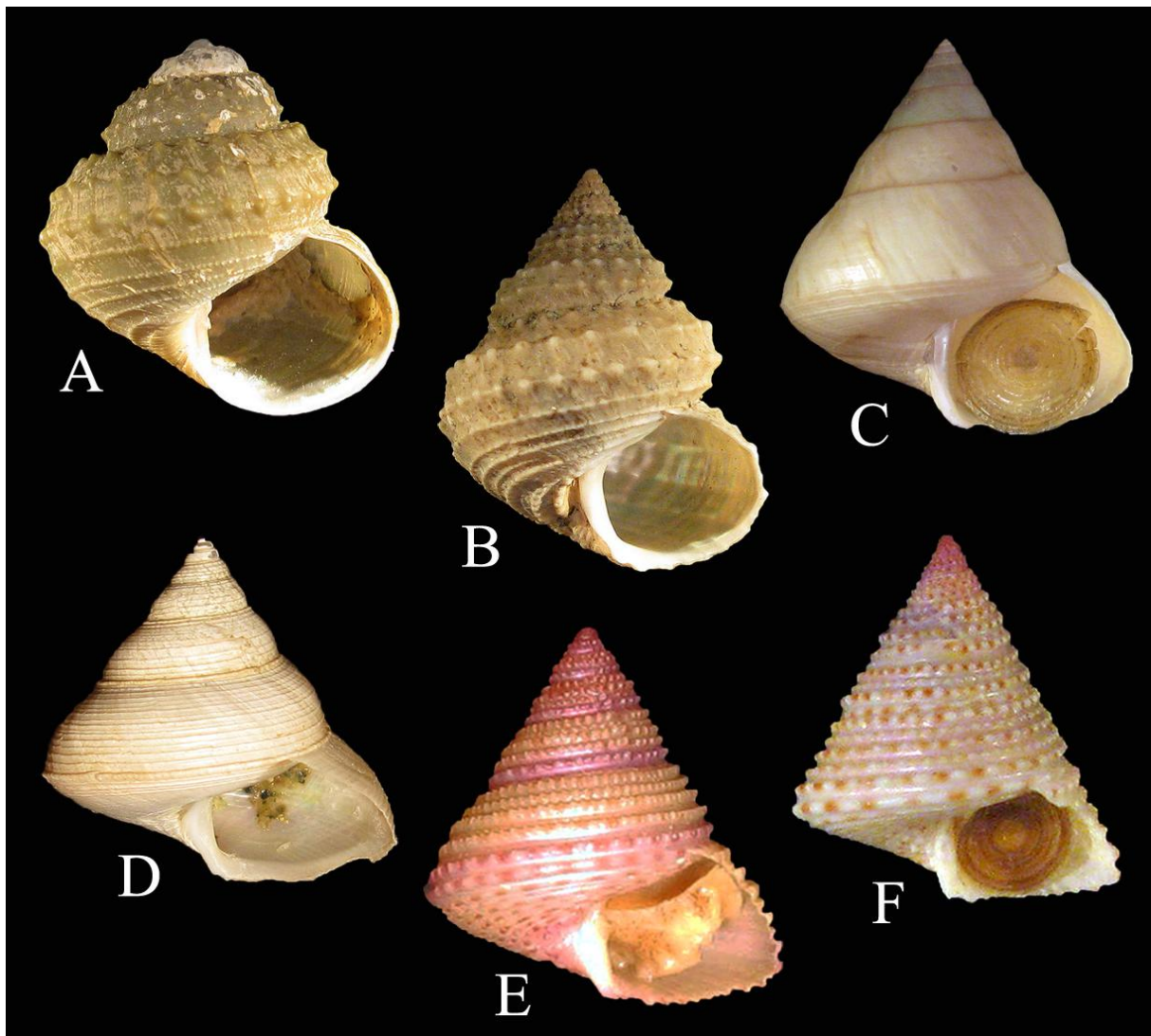


Figure 1. Alaskan Trochiform Gastropods. **A** = *Bathybembix baridii*. **B** = *Cidarina cidaris*. **C** = *Calliostoma platinum*. **D** = *Cf. Calliostoma platinum*. **E** = *Calliostoma annulatum*. **F** = *Calliostoma variegatum*.