

Capturing Alaska Animals on Film

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Concept:

To learn about the interdependence of animals and the local habitat.

Alaska Science Education Standards:

- ✓ A12) distinguish the patterns of similarity and differences in the living world in order to understand the diversity of life and to understand the theories that describe the importance of *diversity* for species and ecosystems;
- ✓ A14a) the interdependence between living things and their environments;
- ✓ A15) use science to understand and describe the *local environment*;
- ✓ B1) use the processes of science including observing, classifying, measuring, interpreting data, inferring, communicating, controlling variables, developing models and theories; hypothesizing, predicting and experimenting.

For a description of Alaska Education Standards visit the State of Alaska Department of Education & Early Development Website: www.eed.state.ak.us

Lesson:

The following will be guided toward discussion of moose and hares since that is what we have the most of in our neighborhood. This focus will help the lesson be more successful. Ours is a K-1 classroom of 34 students. Some of the lesson will be done with first graders only while other parts will be done with all students.

Gear-up:

To assess preconceptions students will help create an idea web starting with the type of animals we have in our neighborhood then link habitat descriptions to each animal's bubble.

We will ask a Native elder to visit our classroom to share with us traditional beliefs and uses of local wild game as well as strategies for locating game.

A local biologist will visit the classroom to discuss and answer questions about the type of animals we have living in our neighborhood. He/she will have various specimens and examples on hand to give students hands-on exposure to the subject. The biologist will lead a nature walk in which we examine, photograph and note what makes up the habitat and why a certain animal prefers to live in this habitat.

We will revisit our idea web to add to it and to clarify any misconceptions the students may have discovered.

Gear-Up process skills:

Observing, Communicating, Inferring

Explore:

Students will recreate the local habitat (woods, shrubs, grass) in the classroom, using mostly paper. By looking at the previous idea web and using our notes, photos, and recent knowledge we will determine what features are necessary for a certain animal to live in this habitat. Students brainstorm ideas as to how we can recreate the local outdoor habitat here in the classroom. Students and teachers will then set to work recreating the habitat in the classroom.

Explore process skills:

Observing, Communicating, Classifying, Inferring

Generalize:

Students will determine where trip-wire cameras should be set up in our classroom habitat in order to photograph an animal. After this determination the camera will be set up. Students will be given the opportunity to create costumes of one of these animals then mimic the animal as it wanders through our habitat, tripping the wire and taking pictures of the animal imposter.

Generalize process skills:

Observing, Communicating, Using space relationships, Predicting

Apply:

In two smaller groups students will walk through the local woods to determine a suitable spot to set up the trip-wire camera in order to photograph a wild animal.

Photos will be incorporated into a class Web page for posting on the Internet.

During the entire project a whole-class observation journal will be kept. We will refer back to this journal to develop the Web page that shares our project.

Apply process skills:

Observing, Communicating, Using space relationships, Predicting.

Assessment:

Create a checklist of observable interactions. For the final assessment, students will be given choices. They might:

- ✓ describe in writing the process involved in our project
- ✓ create a play
- ✓ write a diary or journal from an animal's point of view
- ✓ create a mini-book
- ✓ create a pop-up book
- ✓ create an art project
- ✓ diorama
- ✓ poster
- ✓ video report
- ✓ create a page for class Web site

Scoring Guide: Capturing Animals on Film

Activity or Event	N = Needs Improvement	S = Satisfactory	H = Honor
Native elder visit	Student unaware of topic; asks questions that are off topic.	Student shows interest; possibly asks questions.	Student is highly interested, asks many questions.
Biologist visit	Student unaware of topic; asks questions that are off topic.	Student shows interest; possibly asks questions.	Student is highly interested, asks many questions and shares own discoveries made on nature walk.
Re-visit Idea Web	Student holds on to previous misconceptions that have been dispelled.	Student is satisfied with Idea Web; possibly has additional information.	Student suggests fine details of the habitat that can be added.
Written report on local animal	Student struggles to come up with 2 facts or less.	Student can write 3 facts which include basic knowledge and beyond.	Student can write 3 facts beyond basic knowledge.
Oral fact presentation	Fact student chooses to recite is a falsehood.	Fact student recites is true and different than other presented in the class.	Fact student recites is new information for most students, is lengthy and interesting.