



http://sh.nefsc.noaa.gov/tunicate.htm



Have You Seen This Tunicate?

(Invasive Species Found on Georges Bank) November 18, 2003

Full Story: http://www.noaanews.noaa.gov/stories2003/s2125.htm

Researchers have just identified an invasive species of sea squirt on the northern edge of Georges Bank, colonizing at least a 6.5 square mile area at a depth of just over 150 feet. This sea squirt or tunicate has been identified as *Didemnum*, probably *Didemnum vexillum*. These siphon-feeding animals form dense mats on the seabed, made of many thousands of individuals, encrusting the hard bottom and organisms attached to it. The colonies appear to have grown substantially in just over a year's time.

The U.S. Geological Survey, NOAA Fisheries, and the University of Rhode Island are investigating this phenomenon. If you have any information regarding the presence of this sea squirt, please contact Page Valentine (pvalentine@usgs.gov).

Fishermen: If you encounter the sea squirt in your catch or on your gear and can report the position, depth of the catch, habitat or sediment type, this would be very useful. If you have a digital photo of the sea squirt, please send it along with any information to Page Valentine (pvalentine@usgs.gov).

Below are a text description and images of the sea squirt, which should help you to identify it. Other massive sponge-like organisms, such as "monkey dung", may be mistaken for this encrusting sea squirt.

Text description: *Didemnum vexillum* colonies are yellowish cream , thick sponge-like masses that overgrow themselves and other stationary objects on the sea floor such as gravel, mollusc shells, and possibly other encrusting species. The colonies are flexible. Irregular, long, flat, leaf-, frond-, or flag-like, cylindrical, and often branched outgrowths or processes project from the surface and are sometimes separated from the main body by a narrow constriction. Some of the outgrowths result from the colony encrusting worm tubes or other cylindrical objects but many are solid with a firm gelatinous core. The individuals of the colony are called zooids and many zooids with individual siphonal openings cover the surface of the colony.

Note: The actual colors of the sea squirts in some of the following photos may be distorted since they were taken underwater. The color of this sea squirt on the deck of your ship should be as seen in the image above and image 3 below.



Image 1. The sea squirt colony is a light orange-colored spongy substance covering the gravel sea floor.



Image 2. Light pinkish sea squirt colony covering the gravel sea floor and this sea scallop.



Image 3. This sea squirt colony has encrusted itself or other objects to form this branching sponge-like mass described above. The white bar is $2 \text{ cm} (\sim 3/4 \text{ inch})$.



Image 4. Light orange sea squirt colony encrusting the gravel sea floor on Georges Bank.

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