

WARNING

Didymo (a.k.a. *rock snot*) found in Vermont and New Hampshire

Didymo is the common name for *Didymosphenia geminata*, an invasive freshwater diatom species (microscopic algae). Didymo can form extensive ‘blooms’ on the bottoms of rocky river beds, essentially smothering aquatic life forms such as macroinvertebrates (aquatic insects), native algae, and other organisms.

Additionally, the physical appearance of the bloom is aesthetically unpleasing, and can reduce the recreational values of a waterbody. Didymo uses stalks to attach to rocks and plants in a river system. The diatom creates these stalks, which can form masses 10-12 inches thick on the river bottom, and trail for lengths of 2-3 feet in the current. It is actually these stalks that are more problematic than the algae. The algae will eventually die off and decompose, while these stalks tend to persist for several months on the river bottom.



STOP ROCK SNOT

CHECK - Remove all visible clumps of algae and plant material from fishing gear, waders, clothing, water shoes and sandals, canoes and kayaks, *and anything else* that has been in the water.

CLEAN - Using HOT tap water and lots of soap: **Scrub** boats and other “hard” items thoroughly; **Soak** clothes, felt-sole waders and other “soft” items for **30 minutes!!!!**

For more information:

<http://www.des.state.nh.us/wmb/exoticspecies/didymo/index.html>

DIDYMO: LET'S HOPE FOR THE BEST

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Didymosphenia geminata, a.k.a. didymo or rock snot, is a diatomaceous algae that has infiltrated the Connecticut River and various tributaries. I recently attended a two-day international workshop dedicated to this microscopic gem. The information on this species is a bit overwhelming after it came to be such a nuisance in New Zealand. What was really interesting is that I found out that genetic work is being performed to determine where this species originated. It was originally believed to be from New Zealand, but the preliminary results of the genetic analysis indicate Norway to have the oldest population and North America to be older than New Zealand. That's right -- Norway! It turns out that didymo is also present in various provinces in Canada, Iceland, Poland and the United Kingdom. That being said, we on the New Hampshire/Vermont line may have received it from any one of those countries.

Didymo seems to have preferences on habitat, but can survive under a range of conditions. It prefers cool water temperatures, stable water flows and substrate and high levels of UV light. Didymo can also swim upstream and live in one drop of water, which is why it is so critical to take the steps to "CHECK, CLEAN, DRY" your fishing or recreational gear after being in waters where didymo is present. New Zealand has taken drastic measures to insure the protection of the northern island from acquiring this alga, and so far they are holding it in the southern island.

Didymo has not always been such a nuisance to fish species and habitats. In Norway and the United Kingdom, salmon and fall spawning trout species have not been impacted. In these countries that experience winter, the mats of didymo that are abundant in the summer, slough off in the fall prior to spawning. The substrate needed for egg incubation is exposed, so egg development is and has been unaffected so far. That is not to say that salmon declines haven't occurred in these countries, because they have, but the researchers do not attribute the losses to didymo. These countries have weather patterns like the United States, and we are hoping that we will experience similar results. We still need to be diligent and responsible when dealing with this alga, because we do not know what it is going to do here in the northeast. Didymo is new here and, like any invasive, its introduction can be catastrophic.

Always remember:
CHECK, CLEAN, DRY!

For more info on Didymo in New Zealand and New England, visit these websites:

*<http://www.doc.govt.nz/upload/documents/conservation/threatsand-impacts/biosecurity/whitebait-fact-sheet.pdf> (New Zealand government)

*http://wildlife.state.nh.us/Fishing/Didymo_invasive.html (NH Fish and Game)

*<http://www.des.state.nh.us/wmb/exoticspecies/didymo/index.html> (NH Department of Environmental Services)

If you observe Didymo in New Hampshire, contact Amy Smagula at the N.H. Department of Environmental Services: 603-271-2248 or asmagula@des.state.nh.us.