

Field Investigations: Ethograms and Animal Behavior

What an animal or person does is referred to as a behavior. How an animal or person acts changes depending on a variety of circumstances. For example, we might act differently at a party with friends than we behave at a fancy dinner. Animal behaviors change as well. How a fish behaves when it is feeding is different from when it is being hunted by a predator. It is important when working with animals to make careful observations of the animal's physical appearance as well as the animal's behaviors. Zoo keepers learn a lot from observing the animals they work with each day. Ethograms are used to record animal behavior.



Pre-Zoo Visit Activities

▶ ANIMAL BEHAVIOR JOURNAL

Materials:

- Journal (pencil & paper or electronic)
- Animal images

Have students create a list of four or five animal behaviors and find at least three corresponding images of animals to match the behaviors. For example: you might match the behavior of grooming to images of primates grooming one another, a cat grooming itself and a penguin preening its feathers. For each behavior have students write a short paragraph describing the behavior. Students can use the information and images to create a journal of the collected behaviors. Each behavior and the corresponding images would create a section in the student's Animal Behavior Journal.

▶ ANIMAL OBSERVATIONS

Materials:

- Note taking materials
- Animal videos and device for viewing

Zoo videos:

- **Kopi is a Gibbon Toddler on the Move!**
www.youtube.com/watch?v=0PexONjuvDI
- **Celebrate a Meerkat Birthday**
www.youtube.com/watch?v=SEDtj_ICLoE
- **Our Meerkats Love Jack-o-Lanterns**
www.youtube.com/watch?v=RbWYfX_rGM0
- **Meerkat Pups Join our Mob**
www.youtube.com/watch?v=7uyuVqSwkQc
- **Rough and Tumble (Orangutans)**
www.youtube.com/watch?v=zPi2KtilnnE
- **Bears will be Bears**
www.youtube.com/watch?v=sBvv_Bzvfj4
- **Learning to be a Tiger**
www.youtube.com/watch?v=0D9IH-f0xSk
- **Tiger Cub Zoya Discovers Snow**
www.youtube.com/watch?v=P5MBn5UKPhA

Have students watch videos and record the behaviors they see. Once students have recorded the behaviors, create a class list from the various behaviors observed. Extension: have students use an ethogram to record animal behaviors in a video.

▶ CITIZEN SCIENCE PROJECTS

There are many citizen science projects that involve making observations of the world around us. Here is a list of a few that can be done by anyone from anywhere in the United States.

- **e-Butterfly**
www.e-butterfly.org/
- **Nature's Notebook**
www.usanpn.org/natures_notebook
- **Project Noah**
www.projectnoah.org/missions
- **Project Squirrel**
projectsquirrel.org/
- **Watch the Wild**
www.natureabounds.org/Watch_the_Wild.html



On Zoo Visit

Have students use the ethogram template below to make animal observations. Depending on the skill level of your students, you may want to have students do multiple ethograms. For example, you may have students try observing different species or different individuals of the same species. You could also have them observe the same animal at different times during your visit. A time keeping device is recommended. This could be a watch, smart phone, tablet, stop watch, etc. For younger students, group leaders may want to be the time keeper for the group.

[Template — Ethogram](#)

Post-Zoo Visit Activity

▶ ANALYSIS DATA

Use the data collected to create graphs of the different animal behaviors.

- What were some of the most often observed behaviors?
- How are different animal species' behaviors the same and/or different?
- How are observed behaviors of different individuals of the same species the same and/or different?
- What insights can you make about some of the animal behaviors observed?
- What other factors may have influenced observed animal behaviors? (i.e. weather, time of day, number people around, other animals, enrichment items or food, etc.)

