

Theodore Roosevelt

National Park Service
U.S. Department of the Interior

Theodore Roosevelt National Park
North Dakota



Teacher's Guide for Ranger-Led Day Program



Welcome!

This guide will help you prepare for bringing your students to the environmental education program at Theodore Roosevelt National Park. It will briefly cover the steps necessary to sign up for the program; present an introductory, or “pre-site” activity, to do with your class before coming on your field trip; address logistics and planning for the field trip itself; and finishes with a closing, or “post-site” activity to do back at school.

Registration:

To register for the program, go online to the park’s website. Field trip information and reservation is under the “For Teachers” section. Follow this quick link:

<http://www.nps.gov/thro/forteachers/planafieldtrip.htm>

Please note that the bulk of our field trip requests are for the first few weeks of May, and our staffing can be very limited. Requests are filled on a first-come, first-served basis. If you are not able to register for our Ranger-led program, the website has a detailed Teacher’s Guide for leading your own field trip to the park. In the “For Teachers” section you will also find lesson plans and activities to help teach your students about Theodore Roosevelt National Park.



Prairie dog in its winter coat

Program Introduction:

Theodore Roosevelt National Park is known for its beautiful scenery and wild bison herds, but one of the most fascinating resources which the park protects is also one of its smallest: the prairie dog! Black-tailed prairie dogs abound throughout the park, especially along the scenic loop road of the South Unit. The park offers a 90 minute, curriculum-based program designed for 4th to 6th grade students, which focuses on prairie dog communities and their importance to the ecosystem. Maximum group size is 50 students, with a requested minimum of 10. This program is offered at no cost to schools.



Prairie dogs are famous for their vocalizations, but they also use many forms of non-verbal communication, including flicking their tails and “kissing” family members on the face.

Prairie Dog Information:

Black-tailed prairie dogs are a burrowing rodent found throughout natural prairie ecosystems in North America. They are small creatures, around two pounds and eighteen inches long. Extremely communal animals, they live in large colonies commonly referred to as “dog towns,” constructing complex networks of underground burrows. Within these colonies live family units known as *coteries*, and typically contain one or two adult males, several adult females, and their young. Although a coterie will contain numerous burrow entrances, these family units are separate from one another and do not connect to other coteries. Think of a dog town as a large city, and the coteries as distinct neighborhoods within that city.

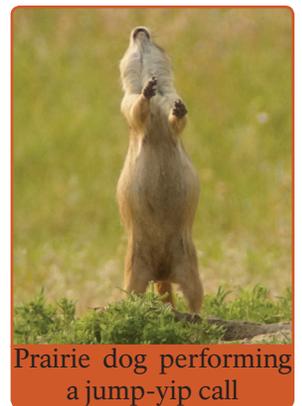
Prairie Dog Information (continued):

Prairie dogs often build large mounds around their burrow entrances, which can serve multiple purposes. Firstly, they can help prevent flooding of the burrow. Mounds also improve ventilation, as air will enter at a lower burrow entrance and exit at a higher mound. Finally, and most importantly, these mounds act as lookout posts for prairie dogs to watch for predators. Prairie dogs have a highly developed communication system they use to warn each other of possible threats, and spend a large portion of their above-ground time scanning for dangers.

Their underground behavior is intriguing because it remains such a mystery. Prairie dogs spend around half of their life inside of their burrows, and objective observation of the animals once underground is understandably tricky. What few excavations of burrows that have been done reveal both simple and complex networks of tunnels and chambers, sometimes as much as 15 feet underground. Individual burrows typically have one or two entrances, but researchers have found others with as many as six. Generally, burrows contain chambers much like the rooms of our own homes, each having a purpose or use, such as sleeping or raising young.

Importance of Pre-Site:

This pre-site activity is designed to start your students thinking about prairie dog life - their homes, communities and society - and comparing it with their own community. It can be used in conjunction with a more traditional assignment, such as researching a short biography on prairie dogs, or as a stand alone project. Feel free to adapt, add or change your pre-site assignment; the important thing is that you take time before your field trip to give your students an opportunity to learn about these animals. Effective pre-site means your students will spend their time at the park learning through experience and reinforcing what you have taught in the classroom.



Prairie dog performing a jump-yip call

Pre-Site Assignment:

Give your students an easy homework assignment: draw a map of their house. They can make it as detailed or as simple as they like, but it must clearly indicate the entrances and exits of their house, and information on all of the rooms (what the room is, who uses it, and what is it used for). They should also indicate how many people live in their house.

Back in the classroom, have students present their maps and drawings to the class (or in pairs or small groups). You can help your class make a list of similarities they see with their houses: number of entrances, types of rooms, number of people, etc. After people have shared, give your students a new task to complete in the classroom: design their own homes! The only catch is, their homes must be underground. You can give them more detailed guidelines, such as creating tunnels and chambers, or allow for a less structured assignment and more creativity. Once they have finished drawing their underground homes, have them compare their two houses. Ask them questions about the new homes they designed, such as:

- How many entrances do you have? Why would more than one entrance be a good idea?
- Do other people share your home? Are there any benefits to living with others?
- What types of rooms are absolutely necessary, that almost all people want in their homes?
- What are the advantages and disadvantages of living underground?
- Are there any animals which live underground we could study to compare our homes?

Assignment Wrap-Up:

From here, you can transition your discussion to black-tailed prairie dogs. Introduce your students to the basic information presented above, emphasizing the communal nature of prairie dogs. Show them a diagram of a prairie dog burrow, and let them compare the prairie dog home with the ones they designed. At the end of the lesson, tell your students that they will soon visit a real prairie dog town at a National Park to learn more about these creatures and how they live.

Field Trip:

Several days before your scheduled trip, park staff should contact you to review program rules and expectations. Make sure you are checking your e-mail and returning our calls! Below is a quick list of important rules for a Ranger-led field trip to Theodore Roosevelt National Park.

- Students must not bring cameras, phones, tablets, electronics, binoculars or money
- All participants (including adults) must wear close-toed shoes and long pants
- Be prepared for the weather - check the forecast and dress to be outside several hours
- All participants must have a name-tag (masking tape and marker work great)
- We require a ratio of 1 chaperon per 10 students, with a maximum of 7 adults



A bison herd in a prairie dog town. Attracted by the fresh vegetation, grazing animals are often seen in dog towns.

Before your visit, please review rules and proper behavior for visiting a National Park with both your students and chaperons:

- Do not feed wildlife
- Pick up and properly dispose of all trash
- Do not pick the plants
- Leave what you find
- Be respectful of other visitors
- Have fun!

Program Logistics:

Please ensure that your group is arriving on time! If you are not able to arrive on time, contact park staff as soon as possible. Upon your arrival to the park, present your fee waiver at the entrance station, and proceed to the Visitor Center (VC) parking area. Your Ranger will greet your group on the bus for a quick orientation, then direct students and adults off of the bus and to the VC to use the rest rooms. Teacher and chaperon support is needed to get your group through this process as fast as possible. The Ranger will gather students outside of the VC for discussion until everyone is ready, then back on the bus to head to the program site. There is about a 15 minute drive from the VC to the dog town.

At the prairie dog town, the Ranger will lead your group through a series of discussions and activities. For some of these activities, the students will split into smaller groups with one adult per group. Chaperons should help keep their group together and focused on their activity, which usually lasts about 10 minutes. Your group should be at the dog town for 45 to 60 minutes. At the end of the program, your time in the park is now your own. You can explore more of the park, go to the picnic area for lunch or rest rooms, spend time at the VC, or head back to school. A post-site activity should be done with your students within a few days after your park visit.

After Your Visit:

After visiting Theodore Roosevelt National Park and learning about prairie dogs and their connections with the greater ecosystem, your students should have a follow-up lesson to reinforce some of the ideas they learned before and during their trip. Again, this activity is an example of what can be done - feel free to use an activity or assignment which best fits your lesson.



When they sense danger, prairie dogs will run to their burrow entrance to keep watch. This prairie dog is ready to escape underground when the threat gets too close.

Post-Site Activity:

To reinforce the concepts of communication and community, your students can play a version of a tag game known as “Predator-Prey.” Find or set up a playing field with boundaries on four sides. Within the field, place several hula hoops (or equivalent) as designated safe zones. Choose a few students to be predators, and the rest will be prairie dogs - the prey. All of the “prey” represent young prairie dogs who are trying to expand their town and find new territory. They must make their way from one side of the dog town to the other, using the safe zones as their burrows to hide from predators. When a student enters a burrow, they must close their eyes to simulate being underground and unable to see. Once a student reaches the other side, they are safe from predators and out of the game. If they are tagged by a predator, they are eaten and must sit out for the rest of the round.

This game can be presented by the facilitator (that’s you!) either very simply, or in great detail. It can be a lot of fun for students if they are allowed to come up with their own details, such as what types of animals the predators represent. Kids will often push the boundaries of rules, so be prepared with consequences for breaking rules (or allowing behavior if they have creatively “bent” the rules). Challenge the group to develop their own consequences, so they are essentially establishing their own boundaries for the game.

One challenging aspect about this version of Predator-Prey is not being able to see when you are in a safe zone. Use inquiry to get your students thinking of how to overcome this handicap. If they learned anything, they should remember that prairie dogs are excellent communicators, and depend on their community to warn each other when predators are nearby. Working together will help them accomplish the game’s objective. Play several rounds, adding any modifications you or your students come up with during the course of play. A debrief at the end can help students draw connections between the game and natural ecosystems:

- What about the game did you find easy or difficult? Why?
- Can you list any reasons prairie dogs live in large, underground communities?
- How do prairie dogs depend on each other? How do other animals depend on prairie dogs?
- What impact(s) would the ecosystem face if prairie dogs disappeared?

Feedback:

In order to improve our programming and strengthen the park’s relationship with local schools, please take time to fill out our evaluation. You should receive an e-mail from our park staff shortly after your visit with our own feedback for your group, and a link to our evaluation form. Feel free to call or e-mail the park with any other comments, concerns or suggestions.