**WONDERFULLY WILD UNIT**

**LESSON 3: Grades 4-6**

**BURS IN YOUR FURS**

\*This activity was created by award-winning educators, Terry and Jan Primas of Duke, Missouri. They have spent the last 30 years instilling compassion, empathy and respect for wildlife and the environment within friends, family and thousands of students.

**Curriculum Connections, Standards addressed:**

**Academic Goals:** 1.2, 1.3, 1.4, 1.5, 1.6, 1.8, 1.10, 2.1, 2.2, 2.3, 3.1, 3.2, 3.4, 3.5, 3.6, 4.1, 4.3, 4.5, 4.7

**Knowledge Goals:** Communication Arts: 1, 3, 4, 6; Mathematics: 1, 2, 3, 6; Science: 3, 4, 8; Social Studies: 7

**Objective:** Introduce students to one of the important roles that wild animals play in sustaining their habitat/environment. Students will make reasonable predictions about what might happen if these wild animals are captured, become endangered or are destroyed due to habitation decline. Students will make observations, identify native plants, make mathematical measurements and graph data.

**Common Core-Aligned Activities:**

**W.5.7—Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.**

**W.5.3—Write narratives to develop real or imagined experiences.**

Invite students to choose a wild animal native to your community. Have them research their habitat, diet, migration and survival modes. After they have collected their information, have them present an oral narrative, reporting their findings to other students. You may want them to create a collage of their native wild neighbors. Now have the students write a narrative describing an imagined encounter they might have with that animal. What would the animal say to them? How does the animal feel with conditions in their community? Explore the feelings, emotions, needs of the animal as relayed to the student.

Encourage students not to remove animals from the wild to keep as pets and to make daily choices that help keep the habitat/environment clean for the wild animals. You can encourage this behavior by setting aside a small amount of time each day for the students to clean-up the trash and debris on the school grounds. If possible, keep the trash each week and take note of how much is gathered that may have caused harm to a wild animal. You can share this with the rest of the school and encourage them to jump on the ‘humane bandwagon’ to help the wild animals and the world we share!

**Character Concepts:** Citizenship, Respect

**Citizenship:** Do your share to make your school and community a better neighbor to the animals in the wild. Don’t litter….remember, animals go barefoot! Leave an area cleaner and more conducive to wild animals than when you entered. Protect the environment, we only have one earth!

**Respect:** Be considerate of the wild animals in your community. Don’t tease, taunt or hurt them. Set a good example for those younger than you by demonstrating how your behavior can make the world more peaceful for all living beings.

**STEM initiatives: Thinking critically in the connections to Science, Technology, Engineering and Math**

**LS4.D:** How can your actions, positive or negative, impact our environment? How can you (people) influence an animals’ environment positively or negatively by your everyday actions? What are the results?

**Materials Needed:**

* Cardboard, plastic or wooden flats (plastic is best and might be donated by a local gardening center)
* Potting soil (regular dirt found outside may taint the experiment)
* One large man's sock per student (the fuzzier the better and students can bring from home or you can find them at a thrift store)
* Rulers
* Pencils
* Colored pencils
* Resources (internet, non-fiction native plant books, wildlife magazines, etc.)
* Notebooks to record data and observations
* Family dog: If possible, make arrangements for a parent to bring the family dog to school to be present for this lesson. Make sure the pet is child-friendly, is current on vaccinations and that your principal approves.
* DOWNLOAD Handout: “Track Math”

**Method:**

1. Have each student slip one of the large fuzzy socks over one of their shoes before heading out on one of your bird-watching visits around the school grounds (see lesson 2). It will peak their interest if you don't tell them what it is all about. Go about your normal business of bird watching, making sure they walk through grassy, weedy areas. Take the dog with you on the walk.

2. Once back in the classroom, ask the students to carefully examine their socks before removing them. What do they see (besides dirt)? Hopefully seeds and burs. Have the students carefully slip their socks off on top of their desks (this way if any seeds fall off, they can put them back on the sock). When you notice that seeds have fallen off onto the desks, explain that this is exactly what happens in the wild. The socks are like the animals' fur and attract seeds and burs. When the animals travel and move about in their habitats they are dropping these seeds along the way. In turn, the seeds become covered with dirt and get watered naturally when it rains, causing the seeds to sprout and ultimately plants and trees to grow. If a dog is present, draw the students' attention to his/her fur and carefully remove any seeds or burs.

3. Have each student plant their seedy sock in a flat by layering it between a top and bottom layer of potting soil. Water liberally. Plant the dog's seeds too and be sure to label everyone's sock so observations can be made later (write on the outside of the flat or use popsicle sticks with names on them). Seeds will begin sprouting within one week.

4. Discuss the fact that this is an important role that wild animals play in their habitats. Have them guess what would happen if these animals were no longer around to disperse the seeds (the plants would have less of an opportunity to spread their seeds and grow, affecting the environment in the habitat.)

5. Brainstorm a list of furry wild animals that may spread seeds in this way. What other ways are seeds spread (birds and squirrels carry and disperse them, and wind mobilizes them, etc.)?

6. Have students make daily observations, recording their data in a notebook. They can draw pictures of what the seeds look like when they begin sprouting, measure the growth each day with a ruler and identify the plants using various resources. They can put the quantifiable data into graph form for display for parents, teachers and other students and display their sketches as well. You can even try planting the remaining plants (roots and all) outside to make further observations!

**Call to Action:** Encourage students not to remove these animals from the wild to keep for pets and to make daily choices that help keep the habitat/environment clean for the wild animals. You can encourage this behavior by setting aside a small amount of time each day for the students to clean-up the trash and debris on the school grounds. If possible, keep the trash each week and take note of how much is gathered that may have caused harm to a wild animal. You can share this with the rest of the school and encourage them to jump on the humane bandwagon to help the wild animals and the environment!

**Reading:** Visit our section entitled ***Recommended Children's Literature***for a comprehensive listing of animal-related books.

**Web Sites:** Visit our section entitled ***Recommended Web Sites*** for animal-related web sites.