Sandra Cooke, Greensboro College

Class info: BIO 3400 Ecology, 11 students (all bio majors), face-to-face, field work only within walking distance to campus

What we did:

Backyard Pollinators

- **Field component**
  - 90 min class before the lab to prep (went over background & methods, including morphospecies ID)
  - Homework: Students reviewed morphospecies ID and took quiz
  - 3-hour lab: students constructed quadrat, walked to field site, did two plots each.
- **Data analysis component**
  - 3-hour lab: network interaction plots of individual, class, and other class' data
- **Assessment**: EREN tool, lab handouts, test questions

Lichen in Diverse Landscapes

- **Field component**
  - 45 min class before the lab to prep (went over background & methods, drew sampling grids)
  - Homework: join EREN Lichen, download canopeo, photo transfer plan
  - 3-hour lab: students worked in pairs on campus, did five trees per pair; uploaded all data on iNaturalist.
- **Data analysis component**
  - 3-hour lab: worked w/ class data, EREN lichen data, NEON data (provided by project leaders)
- **Assessment**: EREN tool, lab handouts, test questions

What went well

- **Backyard pollinators fieldwork** – they really enjoyed it, and I should've have them do more!
- **Network interaction plots** (by hand) were a good way to visualize some of the data on a smaller scale.
- **Lichen fieldwork** – overall went well; it helped that we had already identified and measured these trees and used iNaturalist a bunch.

Possible improvements

- **Backyard pollinator analysis** – provide more guidance on how to use the provided large datasets to test the project hypotheses.
- **Lichen data entry & photo upload** into iNaturalist was cumbersome. Are so many photos needed?
- **Lichen data download from iNaturalist** was weird (e.g., DBH and pH fields were not available)
- **Lichen spatial module** was cool, but I wasn't sure if it was helpful for seeing relationships between lichens, air quality, and other variables.