



[USGS Home](#)

[Contact USGS](#)

[Search USGS](#)

Woods Hole Science Center

[WHSC Home](#) [Research](#) [Technology](#) [Publications](#) [Data](#) [People](#) [Basis Summaries](#) [Location](#) [Contact Us](#)

[Back to Marine Nuisance Species](#)

Printable version in PDF format

Recent Observations on Predation

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.

INDEX

[Nuisance Species Home](#)

Occurrences & Images

- [British Columbia Coast](#)
- [California Coast](#)
- [France Coast](#)
- [Ireland Coast](#)
- [Japan Coast](#)
- [Netherlands Coast](#)
- [New England Coast](#)
- [New England Offshore/ Georges Bank](#)
- [New York Coast](#)
- [New Zealand Coast](#)
- [Wales Coast](#)
- [Washington Coast](#)
- [Worldwide Occurrences](#)

Source

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



Image AC_SB_NZ007

Report new occurrences
to Page Valentine
at pvalentine@usgs.gov

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

Recent Observations

- [Biochemistry](#)
- [Colonization](#) **NEW**
- [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*](#)

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](#)

Click here to [download image](#).



Image AC_SB_NZ009

- [Environmental Impact 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.](#)
Click here to [download image.](#)

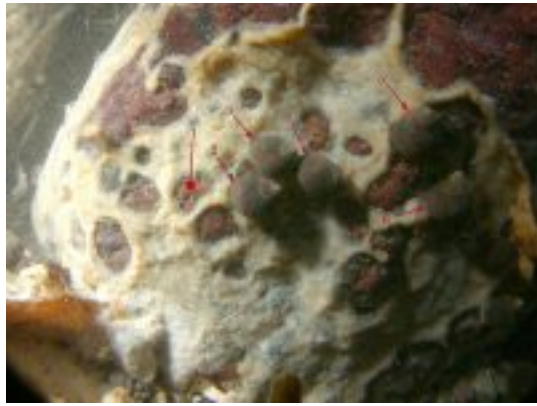


Image DB_STP_DSCN2011

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.](#)

Click here to [download image.](#)

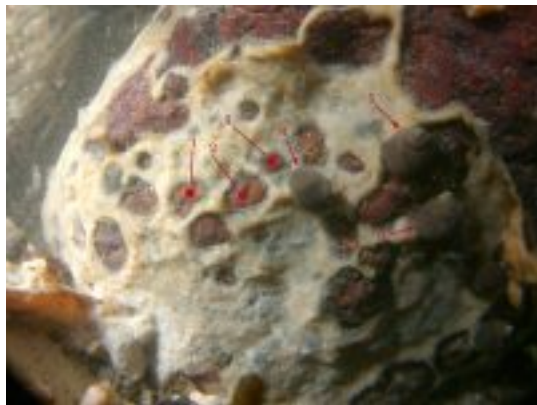


Image DB_STP_DSCN2012

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.](#)

Click here to [download image.](#)

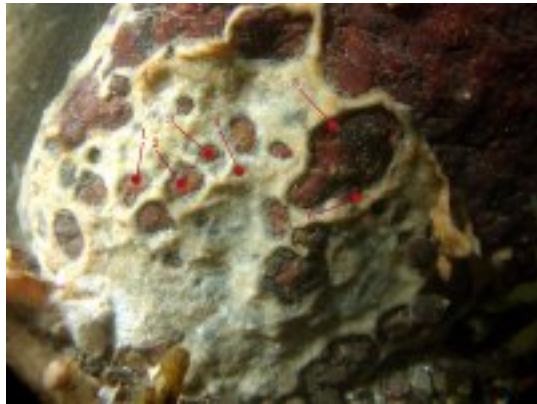


Image DB_STP_DSCN2015

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.](#)
Click here to [download image.](#)

Back to Top



To view files in PDF format, download free copy of Adobe Reader.

[Accessibility](#) [FOIA](#) [Privacy](#) [Policies](#) and [Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

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

Page Contact Information: [WHSC Webmaster](#)

Page Last Modified: Thursday, 15-May-2008 09:05:13 EDT

