

Undergraduate Project in Didymosphenia Distribution and Occurrence in the Logan River

Dr. Janice Brahney

Didymosphenia Distribution and Occurrence in the Logan River

Didymosphenia geminata a.k.a 'Didymo' or 'Rock Snot' is a benthic freshwater algal species that can bloom covering large sections of a riverbed. The blooms negatively affect stream habitat and therefore other organisms in the river system. Because Didymo tends to bloom under low-nutrient conditions, unlike most algal species, the trigger for blooms of Didymo are still debated. Several efforts are underway to map the distribution of the species and understand the conditions of river during a bloom. The student will partake in mapping and sampling exercises on the Logan River to document the distribution of the species in both space and time. The student should have some exposure to GIS, and will gain experience in field sampling of periphyton (benthic algae) as well as water properties and chemistry. The student will also gain experience in laboratory methods for periphyton sample preparation and microscopy.

The project will run through the Summer Semester.

The student should apply for either a Quinney College of Natural Resources Undergraduate Research Grant at:

https://qcnr.usu.edu/undergraduates/involvement/undergrad_research/research_grants

Or an Undergraduate Research and Creative Opportunity Grant (URCO) at:

<https://urco.usu.edu/>

The application deadline for the URCO is February 15th at 5pm, the student should contact me with sufficient time to build their application package. There is no application deadline for the Quinney College of Natural Resources URG.