

Naturalist's Notebook

OBJECTIVES

Students practice observation skills as they document the behavior of an animal and the characteristics of its environment.

MATERIALS

- pencil and paper
- stopwatches
- optional*: binoculars, magnifying glass, tweezers

BACKGROUND

Ethology is the study of an animal's behavior. The first step in learning about animal behavior is to observe and record the behavior. Observers must be careful not to attribute human characteristics or motivations to the animals they study.



ACTION

1. Students record the behavior of a wild animal in its natural environment or at a zoo or aquarium. Brainstorm a list of categories of behaviors they may observe. (Include resting or sleeping, grooming, eating, watchful behavior, aggressive activity, and social or individual "play.")
2. Before beginning, students create an animal observation log. They will need space to record the observation location, the animal, and its behavior.
3. Students find a suitable observation post and observe their animals for 30 minutes. One documentation method used by ethologists is to record the animal's behavior at the beginning of each minute. To do this, students set a stopwatch to alert them at the the start of each new minute. (Once the student records the behavior the animal is doing at the start of the minute, he or she does not record further behavior until the start of the next minute.)
4. In the intervals between behavioral documentation, students record their observations of living and nonliving components of the environment, including temperature, time of day, and other animals present.
5. Students summarize their data. They can calculate percentages for various categories of behavior. They summarize their findings and outline questions that could be addressed in further research.
6. Students discuss their findings in the class. Allow the rest of the class to question or comment on each report.

DEEPER DEPTHS

Students use reference materials to look for interpretations and explanations of the behavior they observed.

Students return to the same location and observe their subject for several days. Do students observe different kinds of behavior during different times of the day?