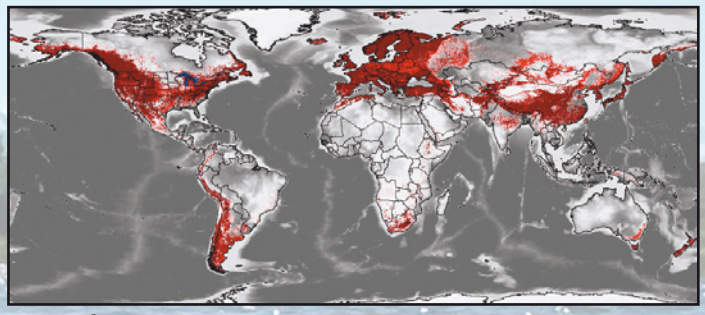
DIDYMO:

a nuisance and invasive freshwater alga

THE THREAT: Didymo is an invasive freshwater alga that can form massive blooms. Didymo can smother streambeds and adversely affect freshwater fish, plant andinvertebrate species by depriving them of habitat, and also impact recreational opportunities. It is not considered a significant human health risk, but in recent years has been spreading to previously unaffected areas in North America, Europe and Asia, and has been detected in New Zealand. This species historically formed blooms in fast-flowing, cold, clean waters but now didymo is increasing its ecological range. Recent research shows that many countries across the globe provide suitable habitat for didymo to thrive.



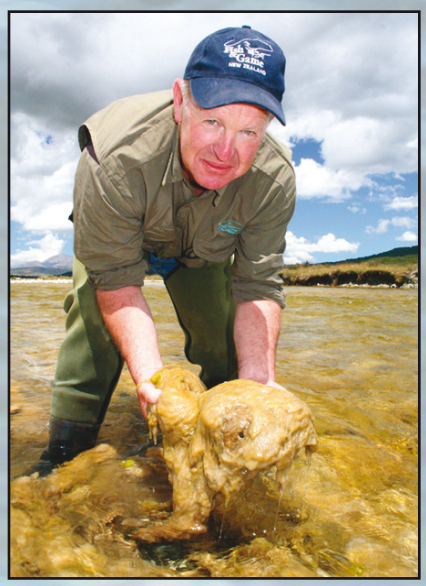
Map of the world showing regions where suitable stream habitats for didymo are located. Results for Australia are preliminary (McNyset, US Environmental Protection Agency)

DESCRIPTION: Didymo is a freshwater diatom (type of alga) that uses stalks to attach to streambed material. It forms a thick mat which smothers rocks, submerged plants and other materials. As the stalks lengthen, the beige/brown mats shred into the stream and are sometimes washed white at the ends, looking similar to tissue paper. Although they appear slimy, didymo mats feel like wet wool.

CHECK:
Before leaving a river's edge, look for clumps of algae and sediment, and remove them. Leave them at the site.

CLEAN:
Soak all gear for at least one minute in a 2% (by volume) solution of household bleach, or a 5% (by volume) solution of dishwashing detergent or salt. All surfaces must be in contact with the cleaning solution for a full minute. Water-absorbent equipment (lifejackets, waders) should be soaked thoroughly to ensure complete contact.

DRY:
If cleaning is not practical, after the item is dry to the touch, leave it to dry for at least another 48 hours before using in another freshwater system.



Fish and Game New Zealand

RISK OF SPREAD: Recreational equipment, including boats, kayaks, lifejackets and fishing gear (particularly waders) is the most likely way for didymo to spread. Didymo can remain viable for several days if kept moist, and can be transferred in microscopic form on equipment to new waterways. Infection may only need a single cell. This means fishermen travelling internationally contribute to the risk of spread.It is not possible to eliminate didymo from a waterway once it has become affected. Decontaminating equipment between use in different freshwater systems is the key to preventing further spread and leaving an environment for all to enjoy. DON'T SPREAD DIDYMO: Where possible, equipment should be restricted to use in a single waterway. If this is not feasible, we suggest the decontamination methods of CHECK, CLEAN, DRY.

DON'T SPREAD DIDYMO

MORE INFORMATION:
www.epa.gov/region8/water/monitoring/didymosphenia.html
www.fedflyfishers.org/conDidymo.php