

PRESS RELEASE

DEEP Announces New Species of "Rock Snot" Discovered

Connecticut's Department of Energy and Environmental Protection (DEEP) announced today that Diba Khan-Bureau, Ph.D., Professor at Three Rivers Community College and Mike Beauchene, Supervising Fisheries Biologist with the Inland Fisheries Division of DEEP have discovered new species of microscopic algae in Connecticut.

In their recently published article in the <u>European Journal of Phycology</u> (the study of algae), Khan-Bureau and Beauchene reveal a new species to the world, *Didymosphenia hullii*, and a species new to Connecticut, *Cymbella janischii*. Both belong to a notorious group of microscopic algae collectively termed "Rock Snot."

History of Rock Snot

"Rock snot" first made headlines when pristine New Zealand trout streams became overrun with thick sticky mats of a diatom, *Didimosphenia geminata* aka Didymo for short. These mats are comprised of multiple individual stalks, each supporting one or more coke bottle shaped cells. Didymo is not native to New Zealand, and it was hypothesized that it was transported inadvertently by a fisherman's boots or fishing equipment. This incredible growth sparked concern worldwide about Didymo and possible negative consequences to trout waters around the globe.

Rock Snot in Connecticut

The first report of Didymo in Connecticut came in March, 2011 when an angler reported seeing what appeared to be a small tuft of Didymo in the West Branch of the Farmington River, Barkhamsted.

Concern about what would happen to Connecticut's trout streams radiated throughout the angling community. As there was very little information to go on, any conclusion on the future impact of Didymo remained largely speculation.

Exercise Caution During the Upcoming Trout Season

With many anglers getting ready for Opening Day, April 9, DEEP reminds everyone who frequents the West Branch Farmington River, especially through the towns of Hartland to Canton, to be extra vigilant about Check, Clean, and/or drying any items that have come into contact with the river water or the river bottom.

Didymo is currently "blooming," creating thick mats, especially in Riverton. This algae can easily be spread from water to water as it can remain alive for long periods of time even when slightly moist. Cleaning your equipment is critically important if you plan to move to additional waters, within a few hours or the same day, after being in the West Branch Farmington River.

Monitoring Rock Snot

Khan-Bureau began to monitor the situation closely. She observed the prolific growth, collected water chemistry and mucilaginous tufts of Didymo from various locations within the river.

It was apparent from the beginning that the diatom she was observing was different from traditional descriptions of *D. geminata*. Khan-Bureau sent the photos to leading diatom experts worldwide. Their consensus was this is a new species of Didymo, previously not known to science.

Following protocols and documentation, she named the new species *Didymosophenia hullii* (Khan-Bureau sp. nov.) in honor of the late David Hull M.D., Director of Transplant Surgery at Hartford Hospital. Dr. Hull enjoyed nature and aspired to understand the many facets of science.

Other Species from the "Rock Snot" Group

In an interesting coincidence, while working to build the knowledge base around Didymo, Beauchene and Khan-Bureau found what appeared to be an area covered with it. It was not however, in the usual location, nor was it during the typical time of year. Upon review in the lab, this look alike was determined to be *Cymbella janischii*, a species lumped into the "rock snot" group but a species whose cells look nothing like Didymo.

Furthermore, *C. janischii* is a species endemic to the Pacific Northwest and had not been found on the eastern seaboard with one exception in New York. While Didymo has not manifested itself into the massive mats first documented in New Zealand, last July, many anglers reported thick clumps of "rock snot" throughout the river about 1.5 miles up and downstream of the famed "Church Pool" on the West Branch Farmington River.

Environmental Impacts of Transport of Species

DEEP reminds everyone about the potential impacts of the inadvertent transport of species from one water body to another. Once introduced it is often very difficult, if not impossible, to eradicate.

Simple Steps to Minimize Inadvertent Transport and Introduction:

Before leaving a water body, practice the Clean, Drain, Dry technique on anything that had contact with the water or the bottom, including boats and fishing gear (waders).

Information of nuisance aquatic organisms and invasive species can be found on the DEEP web page at:

http://www.ct.gov/deep/cwp/view.asp?a=2696&q=322690&deepNav_GID=1630

See photo on next page.

Photo below -- Rock snot (*Didymosphenia hullii*) is currently "blooming", meaning growing rapidly, in the West Branch of the Farmington River, Barkhamsted. Anyone coming in contact with the river in this area should help to prevent the spread to other waters by practicing "Check, Clean, Dry" of their fishing boots, boats, or other equipment.

