

**Shell trauma in *Nautilus scrobiculatus* Lightfoot, 1786
(Cephalopoda: Nautilidae)**

Kent D. TREGO

3895 LaSelva Drive, Palo Alto, California 94306, U.S.A.

Shell trauma and its repair are described for the first time for *Nautilus scrobiculatus*.

Key words: Cephalopoda, Nautilidae, *Nautilus scrobiculatus*, shell trauma, Indo-Pacific.

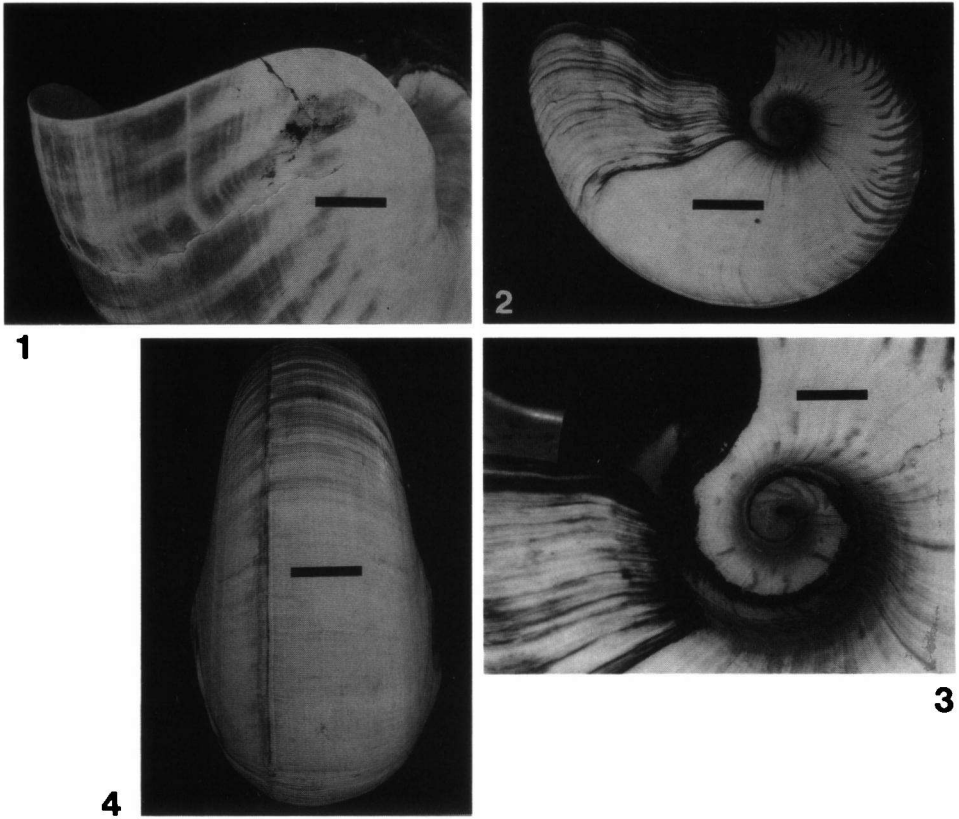
Shell trauma and its origin in the *Nautilus* species *Nautilus pompilius* L., 1758, and *N. macromphalus* Sowerby, 1849, have been discussed in detail by Arnold (1985). For the third distinct species of *Nautilus*, *N. scrobiculatus* Lightfoot, 1786, shell trauma is discussed here.

Examples of shell trauma and its repair in *N. scrobiculatus* are shown in figs. 1-4. Fig. 1 shows a black organic material deposit near a shell scar on the venter flank of an immature shell of this species (diameter 100 mm). Fig. 2 shows the side of a mature shell (diameter 160 mm) with black organic material deposited along large growth lines on the last part of the shell's venter to the aperture lip. Fig. 4 shows a positive longitudinal striation on the dorsum of this shell which is comprised of black organic material and shell mantle. Fig. 3 shows the deposit of black organic material in this shell's umbilical region at the margin where the vertical wall meets the whorl.

Shell trauma and its repair in *N. scrobiculatus* is similar to, and therefore probably has the same origins as, that in *N. pompilius* and *N. macromphalus*.

REFERENCE

- ARNOLD, J.R., 1985. Shell growth, trauma, and repair as an indicator of life history for *Nautilus*. — *Veliger* 27: 386-396.



Figs. 1-4. Shell trauma in *Nautilus scrobiculatus*. 1, Black organic material deposit on immature shell, drift specimen reportedly from Indonesia (diameter 100 mm), scale bar 15 mm. 2-4, Mature shell, drift specimen reportedly from Indonesia (diameter 160 mm); 2, side view, showing organic material deposits on large growth lines, scale bar 30 mm; 3, umbilical area, showing black organic material deposit, scale bar 10 mm; 4, dorsal view, showing positive longitudinal striation, scale bar 20 mm. Specimens in the author's collection.