

Ecological Networks

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 quantify and visualize interaction between flowers and their visitors.

Scenario: A new invasive plant has arrived in the area. Your job is to determine which native plant species are likely to suffer from reduced pollinator visits when growing with the invasive species.

Now lets collect some data!

- 1) In groups of four identify a single plant species with open flowers blooming near the “invasive species” identified by your TA.
- 2) Spend 5 minutes observing and identifying the floral visitors (sketch if helpful!)
- 3) For the next 10 minutes count and record the number of visitors of each type

Plant Species: _____

Visitor 1: ID: _____ # Visits: _____

Visitor 2: ID: _____ # Visits: _____

Visitor 3: ID: _____ # Visits: _____

Visitor 4: ID: _____ # Visits: _____

Visitor 5: ID: _____ # Visits: _____

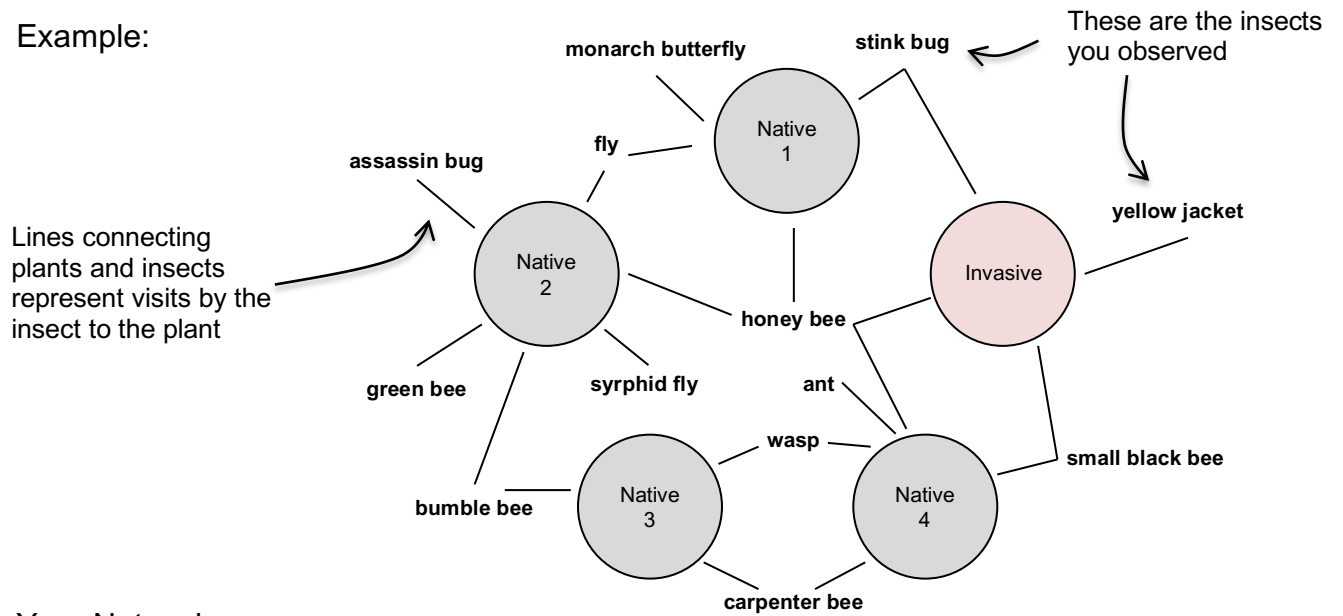
Visitor 6: ID: _____ # Visits: _____

Visitor 7: ID: _____ # Visits: _____

In the last 15 minutes of lab groups will re-organize so that each new group has at least one member from each of the original groups.

Work together to build a full plant-pollinator network using figure on the next page as an example.

Example:



Your Network:

Which species create a link between the invasive species and native species?

If these species prefer to visit the invasive plant's flowers, which species would you predict to have lower fruit/seed set?