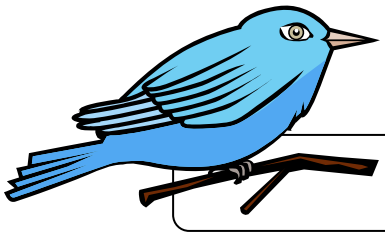

Environment Interactions

Summary:
Students will look at how interactions in their lives and in nature affect them positively and negatively.

Background Information:
This lesson is designed to get students thinking about the interactions in their environments as well as those in nature and how they may overlap. The following is information about the Puerto Rican Parrot that will be needed for the conclusion of this lesson.

Puerto Rican Parrot:
The Puerto Rican Parrot is the only native parrot on the island. Once found throughout the island of Puerto Rico, it is now confined within the Caribbean National Forest and in an aviary in Rio Abajo.

There are several factors that contributed to the decline of the Puerto Rican Parrot: chicks are taken from their nests to be used as household pets, adults are hunted by farmers to prevent damage to their crops, industries like charcoal cause large trees to be cut down, therefore eliminating their habitat. Habitat is also threatened when forests are cut for agricultural purposes; hurricanes destroy natural homes and food. Parasitic flies are also a threat to the parrot, they attack feed on the parrots, their nesting site are in competition with bees and predators like thrashers, rats, snakes, and Red-tailed hawks continue to be a pressing threat.

Some of these interactions are natural, others are due to human interference.

Additional information and fact sheets can be found at the end of the document.

Grade Level: 2nd

Goal: Students will become aware of how nature is a working system.

Key Concepts: discover nature's cycles and the positive and negative outcomes that derive from that

Objectives: Upon completion of this lesson, students will:
1) be able to name aspects of the environment around them that have an impact on their lives.
2) be able to explain how their lives would be different if something in their environment changed.
3) be able to give an example of an interaction in nature

Teaching Location: In the classroom or an outside setting

Lesson Time:
Overall: 100 minutes
Activity 1: 15 minutes
Activity 2: 15 minutes
Activity 3: 30 minutes
Activity 4: 25 minutes
Conclusion: 15 minutes

Subject Areas for Infusion:
Environmental Education, Language Arts

Standards:
Wisconsin State Standards:
Environmental Education: A.4.1, A.4.3, A.4.4

Language Arts: C.4.1, C.4.3

Materials:

- Drawing paper
- Pencils, crayons, markers
- A copy of El Pajaro, el Mono y la Serpiente en la Selva by Kate Banks

Vocabulary

Environment: Everything surrounding you that has an effect on you in some way.

Procedure:

Introduction.
Ask students to raise their hands if they have sisters, brothers, parents, relatives, friends, pets, neighbors, shelter, food, etc. All students' hands should be up. Explain what the term "environment" means and ask them to think about their environment, the interactions they have with people, their homes, yards, food, etc. How would their lives be without all or some of these things?

Activity 1.
Have students close their eyes and picture a typical day starting from when they get up in the morning. What do they do? Who do they interact with? What do they eat? Where do they go? Give students enough time to think through the actions of their whole day until they go to bed at night

Activity 2.
When the students are finished picturing their day, have them quietly draw a picture of one interaction they had with someone or something.

Activity 3.
After all students have completed Activity 2, ask them to share their picture and explain the interaction with the class. Ask how their day would have been different without that interaction. How would this feel? How would their lives have to change?

Activity 4.
Read El Pajaro, el Mono y la Serpiente en la Selva by Kate Banks to the students in Spanish, translating one page at a time into English (If you are not able to do this, ask a teacher or person from the community who can read Spanish to be a guest reader in your classroom). Discuss the relationship between the animals in the book and how things would be different for each animal if the others were gone.

Conclusion.
End the lesson by discussing how some interactions can be positive while others can be negative. Ask students to give examples from nature such as: lots of rain equals lots of mosquitoes – good for mosquitoes, bad for us; a wolf catches a fawn – good for the wolf, bad for the fawn; a lot of acorns – good for the tree and good for the animals that eat them; etc. Now discuss some of the natural interactions the endangered Puerto Rican Parrot encounters. It is hunted by the red-tailed hawk, the old trees with cavities in them have been cut down or

blown down, honey bees compete for nesting sites, etc. How do you think these interactions affect the Puerto Rican Parrot?

Assessment.
Assessment will be oral, notes are to be taken during discussions.

Adaptations: Students at most special needs levels should be able to participate in this lesson due to its oral and discussion nature.

References:

Caribbean National Forest, PO Box 490, Palmer, Puerto Rico 00721
http://southeast.fws.gov/pubs/facts/PR_parrot_FS.pdf
El Pajaro, el Mono y la Serpienta en la Selva by Kate Banks, Straus & Giroux, 1999
http://southeast.fws.gov/pubs/facts/PR_parrot_FS.pdf
Pamphlet, *The Higuaca, Puerto Rican Parrot*, Caribbean
National Forest, PO Box 490, Palmer, PR 00721