LB 144
Introductory Organismal Biology

Week 6
Turn in Ex.14 = citations, summaries, 1st page of each article

Outline of the day
• Review some tricky concepts
• Teamwork check-in
• YOUR projects!
**Review**

What is an ‘environmental factor’?

What do the words abiotic and biotic mean?

What is a factor? Or, a variable?

Based on these definitions, describe three specific environmental factors that may affect bird foraging behavior, and how each factor might do so.

**Reminder: Types of Scientific Literature**

- **Primary**: Reports findings of new research (exps or observational studies), peer-reviewed
- **Secondary**: Summarizes primary literature, no new results, peer-reviewed
- **Tertiary**: More general summary of scientific literature (textbook), not peer-reviewed
- **Peer-review**: = Rigorous review process where experts evaluate the soundness of a scientific article
Exercise 9: Teamwork Reflection

• Discuss your answers to the individual part of this exercise
• Come up with 3 improvement strategies your team will implement
• Share your plan with your instructor

Turn in Ex 9 (individual and team component components)

Exercise 15: Research Plan

• Follow the step-by-step instructions in the c-pack carefully & completely
• Get your plan approved before you leave lab
Reminder: Assigned Team Roles (p 24)

• **Primary Investigator** - organizing meeting times, overall project planning, implementing troubleshooting techniques
• **Protocol Expert** - overseeing the creation of scientific protocols for each week’s investigations (written experimental descriptions and steps you plan to do).
• **Data Recorder/Documentarian** - recording and organizing results and taking many pix to document the team’s efforts.
• **Laboratory Technician** - learning experimental procedures and becoming an expert on how to use equipment needed.

Exercise 16: Research Proposal

**Purposes of a research proposal include:**
• To demonstrate your knowledge of the topic and previous related research
• Show that the problem you propose to investigate is significant enough to warrant the investigation,
• Show that the method you plan to use is suitable and feasible,
• Show that the results are likely to prove fruitful and will make an original contribution to the discipline,
• To garner funding for research.
Exercise 16: Research Proposal

Team roles: ALL team members assigned and graded for writing sections of the proposal and poster as well as editorial duties on all sections of both.

PI and PE – 1st draft of introduction (days 1-4)
DRD and LT – 1st draft of methods (days 1-4)
PI and PE – 2nd draft of methods (days 5-8)
DRD and LT – 2nd draft of introduction (days 5-8)
ALL – Title and References, Final review of complete proposal (days 9-10)

Complete draft due to turnitin.com in 10 days!

Homework

- Read: scientific literature for your project
- Complete Ex 16 (Proposal) – as a team

Exercise 1 due November 14 – see pre-approved seminar list on class website