

The Young Naturalist

Subjects: Social Studies, Science

Location: Outside, Classroom, or Homework

Duration: 1-2 hours

Vocabulary: Naturalist; Conservationist

ND State Curriculum Standards: SS.4.2.5; SS.5.2.4; 4-LS1-1; PE.5.3.2; PE.4-5.5.4; SS.8.2.5; SS.8.2.11; MS-LS2-4



Objectives: This activity is designed to prepare students for the distance learning program, “Theodore Roosevelt in the Badlands.” Students will be able to explain how the boyhood interests of Theodore Roosevelt influenced his conservationist attitudes in his later political career.

Background: The time Theodore Roosevelt spent in the Dakota Territory during the late 19th century not only helped to shape his future success in politics, but also enhanced an already present love of natural history.

However, his fascination with the outdoors, and the animals found during his adventures, actually began when Theodore was a young boy. To understand how his Badlands experiences helped to create our “Conservationist President,” one must first look to his very early years as a young naturalist.

By the time he was nine years old, young Theodore (or “Teedie,” as his family called him) had started his own Roosevelt Museum of Natural History. Collecting simple animals such as local birds, turtles and insects, Teedie expanded his museum and his knowledge of the natural world. Documenting his sightings and collections in detailed diaries and journals, by the time Roosevelt “closed” his museum, he had over 600 specimens. These were later donated to the Smithsonian and other natural history museums, and some are still on display for people to enjoy today.

Materials:

- Bug boxes
- Writing materials

Optional:

- Camera
- Magnifying lenses
- Measuring equipment (ruler/scale)
- Old bedsheet (preferably white)

Procedures:

Using the background information above, and/or other sources (listed at the bottom of this lesson plan), discuss with your class the interests of young Theodore Roosevelt. Highlight his fascination with animals and his creation of a natural history museum at an early age. Tell the students that today we are going to collect and catalogue some local specimens, just as Roosevelt did when he was their age. At the discretion of the teacher, students may work alone or in pairs/groups.

Distribute “bug boxes” (can be as simple as plastic food containers). Take students to an outdoor area (schoolyard or nearby field/wooded area), and have them look for small insects or animals. Give ample time for your group to explore and grow comfortable in this new setting - some students will be well outside their comfort zone. Tell them to look under rocks, logs or plant material for fascinating creatures. You can also find a tree or shrub, spread out an old bedsheet underneath, and shake the plant to see what (or who) falls out. Once everyone has at least one specimen, bring them back to the classroom.

Upon returning to your classroom, set the students to cataloging their finds. Depending on your available equipment, have students note things such as: size (length, width, height, etc.); weight; coloration; anatomy (describe body parts such as legs, antennae, eyes, etc.); behaviors or abilities (does it jump, fly, crawl, etc.); location found (on a tree or under a bush). They should also note the name, and may at this point be interested in researching the creature further. You can assist the students with taking a picture of their specimen before releasing it back into its natural environment.

Evaluation:

With your class, begin a discussion about their experiences as a young naturalist. Ask them to share what they enjoyed about the activity, and make a list on the classroom board for everyone to see. You can then start to compare their own thoughts and experiences with those of our 26th president when he was a similar age. Ideas such as being outdoors, exploring, and learning about creatures were huge passions for Theodore as a boy.

At the age of ten, Theodore Roosevelt got his first pair of glasses, and it literally opened his eyes to a new dimension of the natural world. Being near-sighted, he was unable to discern far away objects very clearly, but his corrective lenses allowed him to admire animals from a distance for the first time - especially birds. Roosevelt's childhood fascination with birds and nature remained with him his entire life, and as president he created the first National Wildlife Refuges, many specifically for birds. He also established numerous National Forests, National Monuments, and other protected lands, both for the conservation of plants and animals, as well as for the enjoyment of all people.

If you are signed up for the Distance Learning Program, tell the students that soon they will meet a Park Ranger and learn about the experiences of Theodore Roosevelt as a young man, when he left his new political career to become a rancher in the Dakota Badlands.

Extension, Tips and Resources:

For an extension, have students research their specimen and submit a report on it. You can also turn this into a class/school project, and have students create their own local Natural History Museum to show off to the school or community (i.e. at the school science fair).

Instead of leading this activity during class time, you can assign it as a homework activity, and have students find specimens from their yards or neighborhoods. If leading this activity at school, set boundaries for the students while outside. Some children will dive into this activity with great fascination, while others can be hesitant about enjoying the outdoors. Be sure you are creating a safe environment, and let students know it is okay to get their hands dirty (we can clean up later). Set a strong example - if they see a role model lifting stones or digging in the dirt, they will be more inclined to let their inhibitions drop and do the same. This is a great opportunity to help connect young people to nature.

For additional resources, reference:

- Teedie: The Story of Young Teddy Roosevelt by Don Brown (children's picture/story book)
- Theodore Roosevelt section of American Museum of Natural History's web page:
<http://www.amnh.org/explore/science-topics/theodore-roosevelt> (short videos and other resources)