# **Backyard Pollinators Research Project**

**Module 6: Data exploration**

Now that everyone has entered their data, it is time to see what we found! We will do some basic network analysis to evaluate our plant-pollinator interactions by creating a bipartite plot.

Begin with your own five sites.

1. Plot a plant-pollinator interaction network for your sites combined, including all of data shown in the example below. Creativity as to how you visualize this data is highly encouraged (you can experiment with line thickness, color, pictures, etc.) – just make sure all of the relevant information is included.

In the example below, across five sites there were only three different types of flower: six flowers of type 1, 25 of type 2, and 6 of type three. Any flower that is a different color, form, or shape should be distinct. Add as many as you need and remove those that you don’t. Make sure to include each type’s features.

1. Add your total number of visitors across your five sites. In the example below, there were three total beetles observed, three lepidoptera, two syrphid flies, and one other fly.
2. Draw connections between the flower types and how many visitors from each morphofunctional group were observed. In the example below, the line between beetles and flower type 2 is thicker because there were many distinct interactions between these groups – again, be creative about how best to visualize your data completely and accurately.



6

3

25

6

2

3

1

**Questions:**

1. **What color flowers were the most attractive to your pollinator population? Why do you think that is?**
2. **What shape or type of flower was the most attractive? Why do you think that is?**
3. **Which flower type was associated with the most diverse set of floral visitors (highest number of morphofunctional groups as visitors)? What traits does this flower type have that might be attractive to a more diverse pollinator population, and why?**
4. **Compare and contrast your five sites. Which are high quality pollinator habitat and which are low quality, and why? What elements contribute to their quality or lack thereof?**

**Paste your plant-pollinator interaction network bipartite plot here.**