Find Those Critters!

**Topic:** Looking for Bear Prints

**Grade Level:** 6-10

**Time:** One week

**Social Studies Concept or Theme:** Population of Florida Animals

**Generalization:** Human development has forced the Florida Black Bear into urban/suburban areas to search for food, water, and shelter.

**Objectives:** Students will:
1. map the location of Florida Black Bears.
2. discuss patterns of Florida Black Bear population.
3. discuss consequences of human development and how it will affect future generations of the Florida Black Bear.

**Materials:**
- Florida population map
- Florida Black Bear Range Map
- drawing paper
- writing paper
- cameras
- GPS Units

**Procedures:**

**Initiating Activity:**
1. Pass out maps of black bear core areas and a population map of Florida. The black bear map can be found at http://wld.fwc.state.fl.us/critters/livingwithbears/wherearebears.asp and the population map can be found in the Atlas of Florida. Each school library in the state of Florida has a copy of this atlas. If one cannot be found, please contact esmith@admin.fsu.edu.
2. Discuss how these maps overlap. How does this affect the bears? The people? What problems may stem from this overlapping? Other questions to consider: Are there other places we can find bears? What do bears eat? How are humans and bears alike? What kind of habitat is best suited for the Florida Black Bear? (Refer to the Your Land, My Land, Our Florida poster to see a composite map of Florida population and black bear habitats.) A great source of information on the Florida Black Bear can be found at http://wld.fwc.state.fl.us/bear.default.htm.

**Strategies:** How to create awareness in you community? One way is to find and record the tracks of bears and other Florida animals, threatened and endangered. Create suggestions on how to live peacefully and safely with the bears. (For more content and great lessons, please visit: http://www.floridaconservation.org/educator/blkbear.htm)
Directions on how to make casts of bear prints and other animal prints.

Materials: plaster of paris and a cardboard form.
1) The cardboard form should be placed around the print to isolate the print.
2) Mix the plaster of paris and pour into the print; not too fast, or the print will be distorted.
3) Set for an hour and then carefully place into a garbage bag for the ride home.
4) Set it out overnight, outside of the bag.
5) Softly clean the plaster cast with an old t-shirt and then set it out for display.

Culminating Activities: After finding and making the plaster casts of the black bear prints, have the students take GPS (Global Positioning System) points at the location of the tracks. Students should also draw and take pictures of the tracks and the surrounding area. Have students write a description of the surroundings: describe the vegetation, is there drinking water nearby? Other animals? Signs of humans? For a high-tech project, students could use Arcview (GIS-Geographic Information Systems) to make a map of where they found the tracks. For a low-tech project, students could hand draw a map or place pins on a topographic map to locate where tracks were found.

Evaluation: Have students present their findings to the class, their principal, Chamber of Commerce, or City Councilman stressing the importance of living peacefully and safely with the bears.

National Geography Standards:
Standard 16: The changes that occur in the meaning, use, distribution, and importance of resources.

Sunshine State Standards:
SS.B.1.3.1-The student uses various map forms and other geographic representations, tools, and technologies to acquire, process, and report geographic information including patterns of land use, connections between places, and patterns and processes of migration and diffusion.

FCAT Statement:
LA.A.2.2.7-The student recognizes the use of comparison and contrast in a text.
LA.A.2.4.4-The student locates, gathers, analyzes, and evaluates written information for a variety of purposes, including research projects, real-world tasks, and self-improvement.