

The rare Elegant ribbed limpet, *Scelidotoma bella* (Gabb, 1865) F. Fissurellidae, found off the west coast of Vancouver Island, BC Canada

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It is rare to find one Elegant ribbed limpet (Elegant emarginula), *Scelidotoma bella* (Gabb, 1865) and remarkable to find two. However, diver, Gabe Howells, found this unusual surprise on predator nets at a fish farm north of Tofino, B.C., March 11, 2014. Two Elegant ribbed limpets (the largest being 71.5 mm long) were among many mollusks and other specimens collected for the Ucluelet Aquarium, based at Ucluelet, on the west coast of Vancouver Island, B.C. The common name accepted in many publications is the Elegant emarginula. Considering that the adult shell is without the Emarginula-like slit, we propose that the **Elegant ribbed limpet** is a more appropriate common name, emphasizing the prominent keel-like rib. The etymology of the scientific name is *skelis* = rib cage, *tome* = cutting or separation, and *bella* = elegant or beautiful. The type specimen of the Elegant ribbed limpet was dredged at Monterey, California (UCMP 12552) and given the original name *Emarginula bella* Gabb, 1865. Dall, working with a juvenile specimen with a distinct notch, described a juvenile limpet as *Subemarginula yatesii* Dall, 1901 (USNM 162062). It is now regarded as a synonym of *S. bella*. Other synonyms are *Hemitoma bella* (Gabb, 1865) and *Arginula bella* (Gabb, 1865) in Kozloff (1996). McLean (1966) elevated this limpet to a new genus, *Scelidotoma* and the current accepted name, *S. bella*. Although this limpet has a broad geographic range, Forrester Island, SE Alaska to Cabo San Martin, Baja California, Mexico, there are few records in museum collections. It has been found intertidally in Alaska and subtidally in other regions, on rocky bottoms at 20-110 m (McLean, 1996).

A voucher specimen of *S. bella* (Fig. 1) was a helpful aid in the identification of this unusual limpet. It was found diving at 15 m, at Trunk Island, Ketchikan, Alaska (May 2001) by Scott Walker (Alaska Department of Fish and Game). The exterior of the shell is cream-colored with brown streaks. The apex of the shell is hooked, pointed towards the posterior, and is posterior to the center. Adult specimens have a unique single raised rib, running to the anterior margin, where an arch is formed (Fig. 1). Juvenile shells (~5mm) are reported to have a prominent deep open notch that fills in as they grow (McLean, 1966). There are numerous other alternating strong and weak ribs, intersecting with commarginal growth lines, forming nodules. The interior of the shell is glossy white, with a crenulated margin and a deep furrow corresponding to the exterior raised rib. The muscle scar is horseshoe-shaped, with in-turned hooked scars.

Fig. 1. Elegant ribbed limpet, *Scelidotoma bella* found diving at 15 m, Trunk Island, Ketchikan, Alaska (May 2001) by Scott Walker, Alaska Department of Fish and Game. (photo by R. Harbo).



Fig. 1

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The live animal is yellow and the foot is slightly larger than the shell, as illustrated in Fig.'s 2-3-4.



Fig. 2



Fig. 3



Fig. 4

Fig. 2. Elegant ribbed limpet, *Scelidotoma bella*, from Begg Island, B.C. (photo by Danny Kent, Vancouver Aquarium)
Fig. 3. Elegant ribbed limpet, *Scelidotoma bella* from Begg Island, B.C. (photo by John Healy, Vancouver Aquarium)
Fig. 4. Anterior end of the Elegant ribbed limpet, *Scelidotoma bella* from Begg Island, B.C. (photo by John Healy, Vancouver Aquarium). The notch marks the exhalant siphon.

The Elegant ribbed limpet may have special dietary requirements, as captive specimens have survived for only three months at the Ucluelet Aquarium (2014) and at the Vancouver Aquarium (2008). The limpet was also collected live in 2008 at Begg Island, outside Ucluelet Harbour, B.C. by Vancouver Aquarium biologists, Marcel Gijssen and John Fisher (Waters 2009). Images of the limpet were taken later at the Vancouver Aquarium by Danny Kent and John Healy (Fig. 2,3,4).

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