

Predation or Trawler Abuse?

by Will Ritter

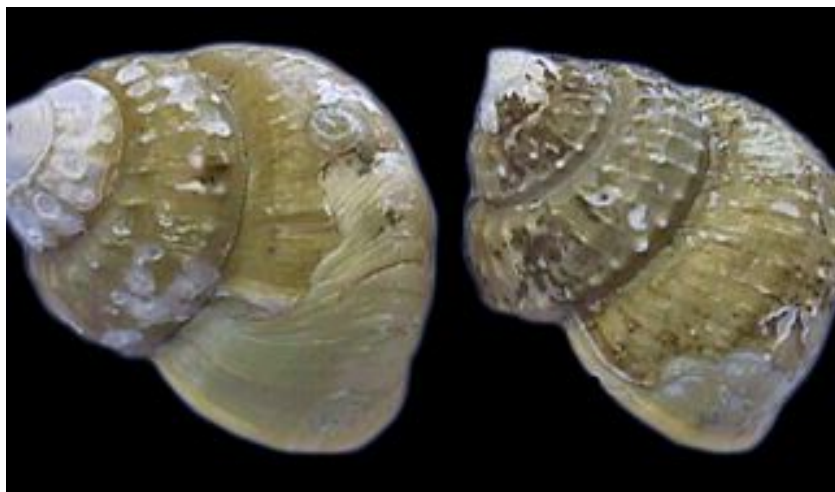
Over the years I have acquired a number of deep water mollusk species taken by trawlers. Some I acquired when working on the boats themselves, but more recently have acquired them from trawlers unloading locally who I have befriended. I have noticed that so many of the local offshore gastropods show apertural damage and subsequent repair - sometimes several episodes of damage and repair - that I have begun to doubt simple predation attempts is always the cause.

Certainly supposed predators - crabs or fish - could break the lip back but why not finish the job and consume the snail?

Since the species in question - examples are *Neptunea amianta*, *N. humboldtiana* (immature), *N. cf. smirnia* and *Bathybembix bairdii* (see images) - are from areas frequently trawled, it seems likely that some of the shell damage is due to trawlers.

From initial contact with the foot-rope, through the trawl (with fish, mud, debris), jammed into the bag, towed on the bottom and then finally dumped on deck, there is ample opportunity for significant damage. (And little wonder I seldom obtained a decent specimen!)

Therefore I have coined the term "trawler abuse" to explain some of the damage/repair seen.



L - *Bathybembix bairdii* (Dall, 1889) left - 48.5 mm, Astoria Canyon in 425 fms.; right - 46 mm, Grays Canyon in 275 fms. **R** - *Neptunea humboldtiana* A.G. Smith, 1971 - 95 & 100 mm, Astoria Canyon at about 400 fms.



Will Ritter photos

L - *Neptunea cf. smirnia* (Dall, 1919) - 128 mm, crabbed, trawled off Cape Disappointment in 35 fms. **R** - *Neptunea amianta* (Dall, 1890) left - 74 mm, southeast Astoria Canyon in 400 fms.; right - 75 mm, Astoria Canyon in over 525 fms.