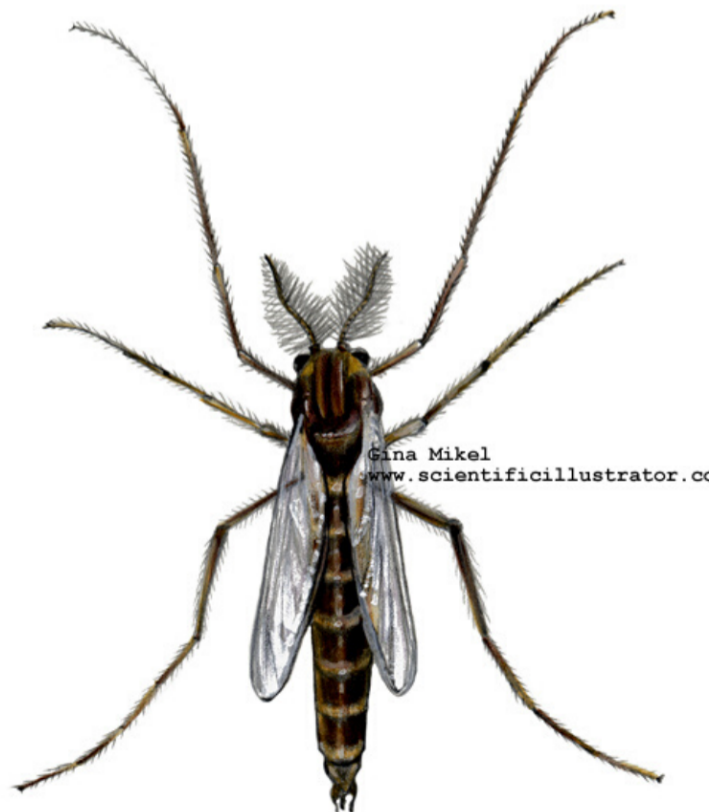


# BUGS BELOW ZERO: WINTER WONDERS

Bugs are everywhere in the summer, but have you ever thought about what happens to them in the winter? Maybe you've noticed small mosquito-like flies on snowbanks surrounding trout streams in winter? Believe it or not, these flies, known as "non-biting midges," are vital to the winter diet of trout in our Minnesota streams.

Len Ferrington, a Professor in the Department of Entomology at the University of Minnesota, and his team of researchers have been discovering the life-cycle dynamics of non-biting midges and their importance to trout for more than a decade. Now, the research group is looking for volunteers to help with monitoring efforts so they can expand the scope of this research program.



## STEPS TO PHOTOGRAPHING INSECTS

1. Walk along stream banks to find insects; the insects tend to be on the surface of the snow where the banks meet with the water
2. Take one photo further away from insect (to show both the insect and its location)
3. Take one closeup and detailed photo of the insect (see example below)
4. Take one photo of the water and its surrounding banks to showcase the landscape (see example below)
5. Record the location (county, state, stream name), date, and notes on weather/temp, time, stream conditions (ex. presence of ice) with your photographs
6. Send pictures and recorded information into the Google Form (As Pictured to the right). Google Form, as well as more detailed information on the project is found under the "Get Involved" tab on the Bugs Below Zero website linked down below

## GOOGLE FORM SUBMISSION

### Bugs Below Zero Participation Dropbox

Drop your photos here, and help us collect some background information!

The name and photo associated with your Google account will be recorded when you upload files and submit this form. Not [munso237@umn.edu](mailto:munso237@umn.edu)? [Switch account](#)

Photos of Insects

[Add file](#)

What is your name?

Your answer

Are you affiliated with an organization, school or company?

☐ Yes

☐ No

If so, what is your affiliation?

Your answer

Please provide details about where you took these photos. Please include: county, state, and stream name.

Your answer

Please provide the date the photos were taken.

Date

mm/dd/yyyy

What were the conditions like when you took the photos? Include whether, temperature, and stream conditions.

Your answer

Why did you choose to get involved in this project?

Your answer



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