The Tower Columns

Welcome to Devils Tower National Monument

I use these definitions quite simply to best provide a sense of why I chose to become part of the team at Devils Tower (Mato Tipila) and be present in the tower’s presence. The Tower speaks for itself I need not tell or explain why it is our countries first national Monument, nor why it is considered sacred, nor why the residents of Crook County and State of Wyoming deeply care for the tower, nor either why others nationally and internationally are called to visit the tower.

The Lakota way speaks of “the circle” or hoop as it pertains to existence. I assure each and every one of you my assignment at Devils Tower is a profound and significant responsibility to me and my hoop.

I call upon you to join me as I have already joined you and your journey in whatever Devils Tower means to you. And whatever the “tower” means to you let it be fulfilling. We will move forward together as we approach the National Park Service’s 100 year anniversary and leave Devils Tower NM a better/safer place. This is what was expected by us of our predecessors and what is expected of the dedicated staff that report to duty at Devils Tower into perpetuity.

- Superintendent Reed Robinson

Know Before You Go

Here are some useful reminders to help maximize the safety and enjoyment of all park visitors:

When walking the trails, take plenty of water and wear comfortable walking shoes.

All plants, wildlife, and archeological artifacts are protected.

Be respectful of this quiet place. Voices and noise travel long distances here.

Traditional cultural landscapes are protected places. Please do not disturb prayer bundles.

Things to do at Devils Tower:

Visit Prairie Dog Town

Check out the exhibits and the bookstore in the Visitor Center

Become a Junior Ranger

Hike the trails

- Tower Trail 1.3 miles
- Red Beds Trail 2.8 miles
- Joyner Trail 1.5 miles

Operational Reporting is intended to support the day-to-day activities of the organization.

Duty is a term that conveys a sense of moral commitment or obligation to someone or something. The moral commitment should result in action; it is not a matter of passive feeling or mere recognition. When someone recognizes a duty, that person theoretically commits themself to its fulfillment without considering their own self-interest.

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Drawn images of how the prayer bundles may appear along the trail

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Geologists agree that Devils Tower was formed by an intrusion, the forcible entry of magma into or between other rock formations, of igneous material. What they cannot agree upon is how that process took place and whether or not the magma reached the land surface.

Numerous ideas have evolved since the official discovery of Devils Tower. Geologists Carpenter and Russell studied Devils Tower in the late 1800s and came to the conclusion that the Tower was indeed formed by an igneous intrusion. Later geologists searched for more detailed explanations.

In 1907, scientists Darton and O’Hara decided that Devils Tower must be an eroded remnant of a laccolith. A laccolith is a large, mushroom–shaped mass of igneous rock which intrudes between the layers of sedimentary rocks but does not reach the surface. This produces a rounded bulge in the sedimentary layers above the intrusion. This idea was quite popular in the early 1900s when numerous studies were done on a number of laccoliths in the Southwest.

Other ideas have suggested that Devils Tower is a volcanic plug or that it is the neck of an extinct volcano. Although there is no evidence of volcanic activity - volcanic ash, lava flows, or volcanic debris - anywhere in the surrounding countryside, it is possible that this material may simply have eroded away.

The simplest explanation is that Devils Tower is a stock—a small intrusive body formed by magma which cooled underground and was later exposed by erosion.

The magma which formed Devils Tower cooled and crystallized into a rock type known as phonolite porphyry. It is a light to dark-gray or greenish-gray igneous rock with conspicuous crystals of white feldspar.

Eventually, at some time in the future, even Devils Tower itself will erode away!
**Black-Tailed Prairie Dogs**

Prairie dogs are social animals that live together in “towns.” The prairie dog town at Devils Tower National Monument is approximately 40 acres in size. Prairie-dog tunnels may extend downward from 3 to 10 feet, and then horizontally for another 10 to 15 feet. Prairie dogs are active only during daylight hours, when they feed and socialize. They have complex vocalizations, and use different calls when they see different predators. When a prairie dog spots a prairie falcon nearby, it will give a different call than when it sees a prowling coyote.

![Juvenile Black-Tailed Prairie Dog](image)

The Black-Tailed Prairie Dog *Cynomys ludovicianus*, a type of burrowing rodent, is one of five prairie-dog species found in North America. The other four species are the Gunnison’s (*Cynomys gunnisoni*), Mexican (*Cynomys mexicanus*), Utah (*Cynomys parvidens*), and white-tailed (*Cynomys leucurus*) prairie dogs. Of those five species, the black-tailed prairie dog is the most abundant and widely distributed.

Though black-tailed prairie dogs are protected within the boundary of Devils Tower National Monument, their overall population is about 2% of what Lewis and Clark described as “infinite” 200 years ago, due to habitat loss, extensive eradication programs, and introduced diseases. Prairie dogs are an important component of local ecosystems. In areas throughout their range, prairie-dog burrows and colony sites provide shelter and nesting habitat for myriad other animals, such as tiger salamanders, mountain plovers, burrowing owls, black-footed ferrets, and hundreds of insect and arachnid species.

Prairie dogs also serve as prey for numerous mammalian and avian predators, such as badgers, black-footed ferrets, bobcats, coyotes, ferruginous hawks, golden and bald eagles, and prairie falcons. Consequently, as the prairie-dog population declines, so do the populations of other species associated with them and their colonies.

Black-tailed prairie dogs have a relatively short life span, averaging only about four years in the wild. Their diet consists primarily of green vegetation. **Do NOT feed the prairie dogs.** Consumption of human food shortens their lives—not only because human food is an improper dietary source, but also because animals that become habituated to human handouts tend to spend more time near and in the road, where they can quickly become roadkill. As such, it is illegal to feed prairie dogs (or any wildlife) in a national park, both for their protection and yours: prairie dogs may bite, and they (and the fleas that live on them) often carry diseases that are potentially harmful to humans, such as bubonic plague.

Enjoy them at a distance!

**What is Chomping on the Tree Bark?**

![Adult porcupine on a tree branch](image)

While strolling on the Tower Trail at Devils Tower National Monument, one is inclined to notice a rather obvious, yet curious, marking at the base of many of the Ponderosa Pine trees.

Conceivably, deer rub their antlers on the bark or, perhaps, busy beavers attempt to claim building materials far from the Belle Fourche River? Truth be told, waddling about the Ponderosa Pine forest is a nocturnal, spiny rodent dining on the bark.

**Adult porcupine on a tree branch**

With 20,000 to 30,000 quills covering the animal from head to tail, this chewer-of-tree-bark is none other than the North American Porcupine! The porcupine does not hibernate and thus, is in need of nutritional food options during the harsh winter months. The inner layer of the bark, the cambium, provides a staple food for the animal in the winter. In addition, porcupines may eat twigs, buds, and the needles of evergreens. The inner layer of the bark, the cambium, provides a staple food for the animal in the winter. In addition, porcupines may eat twigs, buds, and the needles of evergreens.

Like all other rodents, the porcupine has impressive incisors that enable it to chew through the bark. Due to the thick bark of the Ponderosa Pine tree, the porcupine feeds in two phases. A first pass of the incisors shaves off the dead outermost cork layers of the bark. On the second pass, the porcupine harvests the inner bark, the sweet cambium layer, grinding it with the cheek teeth and swallowing it.

Porcupines feed only a short distance from their winter dens and due to the geology of Devils Tower, suitable habitat for winter dens is found here. The boulder field, which was created by columns long since fallen, provides many caverns and crevasses for porcupines to hunker down in during the daylight hours where they are able to catch some shut-eye.

So, mystery solved; the lack of bark on

**High Flyers of Devils Tower**

On a typical summer day, a brief glance above the summit of Devils Tower will give view to large, dark-colored birds that effortlessly glide in spiraling patterns. The loveable (yes, loveable) turkey vulture. Of the three species of vulture found in the United States, turkey vultures are the most widely spread and therefore very common in the Black Hills. They migrate from as far as Cape Horn in South America, often arriving in Wyoming precisely on the Vernal Equinox (or March 20th).

Turkey vultures have been designed to be clean and hygienic birds, assisting in maintaining a healthy ecology at Devils Tower. A process known as urohydrosis - or defecation on its legs and feet - utilizes high levels of digestive acid to kill bacteria found after hopping around on a meal. In addition, this corrosive digestive system aids in killing diseases found in dead animals, helping humans maintain a healthy environment.

![Turkey Vulture soaring above the tower](image)

Turkey vultures are very social birds; their daily activities are often done in large groups, including eating, flying and roosting. It is a real treat to leave the upper parking area and look to one’s right along the roadway, only to see dozens of turkey vultures roosting in the leafless trees.

*(Turkey Vultures - Continued on Page 4)*
Turkey Vultures -

Turkey Vultures truly rest overnight; so much so, that their body temperature drops by 6 degrees Fahrenheit. Come morning, turkey vultures must warm their bodies in order to prepare for a day of flying. Groups of warming vultures perched atop nearby fence posts is a daily sight during the summer months, a stance called the “Horlatic Pose”.

Once our feathered friends are prepared for the day, why are they choosing to fly above Devils Tower? Mid-morning brings about a noticeable rise in outside air temperature, and Devils Tower feels this heat more quickly than the surrounding land. As this increasing hot air rises, it creates spirals which are called thermals. The outcome is that turkey vultures use these thermals above Devils Tower to climb high into the sky and smell for food, gain altitude for a long-distance flight or just simply play with their buddies. And, did you know they fly just like airplanes? Their upturned wings and shifting bodies is how they maintain their balance, just like the dihedral shape of an airplane wing helps in air turbulence.

So enjoy the high flyers of Devils Tower National Monument - they’re here to enjoy the view just as we are.

Exotic Plant Control Efforts

Exotic plants are species that occur outside their native ranges. Invasive plants are nonnative and able to establish on many sites, grow quickly, and spread to the point of disrupting plant communities or ecosystems. Not all non-native plants are invasive. In fact, when many non-native plants are introduced to new places, they cannot reproduce or spread readily without continued human influence. Exotic plants can be introduced intentionally and accidentally, for example with agricultural crops, landscape ornamentals, international trade, and tourism. Exotic invasive species out-compete native species, leading to individual species loss, endangering natural habitats, causing soil erosion, creating a monoculture, and reducing the genetic diversity necessary for stable, balanced ecosystems.

At Devils Tower National Monument, more than 60 exotic plant species have been identified. While some spread slowly, others have replaced native plant communities, reducing the biological diversity of the Monument’s ecosystems. The Monument’s most aggressive, or invasive exotic plants are Leafy Spurge (Euphorbia esula), Houndstongue (Cynoglossum officinale), Field Pennycress (Thlaspi arvense), Yellow Sweet Clover (Melilotus officinalis), Common Mullein (Verbascum thapsus), Canada Thistle (Cirsium arvense), Musk Thistle (Carduus nutans), Scotch Thistle (Onopordum acanthium), Bull Thistle (Cirsium vulgare), and Cheatgrass (Bromus tectorum).

keeping the Park “Green”

Devils Tower National Monument has built environmental responsibility into all aspects of park operations. Recycling is a major part of how we fulfill this responsibility. The monument recycles #1 and #2 plastic, glass, aluminum, steel, cardboard, newspaper, magazines, office paper, printer cartridges, copper, batteries, and light bulbs, among other materials.

Plastic is one of the most commonly used consumer products. More than 2.3 billion pounds of plastic bottles were recycled worldwide in 2007. New products, like the benches on the Tower Trail, can be produced from these previously consumed goods. Devils Tower National Monument is pleased to provide recycling bins at all visitor-use areas. These bins are brightgreen in color and are located at the visitor center parking lot, the beginning of the Tower Trail, the picnic area, and campground.

Devils Tower National Monument is reducing fuel and energy consumption by utilizing new technologies. The park owns a flex-fuel vehicle and has recently acquired a hybrid vehicle, powered by gasoline and gas required by conventional engines. Throughout the monument, park staff have replaced incandescent light bulbs with compact fluorescent lights (CFLs). Making this change will help us to use less electricity and reduce greenhouse gas emissions.

Most CFLs use up to 75% less energy and last up to 10 times longer than traditional bulbs. The monument has also started to update buildings with more energy-efficient heating systems.
American Indians and the Tower

American Indian people have long considered the Tower a place of spiritual and cultural importance. The sacred connection to this place continues today as part of centuries-old ancestral traditions.

Traditionally, indigenous cultures around the world have gathered at places of great natural beauty for ceremonial purposes. These sites, including the Tower, continue to have profound sacred significance to native peoples. Over twenty American Indian tribes have a cultural connection with the Tower.

Northern Plains Indians honor a towering rock formation that they consider sacred. They call the rocky tower Bear’s Tipi, Grizzly Bear’s Lodge, Bear Lodge Butte, Tree Rock and other related names. In 1875, Colonel Dodge led an expedition into the area. In his book titled, The Black Hills, Colonel Dodge explained, “the Indians call this shaft The Bad God’s Tower, a name adopted with proper modification, by our surveyors.” Dodge “modified the name to a better form of English, calling it Devils Tower.” Evidence suggests that the initial translation was incorrect. The Indian words for the Tower should have been translated into “Bear Lodge” and not into “Bad God’s Tower.”

American Indians use the Tower as a place of worship. Most of the ceremonies that take place are small groups or individuals, who have gathered for prayer, pipe ceremonies, the tying of prayer cloths, or vision quests. Group rituals also continue here, including sweat lodge and sun dance ceremonies.

In 1906, President Theodore Roosevelt created Devils Tower National Monument, the first national monument. Devils Tower National Monument was established as our nation’s first national monument because of its scientific and geological importance. Since that time, there has been a growing awareness of the Tower as a cultural resource.

On your way into Devils Tower National Monument, you may have noticed the large granite sculpture located near the park’s picnic area. This site is designed to increase awareness of the sacredness of Devils Tower to the park’s more than 20 affiliated American Indian tribes, and also helps place the significance of the Tower into an international context.

A peace pole reading in both Lakota and English Wolakhota Akan Macoke and “May Peace Prevail on Earth” was also planted at the World Peace “Circle of Smoke” Sculpture site in 2012.

These interpretive sites address improvement of educational and informational programs of the historic uses of the monument as outlined in the 1995 Final Climbing Management Plan. Future plans include the addition of signs and displays to the site, as well as related interpretive programs.

Please take some time to visit these interpretive sites, which are accessible from the picnic area parking lot via the campground road, or by trail from the prairie dog town.
Shared Visions of the Tower

For more information on Devils Tower National Monument’s geology, wildlife, climbing history and opportunities, and cultural significance, look to the Devils Tower Natural History Association. The association, established to support the National Park Service with historical, educational, and interpretive programs at Devils Tower, operates the bookstore located in the visitor center at the base of the Tower.

When you make a purchase at the bookstore, profits are returned to the park in the form of donations that support park programs, including the Junior Ranger Program, interpretive exhibits, the Cultural Program Series, and many other services. Membership benefits include a 15% discount in the bookstore, a discount on items purchased at other national park cooperating association bookstores, and the pleasure of knowing that your membership contributes to the support of the park!

Hey, Kids . . . Become a Ranger!
You and your family can discover Devils Tower through the Junior Ranger program. Stop at the visitor center to pick up a free Junior Ranger booklet. Return with your completed booklet, and the ranger will honor you with a badge and certificate. You can also buy an embroidered patch for $1.00 at the bookstore. By learning about the plants, animals, geology, and history of this area you can help protect the park’s resources and make other people aware of how important these resources are.

LEAVE NO TRACE
1. Plan Ahead and Prepare
2. Travel and Camp on Durable Surfaces
3. Dispose of Waste Properly
4. Leave What You Find
5. Minimize Campfire Impacts
6. Respect Wildlife
7. Be Considerate of Other Visitors

RECYCLED TREES MAKE COLORFUL WALKING STICKS
These unique walking sticks are made of trees where mountain pine beetles have left their mark. As the beetle starts burrowing into the bark, the tree pumps sticky sap toward it trapping the beetle within the sap. The tree will then eject the sap through a small chute called a pitch-out. Sometimes a dead beetle can be found in the pitch-out.

Thank You!
Yes, YOU! By paying the entrance fee, you are partnering with the National Park Service through the Federal Lands Recreation Enhancement Act Program at Devils Tower National Monument. Your entrance fees are used to support park projects, including improved signage and building restoration.

Other partners include the Black Hills National Forest, Black Hills Youth Conservation Corps, Black Hills National Forest Tribal Youth Conservation Corps, Montana Conservation Corps, Student Conservation Association, American Conservation Experience, Hulett and Crook County Emergency Response, Christian Motorcycle Association, Crook County Sheriff Department, Access Fund, Wyoming Department of Transportation, Boy Scouts of America, and the many park climbing guides. Thanks for helping us out!

JUST LIKE VISITING A NATIONAL PARK
When you turn the pages of a pop-up book, you’re never quite sure what awaits around the bend. A beautiful landscape or the colors of an evening sunset may unfold before you. This pop-up book offers many opportunities to inspire future visits to national parks.

AMERICA’S NATIONAL PARKS LUNCH BOX.
Take your lunch with you in a national parks box. Bright colorful images of national parks throughout the country.
Jewel Cave’s Visitor Center and cave entrance are 100 miles east of Devils Tower on Highway 16 B-12. With more than 150 miles surveyed, Jewel Cave is recognized as the second longest cave in the world. Cave tours provide opportunities for viewing this pristine cave system and its wide variety of speleotherms. Call (605) 673-2288 to plan your visit. www.nps.gov/jeca

Mount Rushmore National Memorial is an iconic national park and located 126 miles east of Devils Tower via I-90 E and US -385 S. From the history of the first inhabitants to the diversity of America today, Mount Rushmore brings visitors face to face with the rich heritage we all share. Call (605) 673-2288 to plan your visit. www.nps.gov/moru

Wind Cave is located 126 miles east of Devils Tower on Hwy US 16 E. It is one of the world’s longest and most complex caves. It is famous for its boxwork, an unusual calcite cave formation resembling honeycomb. The park’s surface area contains 33,851 acres of mixed-grass prairie, ponderosa pine forest and associated wildlife. Call (605) 745-4600 for additional information. www.nps.gov/wica

Badlands National Park is located 190 miles east of Devils Tower. Take I-90 to Wall, S.D. to Exit 110 or 131 to access Hwy 240’s Badlands Loop Road. Badlands National Park consists of 244,000 acres of sharply eroded buttes, pinnacles and spires blended with the largest, protected mixed-grass prairie in the U.S. Call (605) 433-5361 to plan your visit. www.nps.gov/badl

Minuteman Missle NHS is located 182 miles east of Devils Tower on I-90. The site preserves a launch control facility and a nuclear missile silo of the Minuteman II missile system. The park offers tour by reservations only. You can call the site at (605)433-5552 or stop by the Project Office at Exit 131 off of I-90. www.nps.gov/mimi

Custer State Park is located 115 miles East of Devils Tower via US 16. At 71,000 acres, it is one of the largest, most unique state parks in the nation and is home to a herd of 1,300 bison. Visitors will find many lakes and natural areas. Hiking access to Harney Peak, the tallest peak in South Dakota, is available. Call the Peter Norbeck Visitor Center (605) 255-4464 to plan your visit. www.custerstatepark.info
Make the Most of Your Visit

If you have an hour or two... don’t miss the dogs—prairie dogs, that is! Their activities are fun to watch, but remember not to feed them. The visitor center at the base of the Tower contains interpretive exhibits, as well as a bookstore and souvenir shop. The visitor center was built in the 1930s by the Civilian Conservation Corps, and both its buildings are listed on the National Register of Historic Places. Sit on a bench and look up at the 867-foot high columnar monolith. Meander across the parking lot and walk 50 yards along the Tower Trail for another view and another bench. The Tower Trail continues 1.3 miles around the base of the Tower.

If you have a half-day... join a park ranger for a guided walk or talk. As you leave the parking lot and drive down the hill, look for a gravel road on the right that leads to the Joyner Ridge trailhead for another incredible view. The low-angle light an hour before sunset makes for beautiful photographic opportunities.

If you have a full day... you’re lucky! You can experience all of the above plus a hike along Joyner Ridge or the Red Beds Trail, or a picnic at the picnic shelter. No food is sold inside the park, but water is available next to the ranger station at the foot of the Tower. Food can be purchased immediately outside the park entrance.