

Goldenrod Community Ecology

When organisms live together, they inevitably interact in many ways. Over time, these species interactions shape the traits that organisms display. This lab is designed to allow you to explore species interactions in the goldenrod community using the scientific process.

Question:

How does insect gall formation influence flowering, pollination and seed set?

Based on the question above develop a testable hypothesis:

Now lets collect some data!

- 1) In groups of four identify 8 goldenrod stems with a gall and an additional 8 un-galled goldenrod stems.
- 2) Estimate the floral area of each plant
- 3) Observe the number and type of visitors to each stem for 5 min.

Floral Area	1	2	3	4	5	6	7	8
Galled								
Un-galled								

Visitors	1	2	3	4	5	6	7	8
Galled								
Un-galled								

Average Floral Area Galled: _____ Un-galled: _____

Average Visitor # Galled: _____ Un-galled: _____

Analysis questions:

1) Do the data you collected support your hypothesis?

2) How would you test whether the gall directly reduced visitation to the plant or acted indirectly by reducing floral area which resulted in decreased visitation?