



PO Box 3019  
Boscawen, NH 03303  
603.796.2615 • info@northeastans.org  
www.northeastans.org

## **Best Recommendations for Decontamination of Outdoor Equipment For the Prevention of Spread of the Invasive Alga, *Didymosphenia geminata* (“Didymo”)**

The Northeast Aquatic Nuisance Species (NEANS) Panel recommends the following methods for the decontamination of equipment used in northeast waters to prevent the spread of *Didymo*. These are based upon existing protocols currently being implemented by state, federal, and provincial agencies in the northeastern United States and Canada as well as information available from MAF Biosecurity New Zealand. As of March, 2008, *Didymo* has been identified in Vermont, New York, New Hampshire, Quebec and New Brunswick.

### **Background:**

*Didymo* is an invasive diatom (type of algae) that can form mats that smother streambeds and negatively impact waterways. Although *Didymo* prefers cool oligotrophic streams, it has been expanding its ecological range into lakes and ponds. A single drop of water can spread *Didymo*.

### **Identification:**

*Didymo* begins as small circular brown spots on rocks and other substrates. As the stalks lengthen and the ends fray, *Didymo* may develop into thick brown or tan mats that resemble wet tissue paper. In some cases, the colonies may appear white or gray. Although it appears slimy, its texture is actually more like wet wool.

### **For all activities related to angling, boating (kayaks and canoes) and natural resource management:**

#### **“Check, Clean, Dry”**

- **Check:** Look for, and remove visible algae and plant material from boots, gear, or anything that has contacted the water or sediments, including flies, lures, rods, reels, line, nets, etc.
- **Clean:** Soak, scrub, and/or expose all equipment in one of the solutions described below for at least 1 minute. Absorbent items like felt-soled waders require **30-40 minutes** of soaking.

**Recommended Cleaning Solutions** (\*\*minimum of 1 minute exposure in either of the following):

**Hot water:** 140° F (Hotter than most tap water, so heating may be required)

**Dishwashing detergent:** 5% solution (~ 1 cup detergent to 1 gallon of water)  
(Some “eco-friendly” brands of detergent may not be as effective)

- **Dry:** Dry gear completely. *Didymo* can survive for months in moist conditions. If **neither** complete drying **nor thorough cleaning** is possible, restrict use of gear to a single waterway and use separate sets of equipment for infested and non-infested waters.

**Drying** If cleaning in one of the recommended solutions is not possible, drying alone is sufficient if items are thoroughly dried *and then kept dry for at least 48 hours*.

**Freezing** Freezing gear until solid will also kill *Didymo*; however freezing may make some gear brittle or even damage it, so an alternative method may be more appropriate. Also, freezing may not kill other organisms such as the spores of the parasite that causes whirling disease.

**Additional Resources:**

**MAF Biosecurity New Zealand Cleaning Methods Chart:**

<http://www.biosecurity.govt.nz/files/pests-diseases/plants/didymo/didymo-survival-results-table-may-07.pdf>

**HACCP Planning Information:**

<http://www.HACCP-NRM.org>

**U.S. State Didymo Websites:**

**New York**

<http://www.dec.ny.gov/environmentdec/36890.html>

**New Hampshire and Vermont:**

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

**Canadian Provincial Didymo Websites:**

**New Brunswick:**

<http://www.gnb.ca/0254/FAQDidymo-e.asp>

**Quebec:**

<http://www.mddep.gouv.qc.ca/biodiversite/eae/didymo-en.htm>

**Data Sources:** NEANS Panel member agencies; <http://www.biosecurity.govt.nz/>