Wildlife Ecology Pre-visit

Classroom Activity

Brief Synopsis:

People, like all living things have specific needs in order to survive. Students will investigate their own needs for living, and mapping it out in a floor plan of a home. The topic can be further explored by researching a local animal and discovering their needs from their habitat.

Ages: Designed for 5th—8th grade

Time Considerations: 15—30minutes

Materials:
- Pencil
- Worksheet (graph paper) for each student

Vocabulary:
Community, Ecosystem, Food, Habitat, Shelter, Space,. Species, Sustain, Water, Wildlife

Outcomes:
1. Students will be able to list the basic needs of all living things.
2. Students will describe how their needs are met via their home.
3. Students will understand how the basic needs of humans are the same as the basic needs of all wildlife.

Minnesota Academic Standards:
Math: 5.IV.A.3(extension activity)
Language Arts: 4.III.A.1&2, 5.III.A.1&2,
          6.III.A.1,3&6, 7.III.A.1&6, 8.III.A.1,2,6&7
          (extension activity includes nearly all the 5-
          8th writing standards (II) and benchmarks.)
Social Studies: 5-8.V.B.1 (extension activity)

Set-up:

Each animal on our planet has special needs; whales need the ocean, polar bears need the cold, etc. However, all living things have basic needs. This includes humans, although sometimes we can get our needs and our *wants* a little mixed up. To help your students start thinking about their own needs and how they are met as a parallel to wildlife needs and habitats you can use the included **worksheets** and **pencils** to conduct this activity.

Activity 1: Human Habitat
Background:

Procedures:
1. Have the students brainstorm a list of things they feel they could not live without and list them on the board.
2. When all ideas are exhausted, have the students try to group some of their ideas together. For example, video games and reading could all get clumped together under the general category of "Entertainment."
3. Once you have narrowed the list down into categories, have the students take a few minutes to think about their new list. Which of the categories are truly NEEDS for survival and which are simply WANTS. You could have them write down their top five choices individually and then edit the list together on the board. The resulting list of needs should look something like this:

<div align="center">

Food
Water
Shelter
Space
Air

</div>

4. Hand out the worksheets (or any graph paper) and ask the students to draw a floor plan of a home that illustrates everything they <u>need</u> in order to survive. For this project, we can assume that air is everywhere and need not be supplies specifically, they should include a place to cook as well as store food, a source of water, a way to stay warm, and illustrate enough space (for sleeping, etc.)
5. Once the drawings are complete have students break into pairs and share their creation with another student. Have them explain why they need all of the things in their picture.
6. Next hang the pictures up in a "gallery." Each student is like an

animal in an ecosystem, each drawing represents the needs of that animal in their habitat. Just as these homes together might make up a neighborhood, a group of animal homes together form a habitat. Just as a group of neighborhoods and local services make a community, a group of habitats make an ecosystem. Just as all the homes may use the same street and sidewalk to travel around the neighborhood, animals may use the same paths and flyways in the same habitat.

7. Have your class take a tour of their combined "habitat" and discuss the following questions:
   - Can the students come up with any more comparisons between how humans and animals survival is similar?
   - Do all animals have the same basic needs as humans?
   - Can the students list three reasons why humans need a home?
   - Are they the same reasons animals need their habitats?
   - What would your students do if their home could no longer provide them with the food they needed, or enough protection from the weather?
   - Can they think of an animal that might face the same problem in their own habitat?

Activity 2: Wildlife Neighborhood
Background: Even the squirrel in your backyard is living in a habitat, where it finds everything it needs. These "city-fied" animals often require much smaller habitats then their more rural counterparts, making it easier to map out their sources for food, water, shelter, and space.

Procedures:
1. For further exploration of these concepts, have students research an animal that lives in their neighborhood to learn how the animal's basic needs are met.
2. Can they walk around the neighborhood and find all the habitat components their animal needs? Why or why not?
3. Have them create a map of this animals needs in their neighborhood and include a paragraph describing and explaining what the needs are and how the animal meets those needs.

Teacher Tips
- Create your own example human habitat drawing with the amount of detail you expect your students to include.
- Have students work in pairs and give them more complex details of needs to be met, such as; there are five people in your family, or there is a young infant living there, etc.
- Make this activity into a two-part lesson, sending them home to draw their own living space, before coming back to school to share their picture and including it in the "gallery."
- For a greater challenge, have the students make floor plans and maps to scale, accurately measuring their homes or neighborhoods and translating that on to the worksheets.

Additional Resources

http://idahoptv.org/dialogue4kids/season5/ habitat/facts.html
A great introduction to all the vocabulary for *Wildlife Ecology.*

Eagle Bluff Environmental Learning Center   **Lanesboro, Minnesota www.eagle-bluff.org**

Name:

Human Habitat

Eagle Bluff

Key

Scale:

Name:

Wildlife Neighborhood

Eagle Bluff

Key

Scale: