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## Recent Observations on Predation

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**Observation No. 1 – *Didemnum vexillum* being preyed upon by a chiton, a sea urchin, and a sea star in Shakespeare Bay, South Island, New Zealand. December, 2003.**

### [Nuisance Species Home](#)

### **Source**

### Occurrences & Images

A. Coutts (CI). Photo date and credit: December, 2003; A. Coutts

- [New England Coast](#)
- [New England Offshore/ Georges Bank](#)
- [New York Coast](#)
- [California Coast](#)
- [Washington Coast](#)
- [British Columbia Coast](#)
- [New Zealand Coast](#)
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- [Japan Coast](#)
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**Image AC\_SB\_NZ007**

Report new occurrences  
to Page Valentine  
at [pvalentine@usgs.gov](mailto:pvalentine@usgs.gov)

[Recent research papers  
on \*Didemnum\*](#)

Recent Observations

- [Biochemistry](#)
- [Colonization](#)
- [Didemnum Management Studies](#)
- [Environmental Impacts](#)
- [Environmental Preferences and Controls](#)
- [Genetics](#)
- [Growth Rates and Patterns](#)
- [Overgrowth on Other Species](#)
- [Predation](#)
- [Reproduction-Larvae](#)
- [Substrate Preferences and Controls](#)
- [Taxonomy](#)
- [Toxicity](#)
- [Preparation of Ascidians for Taxonomy](#)

Links to Related Topics

- [International Invasive Sea Squirt Conference, PEI, Canada, Oct. 1-4, 2007](#)  
- [Program with Abstracts \(PDF\)](#)
- [International Invasive Sea Squirt Conference, Woods Hole, MA, Apr. 21-22, 2005](#)
- [Imagery of the Family \*Didemnidae\*](#)
- [Environmental Impact](#)

**Image AC\_SB\_NZ007.** The chiton *Cryptoconchus porosus* grazing on *Didemnum vexillum* on rocks underneath Waimahara wharf, Shakespeare Bay. Water depth 3 m. Water temperature approximately 17 deg C. December 2003. Photo credit: Ashley Coutts, Cawthron Institute.

[Location no. 11](#)

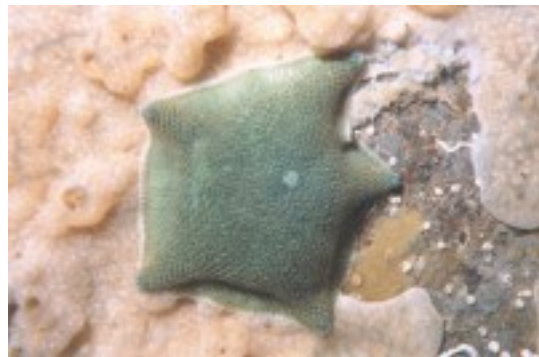
Click here to [download image](#).



**Image AC\_SB\_NZ008**

**Image AC\_SB\_NZ008.** The pink sea urchin *Notechinus albocinctus* grazing on *Didemnum vexillum* on the seabed underneath Waimahara wharf, Shakespeare Bay. Water depth 3 m. Water temperature approximately 17 deg C. December 2003. Photo credit: Ashley Coutts, Cawthron Institute. [Location no. 11](#)

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**Image AC\_SB\_NZ009**

## of Tunicates

- [Tunicate News/Information](#)
- [Invasive Species Web sites](#)

## Contributors & Other Sources

- [Contact Information](#)
- [Other didemnid imagery](#)
- [USGS News Releases](#)

*Text in gray (italic) indicates the topic has not been addressed to date.*

**Image AC\_SB\_NZ009.** The common cushion starfish *Patiriella regularis* grazing on *Didemnum vexillum* on the seabed underneath Waimahara wharf, Shakespeare Bay. Water depth 3 m. Water temperature approximately 17 deg C. December 2003. Photo credit: Ashley Coutts, Cawthron Institute. [Location no. 11](#)  
**Click here to [download image](#).**

**Observation No. 2 – *Didemnum* sp. being preyed upon by the common periwinkle, *Littorina littorea*, in the Sandwich tide pool, Sandwich, MA. February 3, 2004.**

This is the first documented observation of the common periwinkle, *Littorina littorea* (an invasive species), preying upon *Didemnum* sp. in New England. This observation was made in winter when the didemnid colonies were weak and/or dying, and it is not known if this form of predation occurs during other seasons of the year when the colonies are growing actively.

### Source

Page Valentine (USGS) and Mary Carman (WHOI). Photo date and credit: February 3, 2004; Dann Blackwood (USGS).

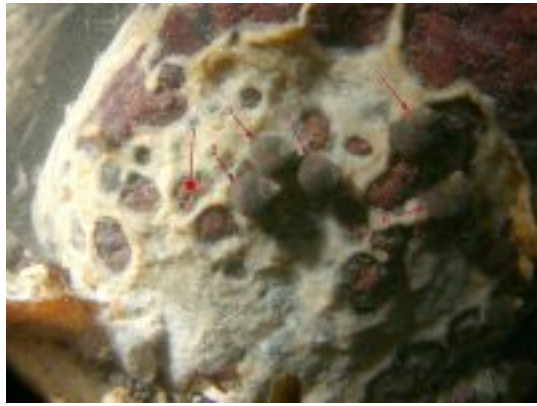


**Image DB\_STP\_DSC0090**

**Image DB\_STP\_DSC0090.** View of the Sandwich tide pool on the south side of the east entrance of the Cape Cod canal at low tide, looking east (41 deg 46.42 min N lat, 70 deg 29.30 min W lon). Water depth, intertidal, 11 foot (3.4 m) range. Water temperature 1 deg C. Observed at low tide. February 3, 2004. Photo credit: Dann Blackwood (USGS). [Location no. 1.](#)  
**Click here to [download image.](#)**



**Image DB\_STP\_DSCN2010**  
**Image DB\_STP\_DSCN2010.** Tunicate colonies of *Didemnum* sp. encrusting a boulder and being preyed upon by the common periwinkle, *Littorina littorea*. Note that the snails are numbered for comparison with the following images. Elliptical and subcircular holes in *D.* sp. are interpreted to represent areas that have been grazed by the periwinkles. Sandwich tide pool (41 deg 46.42 min N lat, 70 deg 29.30 min W lon). Water depth, intertidal range to 11 feet (3.4 m). Water temperature 1 deg C. Observed at low tide. February 3, 2004. Observers: Page Valentine (USGS) and Mary Carman (WHOI). Photo credit: Dann Blackwood (USGS). [Location no. 1.](#)  
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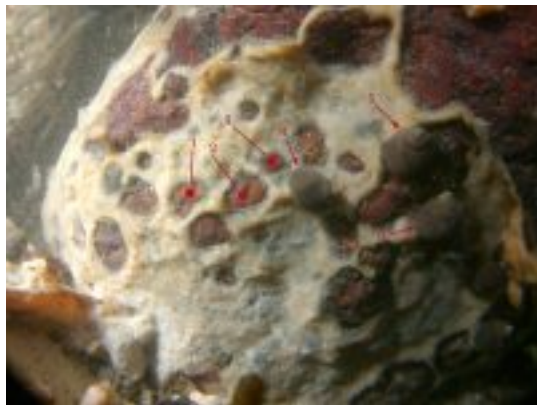


**Image DB\_STP\_DSCN2011**

**Image DB\_STP\_DSCN2011.**

Tunicate colonies of *Didemnum* sp. encrusting a boulder and being preyed upon by the common periwinkle, *Littorina littorea*. Snail no. 1 has been removed to show area grazed through the *D.* sp. colony. Elliptical and subcircular holes in *D.* sp. are interpreted to represent areas that have been grazed by the periwinkles. Sandwich tide pool (41 deg 46.42 min N lat, 70 deg 29.30 min W lon). Water depth, intertidal range to 11 feet (3.4 m). Water temperature 1 deg C. Observed at low tide. February 3, 2004. Observers: Page Valentine (USGS) and Mary Carman (WHOI). Photo credit: Dann Blackwood (USGS). [Location no. 1.](#)

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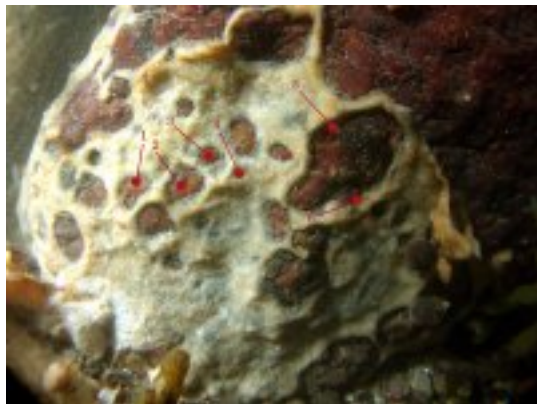


**Image DB\_STP\_DSCN2012**

**Image DB\_STP\_DSCN2012.**

Tunicate colonies of *Didemnum* sp. encrusting a boulder and being preyed upon by the common periwinkle, *Littorina littorea*. Snails no. 1, 2 and 3 have been removed to show areas grazed through the *D.* sp. colony. Elliptical and subcircular holes in *D.* sp. are interpreted to represent areas that have been grazed by the periwinkles. Sandwich tide pool (41 deg 46.42 min N lat, 70 deg 29.30 min W lon). Water depth, intertidal range to 11 feet (3.4 m). Water temperature 1 deg C. Observed at low tide. February 3, 2004. Observers: Page Valentine (USGS) and Mary Carman (WHOI). Photo credit: Dann Blackwood (USGS). [Location no. 1.](#)

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**Image DB\_STP\_DSCN2015**

**Image DB\_STP\_DSCN2015.**

Tunicate colonies of *Didemnum* sp. encrusting a boulder and being preyed upon by the common periwinkle, *Littorina littorea*. Snails no. 1-6 have been removed to show grazed areas in the *D.* sp. colony. Snails 1-3 have grazed through the tunicate, snail no. 4 has grazed the surface of the colony, and snails 5 and 6 were grazing the edges of a large hole in the colony when they were removed. Elliptical and subcircular holes in *D.* sp. are interpreted to represent areas that have been grazed by the periwinkles. Sandwich tide pool (41 deg 46.42

min N lat, 70 deg 29.30 min W lon).  
Water depth, intertidal range to 11  
feet (3.4 m). Water temperature 1  
deg C. Observed at low tide.

February 3, 2004. Observers: Page  
Valentine (USGS) and Mary Carman  
(WHOI). Photo credit: Dann

Blackwood (USGS). [Location no. 1.](#)

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URL: <http://woodshole.er.usgs.gov/project-pages/stellwagen/didemnum/htm/page32.htm>

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