



# Welcome to Devils Tower National Monument!

We are thrilled to invite you to join us in celebrating the 100<sup>th</sup> birthday of the National Park Service by getting out to Find Your Park during 2016.

Devils Tower is spectacular and iconic; inescapably profound and significant to all who see it. We are grateful for the opportunity to tell these stories of significance; whether the story of sacred spirituality it holds for the great American Indian tribes of the area, it's position in the generational fabric of the region's ranching culture, or the singular position it holds for the worlds of rock climbing and geology. As it has done for thousands of years, Devils Tower catches the eye, inspires wonder, provokes questions, makes a lasting impression, and touches everyone in a different way. Get out and hike the trails, view the Tower, attend an interpretive program or guided walk, or simply watch the light play across the Tower columns. This remarkable igneous formation inspired President Theodore Roosevelt to protect it by designating it as America's first national monument in 1906. What inspiration will you find as you visit the monument over one century later?

As we embark on the 2016 Centennial celebration of the National Park Service, it is important that you assist us in our goal of engaging the next generation of park stewards. Use this visit to Devils Tower as a springboard to start, renew, and share your connection to our national parks. Taking others on a visit to Devils Tower, or another national park unit, can be the catalyst for a lifetime of experiences. As you find your park and discover what these places mean to you, we hope you will take the time to share what makes that park so special to you. The National Park Service Centennial is the perfect opportunity for all of us to realize that the greatest treasures are often hidden in plain sight – so get out there and Find Your Park!

Thank you,

Tim C. Reid, Superintendent



## Things to do:

- Observe the prairie dogs
- Browse the Visitor Center
- Buy a book in the bookstore
- Learn something new
- Attend a ranger program
- Become a Junior Ranger
- Take a hike
  - Tower Trail: 1.3 miles
  - Joyner Ridge Trail: 1.5 miles
  - Red Beds Trail: 3.0 miles
- Look for wildlife
- Climb the Tower
- Camp in the Belle Fourche River Campground (May - October)
- Visit the smoke-ring sculpture
- Take amazing pictures
- See the stars
- Listen to nature
- Enjoy your national park!

# The Geologic Making of Devils Tower



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Geologists agree that Devils Tower was formed by an igneous intrusion, the forcible entry of igneous rock 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 first geologic studies of Devils Tower in the late 1800s. Today, geologists continue to search for more detailed explanations.

There are three common theories on the formation of Devils Tower. Some geologists believe it is 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. Other ideas have suggested that the 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. However, 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 crystals of white feldspar. Hot molten magma is less dense and occupies more volume than cool hardened rock. As the rock cooled, it contracted, forming hexagonal columns separated by vertical cracks. These columns are similar to those found at Devil's Postpile National Monument in California.



Until erosion began its relentless work, Devils Tower was not visible above the overlying sedimentary rocks. But the forces of erosion, particularly that of water, began to wear away the soft sandstones and shales above and around the Tower. The much harder igneous rock of the Tower survived the onslaught of erosional forces, and the gray columns of Devils Tower began to appear above the surrounding landscape. As rain and snow continue to erode the sedimentary rocks surrounding the Tower's base, and the Belle Fourche River carries away the debris, more of Devils Tower will be exposed. Rocks are continually breaking off



and falling from the steep walls. Rarely do entire columns fall, but on remote occasions, they do. Piles of rubble, broken columns, boulders, small rocks and stones lie at the base of the Tower, indicating that it was once larger than it is today.

With enough time and exposure, even Devils Tower itself will erode away!

# Shared Resources of the Tower

## Black-Tailed Prairie Dogs



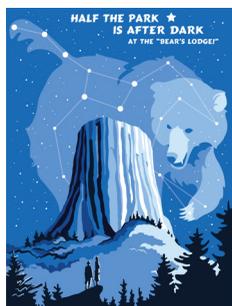
Prairie dogs are social animals that live together in “towns.” The prairie dog town at Devils Tower National Monument is approximately 40 acres in size. Prairie dogs are a burrowing rodent whose tunnels may extend downward from 3 to 10 feet, and then horizontally for another 10 to 15 feet. Prairie dogs are active only during daylight hours, when they feed and socialize. They have complex vocalizations, and use different calls for different predators.

The black-tailed prairie dog (*Cynomys ludovicianus*), found at Devils Tower, is one of five prairie-dog species 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 estimated at less than 5% of what it was 200 years ago - described by Lewis and Clark as “infinite.” Habitat loss, eradication programs, and introduced diseases have decimated prairie dog populations. Prairie dogs are considered a keystone species because they support other organisms which share their ecosystem. 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 insects and spiders. 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.



**Do NOT feed the prairie dogs.** Consumption of human food shortens their lives—human food is an improper dietary source, and habituated animals are more vulnerable to vehicle accidents and poaching. 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!



## An Astronomical Place...

The night sky is one of the most precious resources at Devils Tower. In the surrounding region there is a relatively small human population, which produces little light pollution and allows for thousands of stars to be visible to the naked eye on clear nights.



## What is Chomping on the Tree Bark?

While strolling on the Tower Trail you may notice the missing bark around the base of many of the ponderosa pine trees.

Waddling about the ponderosa pine forest is a nocturnal, spiny rodent dining on the bark. 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 must seek nutritional food options during the harsh winter months.



Chew marks from porcupine



The inner layer of the bark, called cambium, provides a staple food for porcupines in the winter. In addition, porcupines 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.

These winter food sources keep the porcupine alive, but do not provide much energy. Porcupines rarely travel far from their winter dens. Devils Tower provides a variety of suitable winter habitat for porcupines. The monument’s sandstone cliffs and the boulder field below the Tower provide many crevasses where porcupines can hunker down during the daylight hours to rest and conserve energy. Porcupines will also spend much of their time on high tree branches, where they are protected from most predators. As you explore the monument, look for this tell-tale sign of the porcupine. The missing bark on the ponderosa pine trees at Devils Tower is not due to werewolves or rough UFO landings - it is from the prickly porcupine surviving in its habitat.



## ...With Astronomical Events!!

Devils Tower National Monument is committed to educating the public about astronomy. During major astronomical events the park will host free night sky programs. Please check the park website, local newspapers, and Facebook for a schedule of current astronomy education programs.

# Shared Resources of the Tower

## Exotic Plant Control Efforts

Exotic species are organisms found outside of their native ranges. Exotic plants which grow or spread quickly, out-compete native plants and alter ecosystems are referred to as *invasive*. These invasive plants disrupt natural food chains and become a nuisance for land managers attempting to preserve native ecosystems.

Exotic species are introduced by human activity, either intentionally or accidentally. Agricultural crops, landscape ornaments, international trade, and tourism are all vectors for exotic introduction. Once established, an invasive species out-competes native species, leading to losses of individual species or even entire habitats. More than sixty exotic plant species have been identified at Devils Tower National Monument. While some spread slowly, others have replaced native plant communities, reducing the biological diversity of the monument's ecosystems. The monument's most aggressive invasive plants are:

- Leafy spurge (*Euphorbia esula*)
- Houndstongue (*Cynoglossum officinale*)
- Canada thistle (*Cirsium arvense*)

An exotic plant management plan outlines a control strategy for Devils Tower and twelve other national park units. Exotic plant control efforts at Devils Tower National Monument occur both on the ground and on the Tower itself. A combination of chemical, biological, and mechanical tools, as well as prescribed fires, are used to control invasive plants. Controlling invasive plants is a never-ending battle; the best way to preserve native ecosystems is to prevent the introduction of invasive species.



Houndstongue

You can help control the spread of invasive plants by identifying exotic species and avoiding travel through infested areas. Clean vehicles, pets, clothing, and recreational equipment before leaving the area. Support the park's effort in controlling invasive plants by spreading the word, not the weeds!



Climbing biotech removing exotic plants

## Parking at Devils Tower

During the summer, parking around the Visitor Center between 11 am and 2 pm is often limited. Consider alternative parking locations during these peak visitation hours. For vehicles with trailers, long-vehicle parking spaces are available to unhook your rig before heading up to the Visitor Center - find them on the way to the picnic area.

The picnic area provides access to the Circle of Sacred Smoke sculpture and the prairie dog town. You can also find parking at Joyner Ridge trailhead (inaccessible to most RVs and other large vehicles). From these areas, you can choose to hike to the Visitor Center.

Reach the Visitor Center from the picnic area by hiking South Side Trail to Red Beds Trail, about 1.2 miles one way (you will travel uphill to the Visitor Center, but downhill to return). From Joyner Ridge trailhead, follow the south fork to the connector trail and on to Red Beds Trail; this 3-mile route is over varying terrain. Bring your park map if you choose to hike.

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## Keeping the Park "Green"



New E-Ride, a hybrid vehicle

The National Park Service places climate friendly actions at the forefront of park operations with the Climate Friendly Parks program. Devils Tower National Monument is a strong member of this nationwide program and has conducted a greenhouse gas emission inventory, set climate change mitigation and reduction goals, and integrated the findings into a park-wide Environmental Management System. The monument is acquiring and using new technologies such as hybrid and all-electric

vehicles to meet our goals. Assist our efforts and improve the park experience by not letting your vehicle idle. Reduce your impact by reusing water bottles - fill them at the visitor center before you leave. Recycling bins are available at all visitor use areas; utilize them and help add to the over 12 tons of recyclables the park processes every year.

## Sit Back and Enjoy the View

For many people, a hike around the Tower Trail is the highlight of their visit to Devils Tower National Monument. During your hike, be sure to notice—and relax on—one of the twelve benches the park received through the Unilever Recycling at Work Sustainable Grants Program.



This partnership with the National Park Foundation provides recycled plastic lumber, made of sustainable, 100% HDPE (high-density polyethylene). Materials are used in projects for trails, boardwalks, overlooks, pullouts, picnic tables, benches and more. These benches will provide welcoming waysides along the 1.3-mile paved trail.

Here, visitors can take time to relax, reflect, and experience the park as they embrace the outdoors and contemplate this sacred American Indian site. Benches made of 100% HDPE plastic reduce recurring maintenance costs, such as those associated with sanding, painting, and sealing, which are required annually for wooden benches. As you hike the trail, find a bench, sit back, and enjoy the view!

## Celebrate the Centennial!

In 2016 the National Park Service celebrates its 100<sup>th</sup> birthday. As part of the celebration the park service has formed an initiative intended to share the beauty, cultural heritage, natural resources, and stories found in national parks across the country. Visit [www.findyourpark.com](http://www.findyourpark.com) to learn more about the initiative!

**FIND YOUR  
PARK**

# Shared Visions of the Tower

## Centennial Celebration Series

The Centennial Celebration Series brings special guests to Devils Tower to share their stories, unique experiences, and visions of what the Tower means to them.

Humans have been attracted to the Tower for thousands of years. They have also had different views of what this natural wonder means to them.

The Cultural Program Series highlights the different ways in which various cultures relate to the Tower, while also offering a shared vision for all of us who find meaning in a visit here. The programs are offered during the weekend evenings in the months of June, July and August at the Campground Amphitheater. You might meet Theodore Roosevelt, a Cheyenne champion Grass Dancer, or a world-renowned rock climber on a summer evening at Devils Tower.



Phillip Whiteman Jr.

Each special guest will share their view of the importance of Devils Tower so we can share in their experiences and find our own ways to appreciate the Tower. Ask at the visitor center or check our online calendar for more information about guest speakers.

## Thanks, Partner!

Yes, we mean you! By paying the entrance fee, you become partners with the National Park Service through the Federal Lands Recreation Enhancement Act Program. Your entrance fee is used to help support park projects, such as improved roads, signs, campgrounds, visitor facilities and more!

Other park partners include:

- Black Hills National Forest
- Black Hills Climbers Coalition
- Black Hills National Forest Tribal Youth Conservation Corps
- Montana Conservation Corps
- Student Conservation Association
- Wyoming Natural Diversity Database
- Bear Lodge Alternative High School
- Christian Motorcycle Association
- Hulett and Crook County Emergency Response
- Crook County Sheriff Department
- Wyoming Department of Transportation
- Boy Scouts of America
- Bearlodge Writers
- Park climbing guides

Thanks to these partners and more!



## Hey, Kids . . . Become a Ranger!

Discover Devils Tower National Monument through the Junior Ranger program.

Ask for a Junior Ranger booklet at the visitor center. Return your completed booklet, and earn a Junior Ranger badge and certificate. You can keep the pencil.

Embroidered patches are available for \$1.00 in 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 the importance of Devils Tower.



## Devils Tower Natural History Association

Devils Tower Natural History Association supports interpretive and educational programs at Devils Tower. The association operates the bookstore located in the visitor center.

When you make a purchase at the bookstore, proceeds are donated to the monument that support park programs, such as the Centennial Celebration Series, the Junior Ranger Program, interpretive exhibits 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 Devils Tower National Monument!

## Belle Fourche River Campground

Staying at Belle Fourche River Campground, open May through October, is a great way to experience the park.

All camping is first come, first served. There are 50 sites available, 4 sites are accessible. The cost is \$12 per night per site.

There are 3 group sites available. Minimum 10 people per site, maximum 20 people and 4 vehicles per site.



# Rock Climbing at Devils Tower

## Come Prepared!

Check in at the Climbing Office or parking lot kiosk near the visitor center and obtain a free, mandatory climbing permit. The office has information on climbing routes and weather conditions. Routes are “TRAD” (traditional climbing) and are generally long; plan for 6-10



hours round trip.

- Take plenty of gear - 2 ropes, double rack, helmets
- Make plans for self-rescue or assistance from other climbers for unexpected incidents
- Use caution in crowded areas - Durrance, Bowling Alley, Meadows Rappel, etc.
- Watch the weather. Storms can develop quickly!

## “Two Is One, One Is None”

ROCK CLIMBING IS DANGEROUS; WITHOUT THE PROPER TRAINING, EQUIPMENT, AND GUIDANCE, ACCIDENTS AND/OR DEATH MAY OCCUR.

The National Park Service does not maintain bolts or anchors. Climbers are NOT allowed to place new permanent anchors. Inspect all anchors and BACK THEM UP if you feel they are inadequate. Safety first!



**B.A.R.K** Use this simple acronym before you start the climb.

**B** - Buckles: Check climber and belayer’s buckles (make sure they are double backed)

**A** - Anchors: Back up anchors; make sure it’s equalized and carabiners are locked

**R** - Rappel/Belay Devices: Double check locking carabiners and tie an autoblock

**K** - Knots: Double check knots; tie knots in the ends of your rope when rappelling.

## Voluntary June Climbing Closure



Native American Ceremony at the Tower

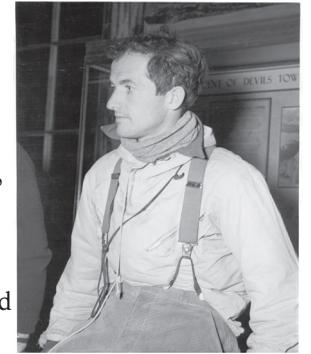
Northern Plains Native Americans regard Devils Tower as a sacred site. Out of respect to these beliefs, the monument’s Climbing Management Plan provides a voluntary closure to climbing during the month of June, an important ceremonial month for tribes affiliated with the Tower. During June we recommend that climbers utilize one of the several world-class climbing areas near the Tower.

The plan balances management and use of Devils Tower as a cultural, natural and recreational resource. Act responsibly, help protect the Tower, and observe park regulations in place to protect visitors and the resource. The Tower is a fragile environment. Minimize your impact: your actions reflect on the climbing community as a whole.

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## How Do They Get Up There?

For over a hundred years, climbers have tested their skills on the vertical faces of Devils Tower. Using various techniques and specialized equipment, climbers have inched their way up and down the steep walls. Today there are over 200 routes around the Tower. The most famous and popular is the Durrance Route, named after Jack Durrance, who in 1938 pioneered the classic and easiest route to the summit. It has been climbed by a variety of people including a six-year old boy and an eighty-one-year old man. However, all climbs are technical, requiring rock climbing skills and specialized safety equipment.



Jack Durrance at the Devils Tower Visitor Center



Climbers on Durrance

The majority of climbers “free climb” the Tower, meaning climbing without the use of artificial aid, mechanical means or ladders. They simply climb up by gripping onto features of the rock, such as cracks and edges. Climbers use precautions to protect themselves in the event of a fall, such as ropes, harnesses and removable pieces of equipment placed in cracks in the rock. The first, or lead, climber places removable equipment like cams or nuts, while the second climber keeps the rope taut (a process known as *belaying*). If the lead climber falls, the belayer catches them with a friction device on the rope. Once the leader has reached the end of the rope, they make an anchor and belay the second climber up. The second climber removes the gear as they ascend.

To get down from the top of the Tower, climbers rappel from fixed anchors on the rock using a friction device on the rope. Climbers use special shoes that are tight fitting and have sticky soles to help them grip the rock. They wear helmets to protect from falls or falling rocks. Their ropes are generally 160-260 feet long (50-80 meters). Because most routes to the Tower summit are 500 feet (150 meters) long, climbers break up the climb into sections called *pitches*. Close to 4,000 climbers ascend to the top of the Tower every year, with several thousand more climbing other routes or pitches that do not reach the summit. For those that do reach the summit, they are greeted with an amazing view that stretches out to five states: Wyoming, Montana, South Dakota, North Dakota and Nebraska. Occasional non-human climbers are seen around the summit as well, including chipmunks, pack rats and snakes.



The Top of the Tower

# Park Neighbors in the Black Hills

NPS / ERIC DODD



## Jewel Cave National Monument

Jewel Cave Visitor Center and cave entrance are 100 miles east of Devils Tower on US Hwy. 16. With more than 180 miles surveyed, Jewel Cave is recognized as the third longest cave in the world. Cave tours provide opportunities for viewing this pristine cave system and its wide variety of speleothems. Call (605) 673-8300 to plan your visit. [www.nps.gov/jeca](http://www.nps.gov/jeca)



## Mount Rushmore National Memorial

Mount Rushmore National Memorial is an iconic national park and located 126 miles east of Devils Tower via I-90, US Hwy. 16 and SD Hwy. 244. 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) 574-2523 to plan your visit. [www.nps.gov/moru](http://www.nps.gov/moru)



## Wind Cave National Park

Wind Cave is located 126 miles east of Devils Tower on US Hwy. 385. 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](http://www.nps.gov/wica)



## Badlands National Park

Badlands is located 190 miles east of Devils Tower. Take I-90 to Wall, SD to Exit 110 or 131 to access the Badlands Loop Road (US Hwy. 240). 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](http://www.nps.gov/badl)



## Minuteman Missile National Historic Site

Minuteman Missile 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 tours by reservation only. Call the site at (605) 433-5552 or stop by the Project Office at Exit 131 from I-90. [www.nps.gov/mimi](http://www.nps.gov/mimi)



## Custer State Park

Custer State Park is located 115 miles East of Devils Tower via US Hwy. 16. At 71,000 acres, it is one of the largest 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 at (605) 255-4515 to plan your visit. [www.custerstatepark.info](http://www.custerstatepark.info)

# Devils Tower Park Map



Pets may not be taken on trails or left unattended at any time. They may be walked in the parking areas on a leash .



Collection of rocks, plants, or any other natural material is prohibited by law.



Collection of archeological artifacts is prohibited by law.



It is illegal and dangerous to feed any park wildlife, including prairie dogs.



Travel above the boulder field can be dangerous and requires a permit .

**SPEED  
LIMIT  
25**

Speed limits are strictly enforced for the safety of visitors, park wildlife and employees.



If you have any questions about park regulations, feel free to ask a uniformed employee.



National Park Service  
U.S. Department of the Interior

Devils Tower rises 1,267 feet above the Belle Fourche River. Also known as Bear's Lodge, it is a sacred site for many American Indians. President Theodore Roosevelt proclaimed Devils Tower the first national monument in 1906.

Devils Tower National Monument  
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Email: [deto\\_interpretation@nps.gov](mailto:deto_interpretation@nps.gov)

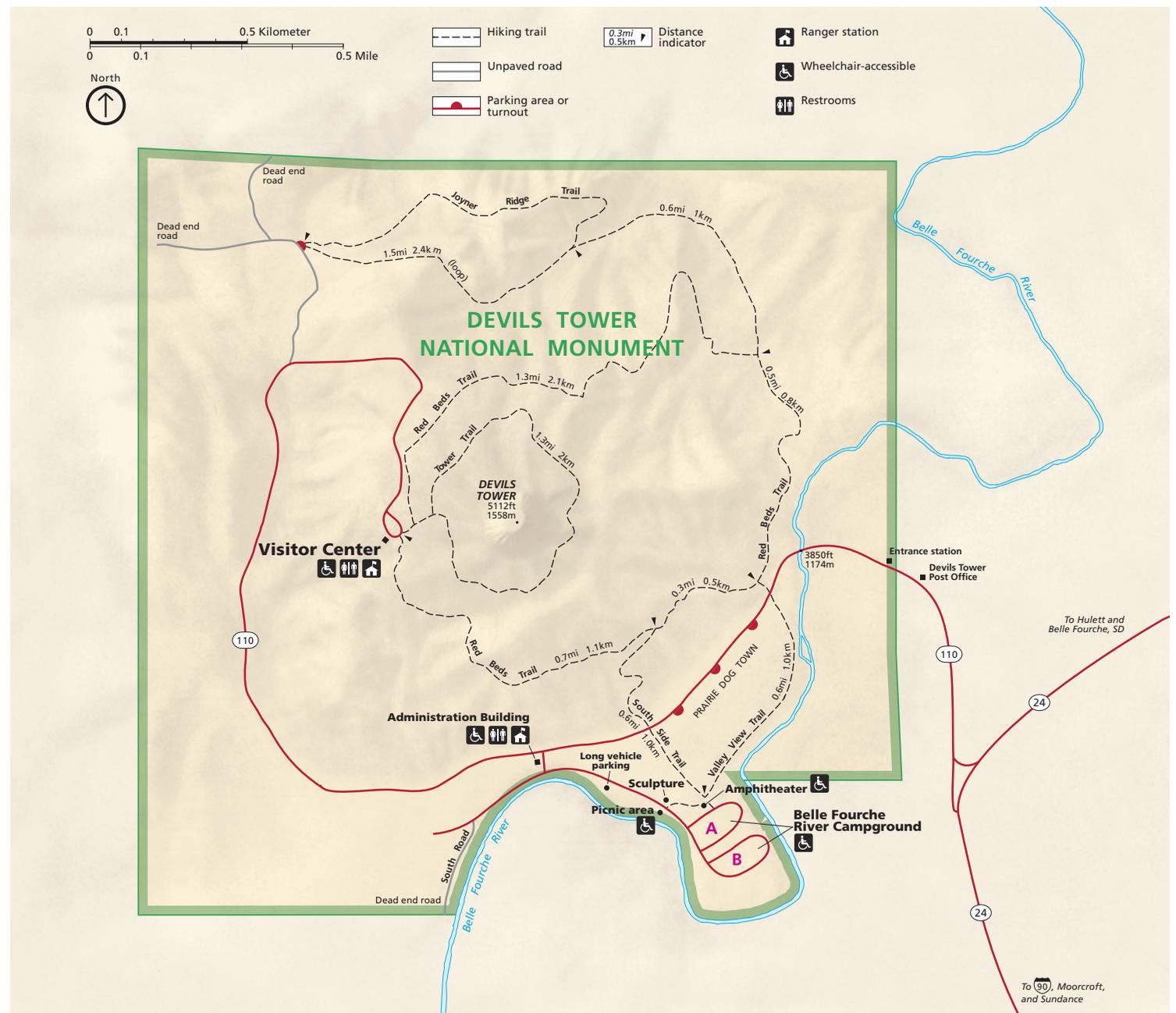
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Twitter - @DevilsTowerNM

YouTube - Devils Tower NM

Instagram - DevilsTowerNPS

Official Website - [www.nps.gov/deto](http://www.nps.gov/deto)



## Make the Most of Your Visit

If you have an hour or two . . . don't miss the dogs—prairie dogs, that is! Enjoy wildlife responsibly and do not feed the animals. The visitor center at the base of the Tower contains interpretive exhibits, as well as a bookstore and souvenir shop. The visitor center and climbing office were built in the 1930s by the Civilian Conservation Corps, and both are listed on the National Register of Historic Places. You may want to 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 spectacular view. 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 of the Tower. The hours before and after sunset offer beautiful photographic opportunities from this area.

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. Spend the night at the campground and see the evening program at the amphitheater. No food is sold inside the monument, however water is available in front of the visitor center and at the picnic shelter. Food can be purchased immediately outside the monument entrance.