



Ridgeline

A Guided Nature Trail



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Be aware of the following:



Cliff Edges



Stairs



Rattlesnakes



Wildlife



Poison Ivy



Ridgeline Nature Trail

Lakota people called this land *mako shika*, or “land of no good.” French explorers called it *les mauvais terres à traverser*, “bad lands to travel through.” The English name is *badlands*. It is dry, maze-like, and rugged. Survival can be tough. Even so, many plants and animals do survive and even thrive here. Learn more as you follow the numbered trail posts.

1. Look deeper

As you hike this trail, look closely. The juniper trees surrounding you now are hard to miss. Also notice the many other plants, including chokecherry, crisply scented silver sagebrush, and many grasses and small flowers. Animals eat most of these plants and

American Indians have long used them for food or medicine. Some plants are toxic. In order to survive, people and animals had to learn which plants could help or harm them.



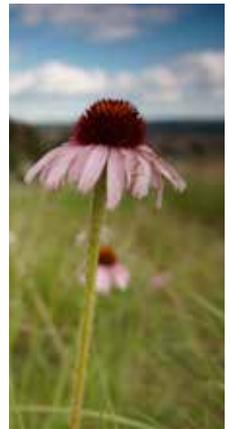
Silver sagebrush
(*Artemisia cana*)



Choke cherry
(*Prunus virginiana*)



Prairie wild rose
(*Rosa arkansana*)



Purple coneflower
(*Echinacea angustifolia*)



2. Mako shika

Imagine traveling across the Great Plains in a covered wagon and coming upon this scene. The name *badlands* is understandable. Next, imagine yourself as a hunter on foot—butte tops become good lookouts and valleys become

good places to travel undetected. Now imagine yourself as prey, using the lookouts and hiding places to evade predators. Once you get to know the badlands, you can use the rugged landscape to your advantage.

Continue straight ahead to follow the guided nature trail.



3. Grasslands

Grasslands look simple at first glance, but upon closer inspection are complex. Hundreds of species of plants live in the park, most of them grasses and wildflowers. Grasslands support *grazers*, animals that eat mostly grass, such as bison. In fact,

grasslands depend on grazers. Grazers fertilize the soil with their manure. Their pointed hooves pierce the soil allowing rainwater to find its way into the ground. By grazing selectively, they help many plant species thrive.

4. Shrubs

Shrubs, like the silver sagebrush in front of you, provide cover for small mammals and birds and are also food for *browsers* (animals that eat shrubs such as deer, elk, and pronghorn.)

Browsers and fires keep shrubs from overtaking the grasslands. Without them, tree and shrub cover increases, shading out smaller plants and reducing the prairie's diversity.



Silver buffaloberry
(*Shepherdia argentea*)



Rubber rabbitbrush
(*Chrysothamnus nauseosus*)



Golden currant
(*Ribes aureum*)

Continue straight ahead to follow the trail posts in numerical order.

5. Expressway

Travel through the badlands is much faster since the construction of Interstate 94 in the 1960s. Increased travel to and through the badlands

means more chances of introducing plants and animals that aren't originally from this area. Some introduced species are damaging; others are not.



Caution! Steep cliff edges ahead

6. New Neighbors

Not all of the plant species you see were here 200 years ago. Those that were here before European settlement are called *native species*. The prairie depends on native species to play their part in the environment—as food or shelter for animals, or as protection

and nutrients for soil. Plants that have been introduced are called *non-native species*. Many non-native species blend into the environment and do not pose a threat; others become a problem. These problem species are called *invasive species*.

7. Invaders

Invasive plants, such as Canada thistle, often spread quickly and take over large areas, crowding out native species. Some invasive plants, like leafy spurge, slow the growth of nearby plants by releasing toxic chemicals from their roots. Many invasive plants

cannot be eaten by native wildlife. Their spread reduces the amount of food available for grazers. Theodore Roosevelt National Park is actively fighting to keep invasive species from overtaking the native prairie.



Canada thistle
(*Cirsium arvense*)



Leafy spurge
(*Euphorbia esula*)



Smooth brome
(*Bromus inermis*)

Continue straight along the ridge to the next post.

8. Variety

As you look out across the landscape, notice its diversity: some areas have trees; some are grassy; and some are almost bare. This is the influence of terrain on plant life. Do you see the pattern?

Trees grow where they can get enough water, usually along streams or northern sides of hills where the sun doesn't dry up moisture as quickly. Grasses are adapted to dry areas like the tops and southern sides of hills.

9. Cooling Down

You are entering the north slope of the ridge you've been walking along. Notice there are fewer grasses and more trees and shrubs. Grasses thrive on the sunnier, drier hilltops and



Rocky Mountain juniper
(*Juniperus scopulorum*)



shrubby cinquefoil
(*Potentilla fruticosa*)



spreading dogbane
(*Apocynum androsaemifolium*)

southern slopes. The cooler, wetter conditions of the northern slopes allow juniper, skunkbush sumac, and dogbane to grow.

10. Having it All

Imagine living here without modern conveniences. On a hot day, you would find shade in the cottonwood trees along the river. When hungry, you could find edible roots in the grasslands and berries in wooded and shrubby areas. You would move

between habitats to find the food and shelter you need. Many animals depend on the mix of habitats of the badlands just as people would. For example, elk use juniper woods for cover and graze in open prairies.

11. Bird Food

In the summer and fall, the shrubs and trees around you abound with berries, which feed some of the nearly 200 bird species in the park. Some birds live here year-round, but many migrate here for summer or come through on

migrations to places further north. These bountiful berry patches are critical fuel for the migrating birds' journey. The cover of their branches provides a protected resting spot or a place to nest.



western meadowlark



lark sparrow



spotted towhee



12. Burning Up

Fire is a healthy and important part of the prairie ecosystem. Together, fire and grazing keep soils healthy and stop trees and shrubs from overtaking the prairie. Do you see any evidence here from past fires?

Native plants are well adapted to occasional fire. Native grasses have very deep roots which store the energy

plants need to regenerate after fire. The grass shoots that regrow are fresh and nutritious—preferred grazing for bison and other animals.

Fire is a useful tool for fighting the spread of invasive plants. Many invasive species are less tolerant of fire, giving native species an advantage in the growing season following a fire.



A hillside in the park one month after a prescribed burn



13. Setting Fires

The health of the grasslands was essential to the Mandan, Hidatsa, Arikara, and other plains tribes. To keep the prairie healthy, people have been setting prairie fires for thousands of years.

Today the National Park Service prescribes and sets carefully controlled fires. These fires mimic the historic natural and human-made fire cycle that is so important to the prairie's health.

14. Preserving the Balance

Along the Ridgeline Trail you have seen how the habitats of the badlands, when in balance, create a place for many species' survival and also how delicate that balance can be.

As you continue to explore, notice how each habitat affects the plants and animals within it and how those park residents affect their habitats.

The National Park Service strives to preserve the balance of the badlands for the benefit of wildlife, visitors, and the ecosystem we all share.

Continue up the hill, then follow the trail to the left.

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