

## Lab 11: Animal Behavior

### Introduction

- Animals/behavior are both inherited and learned
  - They possess their survival and reproductive success in a variety of ways

### Key Concepts

- Many behaviors have both genetic and learned components
- Scientists study behavior and other aspects of organisms through observation and controlled experiments

### Key Concept 1. Observing Behavior—How Do We Study Behavior?

- Many types of birds
  - Observatory: Male Song, Following, Mate-Licking, Copulation, Ejection

### Key Concept 2. Observing Behavior—Eggs, Behavior

- How do gillings react to water level movements?
- Are they all the same species?
- Can you tell the difference between males and females?
- How many eggs do they have?
- How many legs?
- Do they exhibit any distinctive behaviors?
- How do they respond?
- How do they grow?
- What are water levels they survive dependent?

### Key Concept 3. Scientific Method

- You will receive three pairs of gillings from various angles to allow you to see all the details
- Tips for making an accurate sketch of a gilling:
  - Determine the relative proportions:
    - Antenna: length
    - Weight: length
    - Distance between eyes: width of body
    - Length of antennae: length of body
  - Count the number of body segments
  - Count the number of legs
  - Count the eyes
  - Label the body parts
  - Note the color of the gilling

### Key Concept 4. Responses to the Environment

- Place gillings in a clear chamber with food on the left bowl with dry filter paper and the other bowl on the right bowl with wet filter paper

### Analysis Results

- Gillings are omnivorous and ingest through their gills. Therefore, it can be predicted that they would be found in moist environments such as B, D, E, G, H, I, and J, and partly omnivorous as well.
- As the experiment takes a controlled environment, could there be another factor to consider as well?

### Design of the Experiment—The Hypothesis