

# **Classroom resources for using BBZ Data**

Link to key papers for ecological background and significance of chironomids and other insects:

## **Emergence Patterns in chironomids**

[Winter Growth, Development, and Emergence of \*Diamesa mendotae\* \(Diptera: Chironomidae\) in Minnesota Streams](#)

[Emergence dynamics of \*Diamesa cheimatophila\* Hansen \(Diptera: Chironomidae: Diamesinae\)](#)

## **Cold Adaptation**

[Survivorship and longevity of \*Diamesa mendotae\* Muttkowski \(Diptera: Chironomidae\) under snow](#)

[Freeze tolerance in larvae of the winter-active \*Diamesa mendotae\* Muttkowski \(Diptera: Chironomidae\): a contrast to adult strategy for survival at low Temperatures](#)

[Survival strategies of freshwater insects in cold environments](#)

[Freeze tolerance in an arctic Alaska stonefly](#)

[How aquatic insects live in cold climates](#)

## **Relating to food webs**

[Winter Diets of Brown Trout Populations in Southeastern Minnesota and the Significance of Winter-Emerging Invertebrates](#)

[Winter feeding, growth and condition of brown trout \*Salmo trutta\* in a groundwater-dominated stream](#)

## **Relating to Climate Change**

[Longevities of adult Chironomidae \(Diptera\) from two streams in Iceland](#)

[Longevity and oviposition of winter-emerging Chironomidae \(Insecta: Diptera\) at varying low temperatures](#)

[Link](#) to activities for undergraduate classrooms using the community science data.

Other lesson plan resources already available:

- <https://stroudcenter.org/education/virtual-learning-resources/>
- <https://wikiwatershed.org/>
- <https://leafpacknetwork.org/resources/>
- <https://www.projectwet.org/educational-resources/clean-water-act>
- <https://stroudcenter.org/virtual-learning-resource/discover-free-middle-school-watershed-education-lessons-from-the-waters-curriculum/>
- <https://stroudcenter.org/virtual-learning-resource/virtual-resource-for-teaching-learning-aquatic-macroinvertebrates/>
- <https://wateractionvolunteers.org/get-involved/in-the-classroom/>