

Sandia Mountain Natural History Center

Ecology Field Program:

Bear Habitat Checklist Lesson plan

Your Name:

Grade Level: **5th**

Subject Area: **Life Science**

Lesson Title: **Bear Habitat**

Lesson Length: **30-40 minutes**

The Teaching Process

Lesson Overview

Focusing on biotic and abiotic parts of an ecosystem, students will explore the outdoor area around them and learn to look for parts of the ecosystem that bears would find helpful for their survival. Students will make connections about how each part of the ecosystem functions to benefit a bear. Further, students will practice developing hypotheses and modeling.

Lesson Objectives

1. Students will discover which areas are best suited for bears.
2. Students will utilize evidence to hypothesize how parts of the ecosystem benefit bears.
3. Students will make connections between the biotic and abiotic parts of an ecosystem.
4. Students will model ecosystem parts by illustrating evidence they discover.

Standards addressed

NMSS: NM I- Scientific Thinking & Practice, BM I- Scientific Method 1; Scientific Thinking & Practice, BM III- Measurement & Data 3;

NM II- Life Science, BM I- Ecosystems 1

NGSS disciplinary core ideas: LS 2.A, LS 2.B

NGSS crosscutting concepts: Cause & Effect; Systems & System Models; Energy & Matter

NGSS science & engineering principles: Engaging in Argument From Evidence

CCSS: RI 5.4, RF 5.3, L 5.1, L 5.2, L 5.4, SL 5.1, W 5.10

List of Materials

Bear Habitat sheet, notebook, pencils. Optional: field guides, bear skull, tracks, scat, fur, pictures.

Instructional Sequence

Phase One: Engage the Learner

Through questioning, the instructor directs students to think about what animal species may live here. Directing questions should focus on what the students see and lead them to critically think about what animals need to survive. Introduce students to the Bear Habitat activity. Explain to the students that they will need to use their observational skills to look for different parts of the ecosystem that will benefit a bear.

What's the teacher doing?

- Guides students through questioning and simple observation to understand what is happening in the area.
- Prompts students to think critically about how bears use the ecosystem/how they can't use it.
- Assists students with understanding various items on the Bear Habitat sheet.
- Models how to engage in the Bear Habitat activity.

What are the students doing?

- Actively listening and asking questions.
- Making connections to their surroundings.
- Use prior and/or recently gained knowledge to actively participate in discussion.
- Prepare for the activity by learning what evidence to look for.

Phases Two-Four: Explore the Concept; Explain the concept and define terms; Elaborate the Concept

Set exploration boundaries, give students roles and expectations (recorder, photographer, etc.), and put students into groups sized 2-3. During this portion of the activity students explore the designated area looking for parts of the ecosystem that match the Bear Habitat items.

What's the teacher doing?

- Explains directions and describes boundaries for activity.
- Actively monitors students by checking for understanding, guiding students and discussing finds.
- Encourages students to closely explore living and nonliving parts around them.
- Assists students with understanding their roles.

What are the students doing?

- As partners and with Bear Habitat sheet, students explore the area and determine which parts of the ecosystem may fall under each description/picture.
- With close observation, students make predictions and conclusions regarding the different parts of the ecosystem and how a bear many interact with each part.
- Students will record each item they find only once and record each set of points only once. Students will then add up all the points to determine if the area is poor, fair, good, or excellent habitat.
- Students will illustrate their findings.

Phase Five: Evaluate students' Understanding of Concept

While sharing with the group, students may reference the sheet, but must provide evidence to support their claim as well as use their observations to determine how the parts they found can be beneficial to a bear.

What's the teacher doing?

- Gathers students back to meeting area.
- Leads students in sharing their finds and citing evidence.
- Assesses students' understanding of the items found and how they help a bear through questioning and discussion.

What are the students doing?

- As a group, students share some of their observations and explain how they help a bear. Students must back up their claim with evidence.



Discovery Education Science
5-E Lesson Plan Template



Revised by H. Perry, Feb., 2018
Original by Paul Mauermann