## The secret weapon of the keyhole limpet by George P. Holm

The secret weapon of the Rough keyhole limpet, *Diodora aspera* (Rathke, 1833), is a worm, namely the Banded scaleworm, *Arctonoe vittata* (Grube, 1855). The worm lives commensally with a number of species, including the limpet, where it can be found just under the shell in the mantle groove. If the host limpet should be attacked by a starfish or other predator, then the worm, in spite of its small size, becomes very aggressive and will nip at the attacker with its jaws, inflicting painful bites that most often will cause the attacker to back away.

Drs. Brian Bingham and Eugene Kozloff from Shannon Point Marine Center were advisors to a student, Champ Williams, while he produced a video showing the worm defending its Rough keyhole limpet host from an attack by a Sunflower star. The video plus a couple more can be seen on Champ William's website. A visit is highly recommended. www.champwilliams.com/video.html

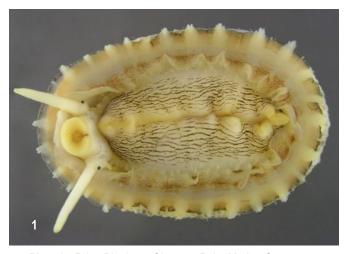


Photo by Brian Bingham, Shannon Point Marine Center



Photo by Dave Cowles at www.Rosario.wallawalla.edu/inverts

**Photos:** In the first photo, fig. 1, the Banded scaleworm is well hidden in the mantle of its host limpet. In the second photo, fig. 2, the worm is seen extended out from the mantle groove, the way it would do, were it to repell a starfish or other predator.

## References

Lamb, A.L and B.P. Handy. 2005. Marine Life of the Pacific Northwest, A Photographic Encyclopedia of Invertebrates, Seaweeds and Selected Fishes. p. 141.

www.beachwatchers.wsu.edu/ezidweb/animals/Diodoraaspera.htm

www.wallawalla.edu/academics/departments/biology/rosario/inverts/Annelida/Polynoidae/Arctonoe\_vittata.html

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