

Nature in the city; ecology of the city



ESA Water Cooler

Bringing Ecology Home

George Middendorf, Howard University

Bruce Grant, Widener University

Gretchen Lebuhn, San Francisco State University

Warm-up/check-in

- How did labs go this semester?
- Share your best descriptor in a brief phrase in the chat.

CHECKING
IN





Water Cooler Guidelines

- Please post questions in “chat”
(we’ll review and organize to maximize)
- If you’d like to comment, please “raise hand” (we’ll recognize in order)
- Please try to minimize your comments
(we’d like to maximize participation)

Zoom norms of behavior

Chat and questions.



- It helps to have folks type their questions and comments into chat.
- Chat can sometimes be overwhelming so, we've built required pauses into the Water Cooler session today where we'll run through any of the questions that are posted.
- If the question or comment is something a bit off the topic we are dealing with right now, we may cover that in a response in the chat at the end of the session.



- **Four-Dimensional Ecology Education Framework | 4DEE**

Core Ecological Concepts: Organisms, Populations, Communities, Ecosystems, Landscapes, Biomes, Biosphere

Ecology Practices: Natural history approach, Fieldwork, Quantitative reasoning and computational thinking, Designing and critiquing investigations, Working collaboratively, Communicating and applying ecology

Human-Environment Interactions: Human dependence on the environment, Human accelerated environmental change, How humans can shape and manage resources/ecosystems/the environment, Critical thinking about the values underlying environmental problems, challenges and opportunities

Cross-Cutting Themes: Structure & function, Pathways & transformations of matter and energy, Systems, Space & time – Evolution, scale, stability and change, biogeography



Bringing Ecology Home

- Pedagogy
- Experimental design and analysis
- Student community-building and bonding
- Nuts and bolts
- Opportunities and outcomes

Chat check

- We will pause here.
- Pop your questions into the Chat.



Crosscutting Themes

Natural History of Your Home – Making Observations Asking Ecological Questions

Nature In vs Ecology Of the City

Bioregional Identity

Natural History & Citizen Science

Overcoming Socioecological Inequity & Inclusion

Collection Methods

Plants/ Fungi

tree surveys

plot-based in yards
transects block walks

shrub/herb surveys

transects in yards
time constrained sampling

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Animals

birds (BirdNet app)

squirrels, etc.

terrestrial inverts

Berlese traps
pitfall traps

flying inverts

flower visitor counts
timed counts, transects
bait traps (sugar solutions)
nocturnal UV light traps

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Specimen Methods

Identification

INaturalist

Google slides
www sites
digital guides

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Archiving

Google Slides

temporary (school glue to card stock)

permanent (deposition in natural history collection)

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Data Science

Data Management

Data Analysis

Data Sharing

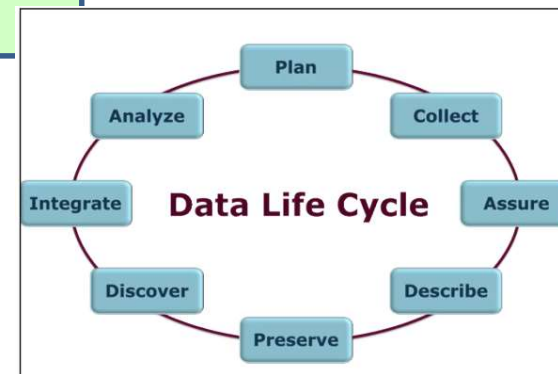



Figure 1. The data life cycle model, courtesy of DataONE.

Growing Rachel Carsons & Charles Darwins at Home



What can ecology classes look like in the fall and beyond?

- Place-based education has a new meaning and new opportunities.
- Incredible opportunity to show that place-based education can improve science engagement and literacy
- Challenges and Opportunities!



- **Stickies.io**

- Real-time sticky notes for teams. Create, move, cluster and upvote stickies in real-time. Perfect for affinity maps, retrospectives and brainstorming sessions.
- In the chat, you'll find an invitation to a Stickies board. Click on the link associated with your last name (A-E, F-J, K-O, P-T, W-Z) and sign in to participate.



Breakout groups/ Find your Sticky board

- Group 1 <https://stickies.io/boards/5ecd7344268a390540964ac1#1>
- Group 2 <https://stickies.io/boards/5ecd7344268a390540964ac1#2>
- Group 3 <https://stickies.io/boards/5ecd7344268a390540964ac1#3>
- Group 4 <https://stickies.io/boards/5ecd7344268a390540964ac1#4>
- Group 5 <https://stickies.io/boards/5ecd7344268a390540964ac1#5>
- Group 6 <https://stickies.io/boards/5ecd7344268a390540964ac1#6>
- Group 7 <https://stickies.io/boards/5ecd7344268a390540964ac1#7>
- Group 8 <https://stickies.io/boards/5ecd7344268a390540964ac1#8>
- Group 9 <https://stickies.io/boards/5ecd7344268a390540964ac1#9>

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