**Didymo** (*Didymospenia geminate*) aka *Rock Snot*

**What is it?**

As its common name suggests, didymo may look like, well – snot, but it’s not. Didymo is a microscopic freshwater diatom (type of algae) that secretes a fibrous stalk which it uses to attach itself to rocks and plants in rivers and streams. During blooms, the stalks grow to form thick mats that can completely cover the stream bottom. This disgusting diatom may look slimy, but its silica cell walls make it feel more like wet wool. Nuisance blooms are often mistaken for raw sewage spills because trailing stalks look like wet toilet paper in the water.

**FACT:** When examined under a microscope, didymo cells look like an old-fashioned coke bottle.

**Where is it from & where is it now?**

Didymo is native to the far northern regions of the Northern Hemisphere, including Europe, Asia, and parts of North America (i.e., Vancouver Island). Historically it has been limited to cool, clear, flowing rivers and streams with relatively high water quality and good light penetration.

In its non-native range, didymo is found in a broader range of habitats including lakes and ponds, and tolerates warmer, more nutrient rich waters. Nuisance blooms of didymo have been documented throughout New Zealand, South America (Chile and Argentina), Canada, and North America. This map shows the North American distribution of didymo as of July 2008.

**FACT:** Didymo has been found in 18 US states (as of 2011).

**How did it get here?**

It is unclear how this awful alga first slithered its way across the globe, but it is likely that humans are the main culprit. Most speculate didymo was first introduced and is still spread by the movement of contaminated recreational gear (e.g., boats, trailers, fishing line and tackle,
kayaks, inner tubes) and clothing (e.g., life jackets, wetsuits, waders, felt-soled wading boots) from an infested water body. It only takes a single viable cell of didymo to begin an infestation in a new water body.

**FACT:** Didymo cells will remain viable in a cool damp environment for at least 40 days.

### What are its impacts?

Under optimal growing conditions, didymo forms dense mats that can completely envelop the stream bottom, smothering aquatic plants, insects and mollusks; reducing fish spawning and foraging habitat. Nuisance blooms of didymo may cause a shift in the benthic macroinvertebrate community from caddisfly, mayfly and stonefly (an important food base of many native fish species) to more pollution tolerant midges and worms. Didymo may out-compete or limit the growth of native algal species that are a food source for aquatic insects. Didymo may also have harmful effects on the local economy. Stalk material can clog irrigation canals, block pipes and water intake structures at hydropower facilities, hinder commercial and sport fisheries, and ruin the aesthetic value of a water body which may impact recreational and tourism industries.

**FACT:** Mats of didymo can grow up to 12 inches thick on the stream bottom with strands trailing in length of up to three feet.

### What is being done about it?

There is currently no known method for eradicating didymo once it infests a water body. Researchers in New Zealand are testing various biocides for potential control of didymo, but it is unclear what impacts these chemicals may have on fish and wildlife. For now, the only effective management tool is spread prevention.

**FACT:** Didymo is commonly spread by unsuspecting anglers because felt-soled wading boots absorb didymo cells like a sponge and provide a moist environment while boots are transported to a new location.

### How can YOU prevent the spread of didymo?

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Many aquatic nuisance species are spread unknowingly on equipment, shoes, and clothing. To minimize the potential spread of unwanted invaders, follow these simple steps.

- **CHECK:** all recreational gear and clothing that has come in contact with water for visible fragments before leaving a water body. Leave fragments at infected site, preferably on dry land.
- **CLEAN:** and disinfect your gear before traveling to a different water body. Scrub and soak non-absorbent gear in very hot water (>140°F) and one of the cleaners below for at least one minute, or in hot tap water (≈113°F) and one of the cleaners below for at least 20 minutes. Absorbent items such as felt-soled boots need to be soaked a minimum of 40 minutes.
  - Household bleach (2% solution)
  - Table salt (5% solution)
  - Antiseptic hand cleaner (5% solution)
  - Dish detergent (5% solution)
- **DRY:** Allow your gear to dry completely (at least 48 hours) before next use.

**What if I find didymo?**

If you find didymo or any other “tenacious trespasser” contact the Aquatic Nuisance Species Task Force at 1-877-STOP-ANS.