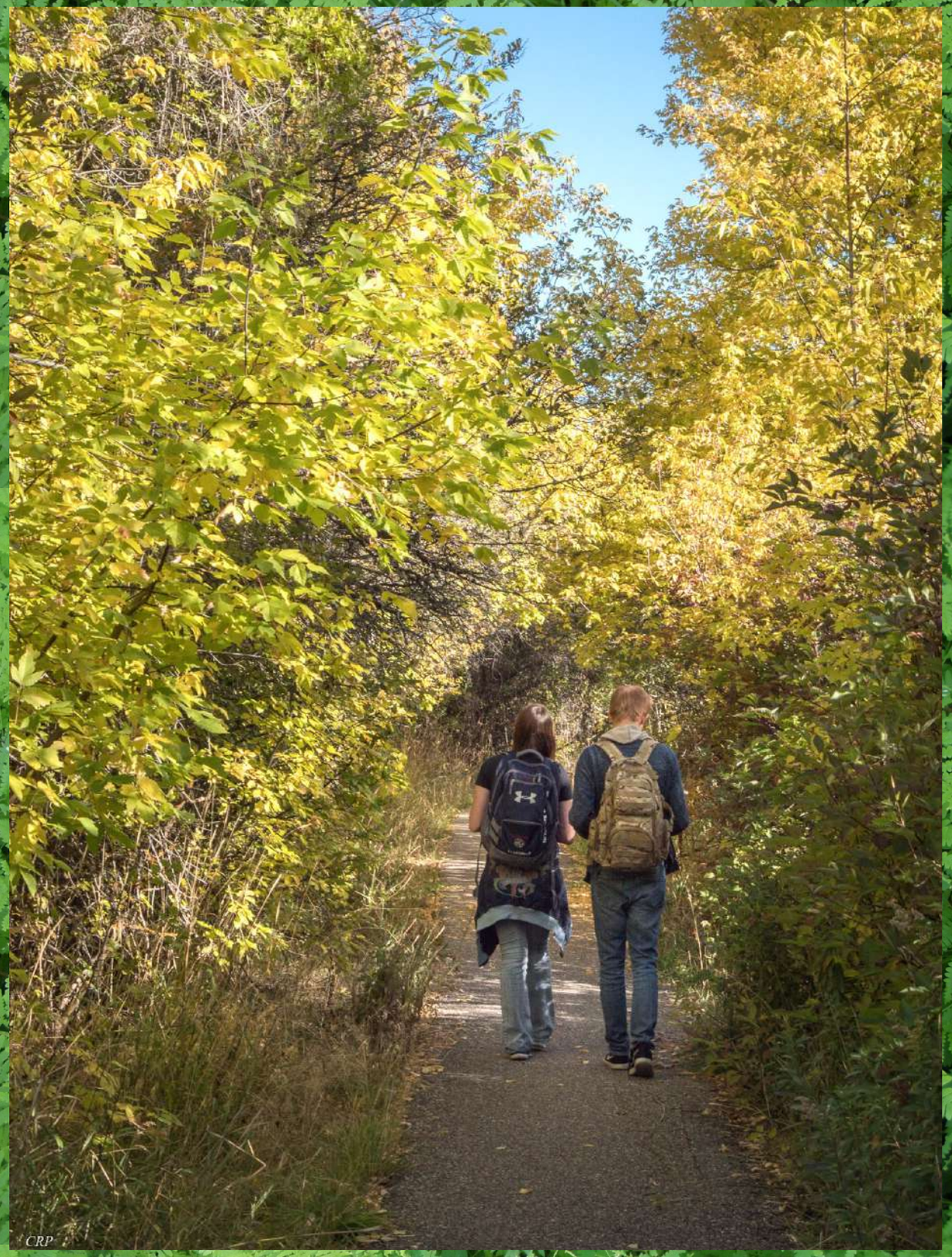
LET'S DO A

BIOBLITZ!

Eric Rude, Pocatello High School
Pocatello, ID


CRP

What is a BioBlitz??

- A BioBlitz is an event focused on finding and identifying as many species as possible in a specific area over a short period of time

Why do a BioBlitz?

- To develop skills in finding and identifying organisms
- To develop skills in recording and sharing data
- To contribute to conservation of the environment where we live and study

- To learn the practical side of science/biology rather than just the theory
- To develop awareness of organisms in the local environment
- To recognize services provided by our local ecosystems
- To participate in citizen science

- A BioBlitz can be used to teach about
  - Symbiosis
  - Ethology
  - Evolution
  - Citizen Science
  - Ecology
  - Phylogeny and Taxonomy
  - Research Skills

What happens on the BioBlitz?

- Photograph as many species as possible
- Take multiple photos of each organism
- Identify the organism (if possible)
- Record the GPS coordinates of the organism
- Upload each organism to iNaturalist

Who can do a BioBlitz?

- Great for all grade levels
  - For students younger than 13 years old, use “Seek by iNaturalist”

Where and when?

- Anywhere and anytime you can find wildlife

- Animals (large and/or small), plants, fungi

- Nature areas, parks, school grounds

Preparing yourself

- Practice using iNaturalist
- Explore the iNaturalist teacher's guide
- Find where to do the BioBlitz
  - Scout out the area
- Set up the "project"
- Find helpers

Who can help?

- College professors and graduate students
- Park/Forest rangers
- Master Naturalists, Audubon chapters, etc.

What else does the teacher need to do?

- Permission slips
- Keep the students safe
- Help students find organisms
- Check submissions to iNaturalist

Preparing the students

- Discuss the requirements/grading
- What organisms live in the area
- Lessons on taxonomy and ecology
- How to look for organisms

Preparing the students

- Safety
- What is citizen science
- The importance of what we are doing
- Using iNaturalist

What is iNaturalist?

www.inaturalist.org

- A global online network of people sharing observations of biodiversity
- Observations include evidence of the organism, location, and time
- Observations can be verified by other iNaturalists

Using iNaturalist

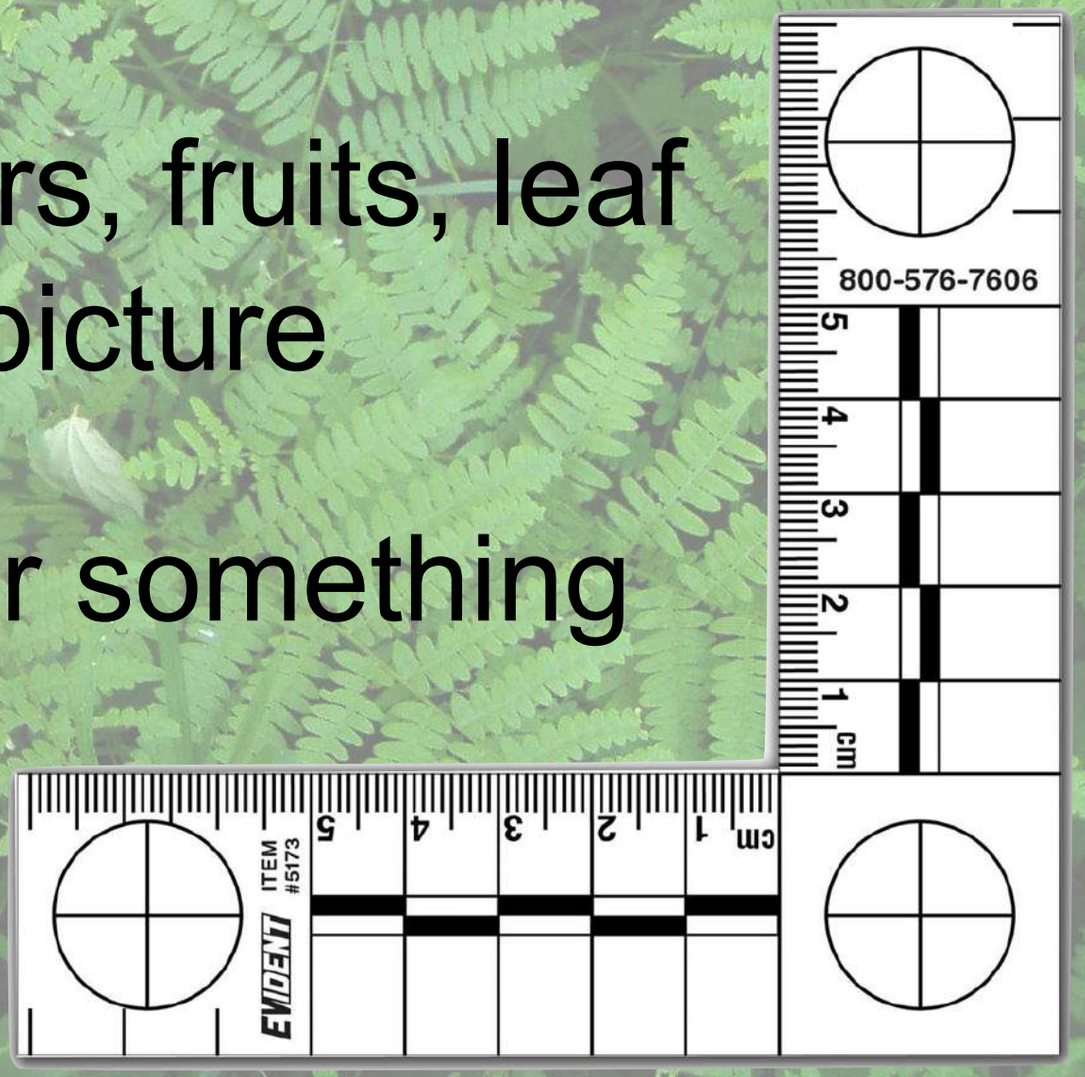
- Creating an account
- What needs to be included in each entry
  - “wild” organisms only
  - at least a partial identification
  - location
- Practice on school grounds

What to bring

- Binoculars
- Field guides
- Hand lenses
- Sweep nets, beating sheets
- Animal containers
- Smartphones, tablets, digital cameras

Taking photos

- You can only upload your own photos!
- When possible, take multiple shots
- With plants, show flowers, fruits, leaf pattern, and an overall picture
- Can also include ruler or something else to indicate size



Grading the project

- Document as many organisms as you can in the time allowed
  - At least 10 species
- Record a wide variety of organisms
  - At least 3 phyla (or other clades, as indicated)
- Upload your photos and information to iNaturalist

Extra points:

- For having the most identified organisms on iNaturalist
- For finding the most different clades of organisms
- For the best photograph of an organism (I'll be the judge!)
- For getting the first picture of the most "unique" organism (again, I'll be the judge!)

Rules and Safety

- Watch out for wildlife
  - Black widows, wasps, bees, scorpions, rattlesnakes, moose?

- Poison Ivy

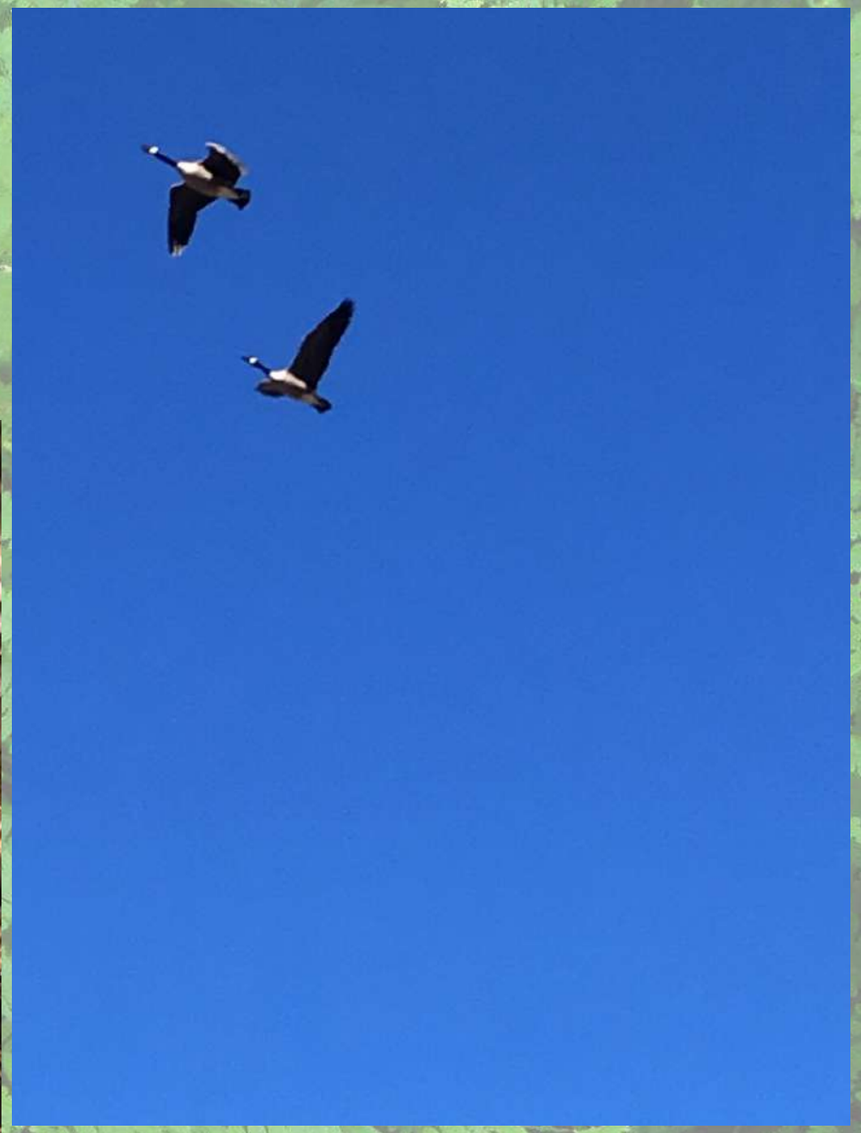
- Stinging nettle

Problems

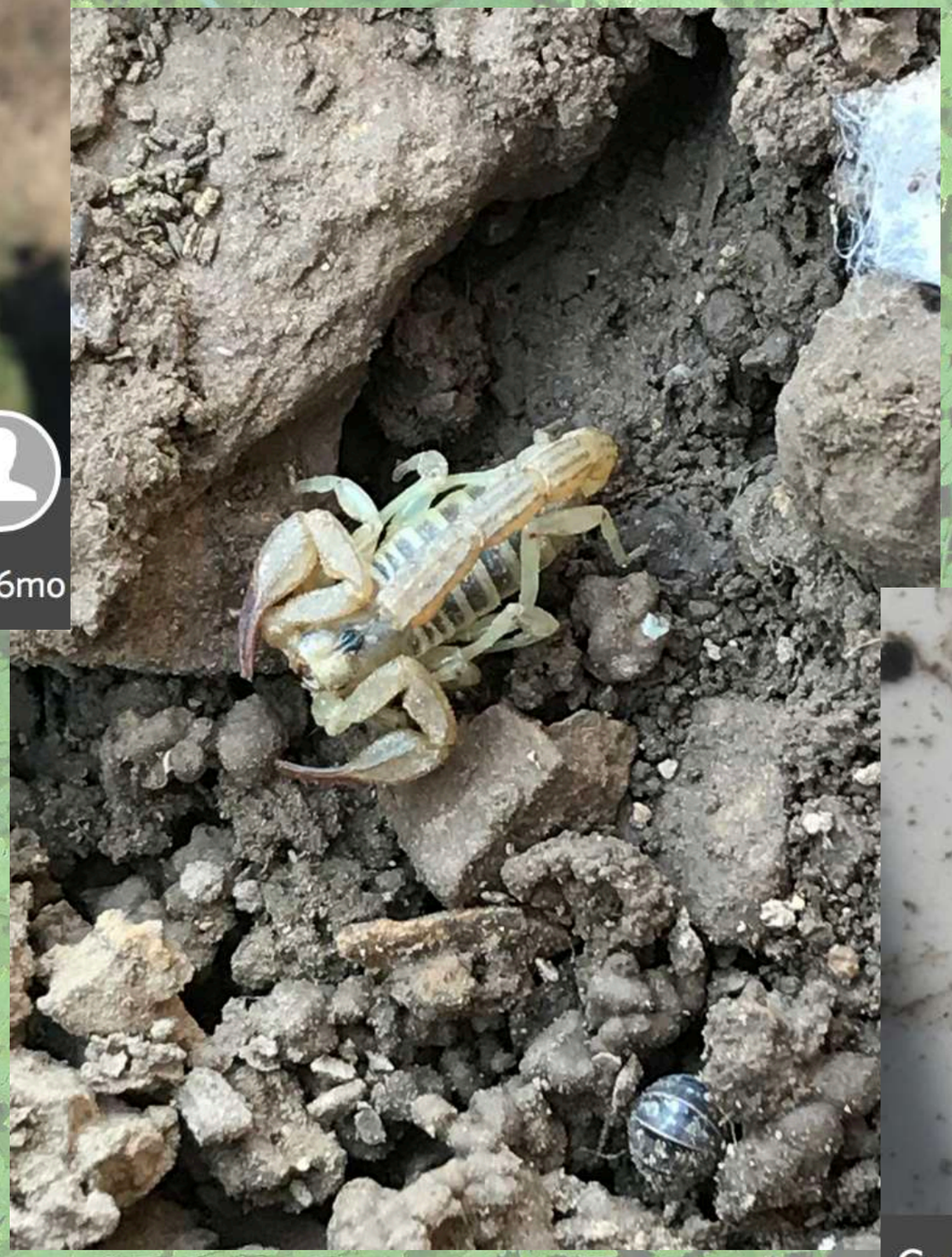
- Students not “seeing” very much
- Having trouble uploading photos
- Misidentifying organisms

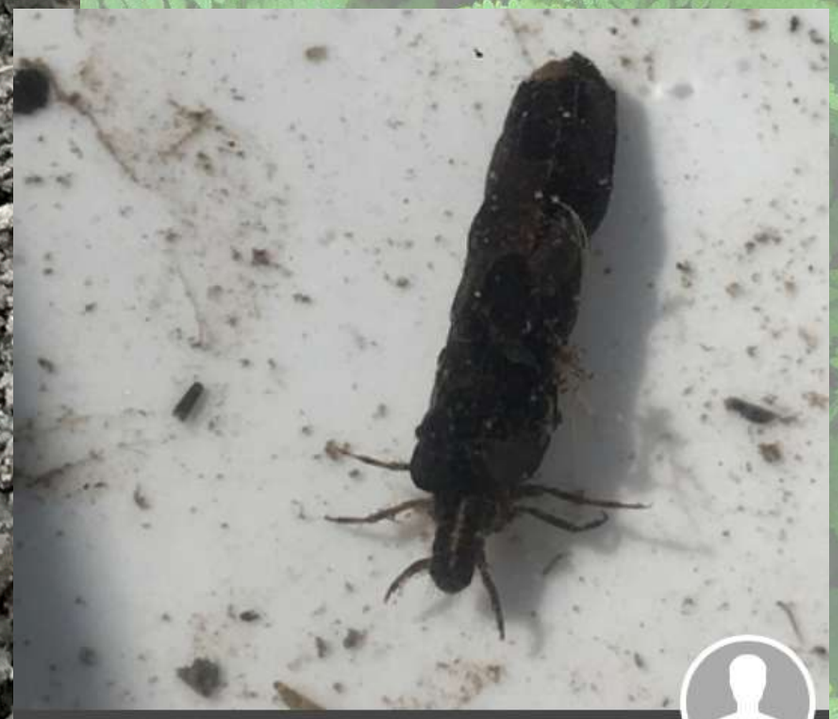
Success!

- On our first BioBlitz, we had close to 300 observations and nearly 100 species
- On our most recent trip, we had 720 observations and 147 species
- A few students have continued posting to iNaturalist
- Students were pointing out different organisms—and even different clades



Common Land Snails an...
Order Stylommatophora 6mo





Caddisflies
Order Trichoptera 6mo

Contact me…

rudeeric@isu.edu
Eric Rude
Pocatello High School
325 N. Arthur
Pocatello, ID 83204