



Didymo

An ugly cloak of algae has invaded at least one Quebec salmon river. Anglers have a role to play in minimizing any potential impacts.

Its scientific name is *Didymosphenia geminata* but those who have encountered it have come to refer to it simply as didymo or its cruder nickname “Rock Snot.” The name may be crude but when the single celled algae (a diatom) form thick slippery mats it looks like the bottom of the river is coated in toilet paper.

Although it is native to freshwater lakes and rivers in parts of North America, didymo has recently become invasive. It is not clear why this is occurring, but in British Columbia, where the thick mats have been spotted since the 1980s, scientists believe its arrival coincides with the introduction of felt soled waders in the market place.

In 2006, the first major infestation of didymo was reported from an Atlantic salmon river in North America. The species was first noted in the Matapedia River in mid-July, and by the end of the summer there was heavy didymo coverage of the stream substrate over 35 km of the Matapedia River upstream of the confluence



Didymo forms ugly mats that make wading difficult. The alga poses no health threat to humans but potentially could harm salmon production.

with the main stem of the Restigouche River. ASF dive teams retrieving sonic receiver units in the autumn did not detect didymo mats in the Restigouche system upstream of the Matapedia River, although the species was present in the river borders at the highway bridge crossing the main stem slightly downstream of

the Matapedia confluence. Electrofishing in the Matapedia River by biologists from the Quebec government did not detect a significant decrease in juvenile salmon numbers. This may mean that Atlantic salmon juvenile production will not be impacted by didymo, or it could simply reflect the fact that the alga arrived so recently that it has not had time yet to exert its effect.

Infestations in Iceland have not been shown to have a negative impact on salmon production. The alga needs moderate to slow current with high light levels to prosper. This probably means the fast current, shaded areas of salmon rivers where much of the spawning occurs is not affected by the algae. Still, the nature of the algae mats, with their thick woolly consistency could impact spawning beds if infestations occur there.

The algae poses no known health danger to humans, but the mats are esthetically displeasing and make wading difficult. It is also not known if the didymo

Didymo (Cont'd from page 16)



When didymo cells book up, ugly mats of algae cloak stream bottoms.

blooms will be annual events once the species establishes itself in a river system. In Western Canada, where the species has been invasive, blooms have proved to be intermittent in some sites over time.

Algae cells were also detected by government monitoring teams in the Matane, Sainte-Anne, Nouvelle, Cascapédia, Petite Cascapédia and Bonaventure rivers. Presence of the cells does not indicate that an invasion is imminent but these rivers will continue to be monitored closely, as will other rivers throughout the Gaspé peninsula.

Experience elsewhere has shown that control of the spread of the species is very difficult and anglers can play a key role. For recommended cleansing methods see Good Riddance (right) and for more information on didymo and the Quebec government response visit http://www.mddep.gouv.qc.ca/eau/eco_aqua/didymo/didymo.pdf.
—M.S.

ALERT

Good Riddance

Measures to be taken by anglers to limit the spread of didymo

Didymo can be spread from one body of water to another by human activities. By limiting the use of equipment, watercraft, clothes, and other items, which may have come in contact with this species to one water body, the risk of spreading didymo can be minimized. Individuals who must go from one body of water to another, must clean these articles by following these general rules:

- Closely examine your craft and equipment before leaving a river and make sure you remove any visible clumps of algae. Leave this material at the river site. If you find any material later, do not wash it down the drain, rather place it in the garbage.
- Clean all items that were in contact with the water. Let them soak for at least a minute in one of the following:
 - Hot water (60° C);
 - A two percent solution of household bleach (mix 200 mL of household bleach in enough water to make 10 litres);
 - A five percent salt solution (mix 500 mL or 2 cups of salt in enough water to make 10 litres);
 - A five percent solution of antiseptic hand cleaner (mix 500 mL or 2 cups of cleaner in enough water to make 10 litres);
 - A five percent solution of dishwashing detergent (mix 500 mL or 2 cups of cleaner in enough water to make 10 litres).
- Completely dry your equipment if you cannot clean it properly and wait 48 hours before using it again in another river.

—M.S.



Anglers must do their part to prevent the spread of didymo.