



Welcome to Yellowstone

WINTER IN YELLOWSTONE MEANS FEWER crowds, cold temperatures, and steaming geyser basins. Skis, snowshoes, snowcoaches, and snowmobiles become the main modes of transportation as roads close, rivers and lakes freeze, and winter storms blanket the park with snow.

STAY ALERT IN THERMAL AREAS

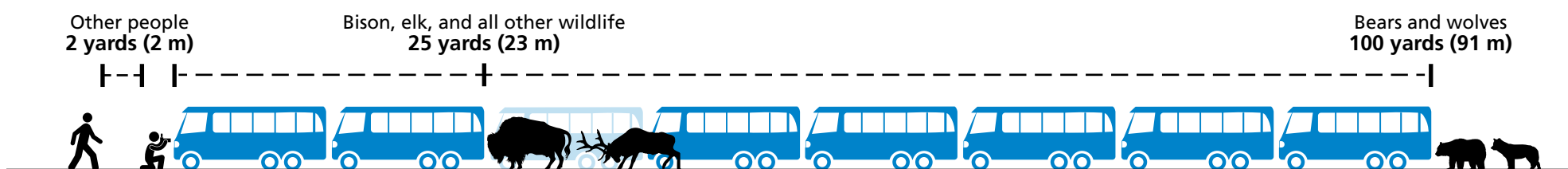
Hydrothermal features are evidence of an amazing fact: Yellowstone sits above a giant supervolcano. If you travel the 50 miles (80 km) between Mammoth Hot Springs and Old Faithful, you will see travertine terraces, acidic thermal features at Norris Geyser Basin, mudpots and fumaroles at Fountain Paint Pot, plus beautiful hot springs at Biscuit and Black Sand basins near Old Faithful.

- **Stay on boardwalks and designated trails.** The ground is unstable in hydrothermal areas. Use caution, as boardwalks are often covered in snow and ice.
- **Keep hands out.** Water in geysers and hot springs can severely burn you.
- **Keep litter out of the pools.** Do not throw any objects into hydrothermal features.



Safely exploring the boardwalks near Castle Geyser.

Enjoy watching Yellowstone's animals but **STAY SAFE**. They are **WILD** and **DANGEROUS**.



COVID-19 Precautions

Operations may change depending on circumstances. Check locally, on the park website, and in the park app for current information. Thank you for your patience and cooperation.



Come prepared. Visitor services are very limited.



Wear face coverings in busy areas and inside visitor facilities.



Maintain social distancing of six feet (2 m), especially in busy areas (on boardwalks, inside visitor facilities, on popular trails, while viewing wildlife, etc.).



Follow current local, state, and national health guidance:

- Wash your hands with soap and water, or use hand sanitizer.
- Avoid touching your face.
- Sneeze or cough into a tissue or the inside of your elbow.

If you are sick, do not visit the park. Self-isolate to avoid exposing others.

Keep Wildlife Wild

Winter is a wonderful time to view wildlife. All the large mammals present when Yellowstone became a park in 1872 are here today: grizzly and black bears, wolves, mountain lions, elk, bison, pronghorn, moose, and bighorn sheep.



- **Wildlife are dangerous.**
- **Do not approach, encircle, follow, or feed any animal.**
- **Bison, bears, and elk injure and kill people.**
- **Stay at least 100 yards (91 m) from bears and wolves.**
- **Stay at least 25 yards (23 m) from all other animals.**
- **If wildlife move, move to maintain the above distances.**
- **Do not stop on or block a road.**
- **Use pullouts; stay in your car** to watch animals.
- **Store food and trash securely.** Backpacks and snowmobile gear bags are not secure.
- **Do not feed any animals,** even birds and squirrels.



Yellowstone National Park
National Park Service
U.S. Department of the Interior

Emergency Information
TTY
Park entrance radio

Dial 911
307-344-7381
307-344-2386
1610 AM

Park Tip Line **307-344-2132**
To report a crime or criminal activity.
Leave as much detail as you can. Remain anonymous, or leave a name and number.

NPS Yellowstone National Park App



Plan and enrich your visit with the official, free National Park Service app. Digitally explore the world's

first national park—by map or by topic of interest. Discover the natural and cultural stories in context with their locations. Find the information you need about visitor centers, events, lodging, places to eat and shop, and services throughout the park. Download the app and app content before you begin your adventure, as cell service and Wi-Fi are limited in Yellowstone.

Follow @YellowstoneNPS



Facilities and Services

Medical Services

Yellowstone emergency response and ambulance service

Call 911
Text 911 is not available in Yellowstone.

Mammoth Clinic (Medcor)

Medical care from emergencies to minor needs.
307-344-7965

Winter Hours

Monday–Thursday	8:30am to 5pm
Friday	8:30am to 1pm
Weekends, holidays	CLOSED

Eastern Idaho Regional Medical Center and other area hospitals provide air evacuation and trauma care.

Accessibility

A **printed guide** with accessibility information is available at visitor centers and on the park website (go.nps.gov/YELLaccess).

Qualified service animals are welcome throughout the park and in all park facilities. However, they must be leashed and under your control at all times.

Cell Service

Cell phone service is very limited in the park and surrounding areas. General cell coverage areas are marked on the newspaper park map (see back page).

Emergency 911 service by cell phone is only available in coverage areas. Text 911 is not available in Yellowstone.

During peak hours and periods of heavy visitation, **the cellular network may be very slow.** Your provider may or may not roam on networks in Yellowstone.

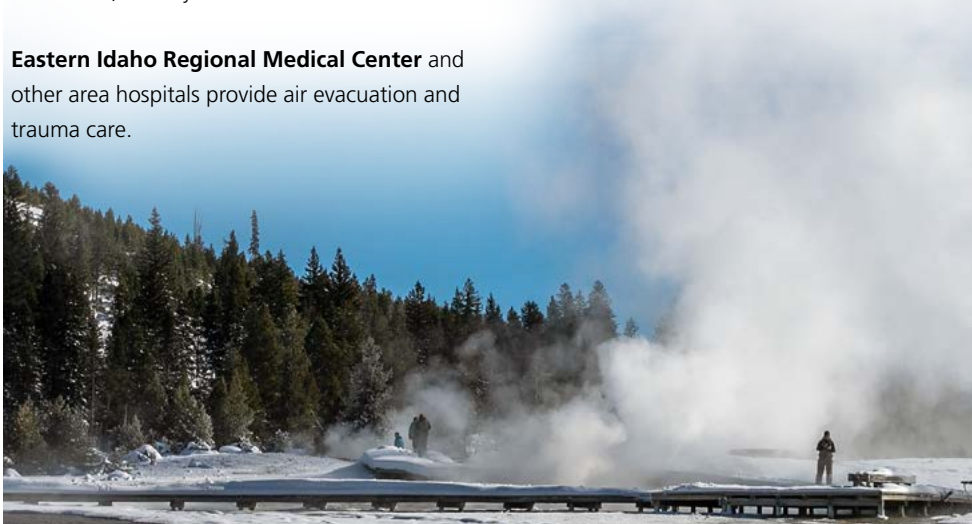
As a courtesy to others, **silence your mobile device** while enjoying Yellowstone.

Wi-Fi

Available for free:

- Horace M. Albright Visitor Center in Mammoth Hot Springs

Data speeds are very limited outside of Mammoth Hot Springs.



Geyser Hill in winter.

Lodging, Dining, and Tours

As one of Yellowstone's official concession companies, Yellowstone National Park Lodges offers **lodging, dining, and a variety of tours and activities.**

For reservations and information, ask at park hotels, or contact Yellowstone National Park Lodges:

Phone	307-344-7311, 866-439-7375
TDD	307-344-5395
Online	YellowstoneNationalParkLodges.com
Email	Reserve-YNP@Xanterra.com
Mail	PO Box 165 Yellowstone, WY 82190

A variety of winter activities, including partial or full-day tours by heated snowcoach, snowmobile tours and rentals, and skiing and snowshoe adventures are available from a wide range of authorized guides. Learn more on page six or by visiting go.nps.gov/YELLtours.

Other facilities and services may be available depending on current conditions. Learn more by inquiring locally or visiting go.nps.gov/winterinyellowstone.

Developed and Backcountry Camping

Mammoth Campground

Open year-round
Sites may be limited in winter
\$20/night, 30 night maximum stay

Amenities include flush toilets and accessible sites. Generators are allowed 8am to 8pm.

Overnight Backcountry Camping

A free permit is required to camp in the backcountry during winter.

For more information, contact the Central Backcountry Office:

Phone	307-344-2160
Online	go.nps.gov/YELLbackcountry
Email	yell_backcountry_office@nps.gov



A snowcoach at the Madison River.

How Do Geysers Work?

THE UPPER GEYSER BASIN OF YELLOWSTONE National Park has the largest concentration of geysers in the world. Geysers are hot springs with narrow spaces in their plumbing, usually near the surface. These constrictions prevent water from circulating freely to the surface where heat would escape. The deepest circulating water can be even hotter than the surface boiling point of 199°F (93°C).

Surrounding pressure also increases with depth, similar to the ocean. Increased pressure exerted by the enormous weight of the overlying rock and water prevents the water from boiling.

As the hot water rises, steam forms. Bubbling upward, the steam expands as it nears the top of the water column until the bubbles can no longer pass freely through the constrictions. At a critical point, the confined bubbles actually lift the water above them, causing the geyser to splash or overflow. This decreases pressure on the system, and violent boiling results. Tremendous amounts of steam force water out of the vent, and the eruption begins.

Water is expelled faster than it can enter the geyser's plumbing system, and the heat and pressure gradually decrease. The eruption stops when the water reservoir is exhausted, or when the system cools.



Old Faithful under a winter night sky.

Pack Mentality

YELLOWSTONE NATIONAL PARK IS THE SITE OF one of the most ambitious and controversial wildlife restoration projects in the world. The Yellowstone Wolf Project has yielded more than two decades of discoveries on wolf behavior, predator-prey relationships, wildlife disease management, and ecological complexity.

The stark white backdrop of snow and the general absence of leaf cover make winter an ideal time to observe wildlife. From the popular overlooks of Lamar Valley, it is possible to get a glimpse of wolf society. You may even witness the dangerous dance of predators and prey as each struggles to survive.

See page five for more information about driving the Northern Range in winter and tips for safely capturing stunning photographs.



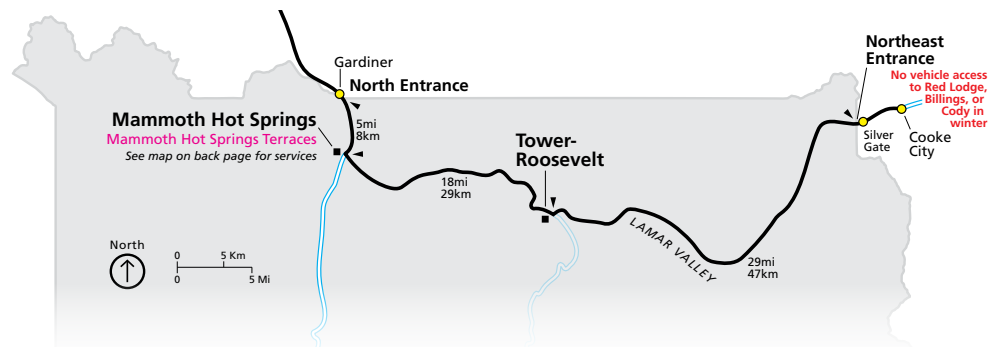
A wolf pack photographed from a plane during a wolf study.

Reachable by Road

YELLOWSTONE IN WINTER IS WILD and remote due to seasonal changes in road conditions and access.

Most park roads are closed to regular vehicles. The only exception: the road between the North and Northeast entrances, which is open to regular traffic all year. (The road is closed beyond Cooke City, Montana.)

Other park roads are open only to limited snowmobile and snowcoach travel. The only way to visit Old Faithful, the Grand Canyon of the Yellowstone, and other popular destinations is by guided snowmobile or snowcoach (see pages two and six) or through the non-commercially guided snowmobile access program (see page six).



Experience Mammoth Hot Springs

Travertine Terraces

WINTER IS AN AMAZING TIME TO EXPLORE the terraces of Mammoth Hot Springs. Hot water steams in the cold winter air while ice and snow accentuate the beautiful shapes of these living sculptures.

Four factors come together to create the terraces:

- **Water**

Rain and snow falling on the surrounding mountains seeps deep into the earth.

- **Heat**

The water is then heated by underground volcanic heat. The exact source of the heat is unknown! (Scientists have proposed two sources: the large magma chamber underlying the heart of the park or a smaller source closer to Mammoth.)

- **Fractures and fissures**

A network of fractures and fissures (cracks) acts like plumbing. The very hot underground water travels through the cracks to reach the surface.

- **Limestone**

Limestone was deposited millions of years ago when a vast sea covered the area. The hot water travels up through the limestone via the fractures and fissures, carrying high amounts of dissolved carbonate minerals. At the surface, carbon dioxide is released, and carbonate minerals like calcite are deposited, forming travertine, the chalky white rock of the terraces.



Stay On Boardwalks

and designated trails. Do not touch any thermal features and keep foreign objects out of springs. To avoid slips and falls, use caution on ice and snow.

EXPLORE BY FOOT

Boardwalks provide access to the lower area of Mammoth Hot Springs.

EXPLORE BY SKIS OR SNOWSHOES

The Upper Terrace Loop Ski Trail can be reached by personal vehicle via the Upper Terrace parking area. This groomed 1.5 mile (2.4 km) loop ranges from easy to more difficult due to a steep downhill section if traveled to the right (counter-clockwise) from the trailhead.

It is easiest if skied beginning to the left (clockwise). A moderate climb leads to views of hot springs, terraces, the Mammoth Hot Springs Historic District, and the surrounding mountains. At the top of the climb, a trail veers off to the southwest, which connects with the Snow Pass Trail. The Terrace Loop Trail descends past more hot springs before completing the circuit. Since snow is less deep than in the mountains above, wintering elk and deer are occasionally seen.



THE UNITED STATES ESTABLISHED Yellowstone National Park in 1872. For the next decade, the park was under threat. Poachers killed animals. Souvenir hunters broke large pieces off of the geysers and hot springs. Developers set up camps for tourists. The park turned to the US Army for help.

In 1886, men from Company M, First US Cavalry, Fort Custer, Montana Territory came to Yellowstone under the command of Captain Moses Harris. They began what would be 32 years of military presence.

The buildings of Fort Yellowstone are a testament to the long history of our first national park and of the important role the Army played. Most buildings constructed during the Army era are still standing and are currently used by the National Park Service as park headquarters.



Overlooking the boardwalks near Canary Spring.

Drive the Northern Range

THE 52 MILES (84 KM) OF ROAD BETWEEN THE North and Northeast entrances travel through the Northern Range, the hub of wildlife in Yellowstone National Park. Occupying just ten percent of the park, it is winter range for the biggest elk herd in Yellowstone and is arguably the most carnivore-rich area in North America.

It is also the only area of the park that can be reached by automobile year-round, providing incredible opportunities to observe wildlife in winter—when they are often more active and easier to spot—as well as view beautiful winter scenery.

Looking out over a Northern Range valley, you could see bison, elk, pronghorn, mule deer, wolves, and more all interacting with each other.

If you choose to venture out into this winter wonderland, remember:

- **Watch out for wildlife on or near roadways.**
- **Check road and weather conditions locally or online before you depart** (see page two for ways to receive updates on road conditions).
- **Drive cautiously.** The park speed limit is 45 mph (72 kph) unless posted slower. Icy and wet road conditions require extra attention.
- **Don't rely on your cell phone.** There is almost no cell service once you leave the Mammoth area. In case of emergency, there is a phone booth between the restrooms and gas station at Tower-Roosevelt.



Wolf (*Canis lupus*)

Photograph Wildlife

YELLOWSTONE IS ONE OF THE BEST PLACES in the world to view—and photograph—wildlife in their natural habitat. Professional photographers share these tips for capturing the best shots while respecting and protecting park wildlife.

The Name of the Game is Patience

To get the best shot, you will spend more time waiting and observing than taking photos. Look for patterns in animal behavior that can help you get a great shot. You may have to wait a while, so be ready.

Know Your Camera's Limits

A cell phone camera will not be able to capture the same resolution and detail as a more advanced standalone camera with large lenses. Good photography isn't about getting close to the animal for a close-up. It's about having the right equipment for the job.

Widen Your Perspective

Try to capture the character of the environment around wildlife, too. Habitat says a lot and will increase your chances of capturing interspecies drama.

Work the "Golden Hours"

Animals are most active in the early morning and late afternoon or evening. Luckily, these are also the hours of the day with the most dramatic light.

Stay Safe Behind and in Front of the Camera

An unusual vantage point can add drama to your image, but you don't want to add the drama of a hospital visit to your trip. **Never sacrifice safety for a photograph.**

Be Aware of Your Surroundings

Stay behind fences and guard rails. Never turn your back on wild animals.

Keep Children Close to You at All Times

Never try to pose them with wildlife.

Stay Out of the Road

Do not stop your vehicle in the road or stand in the roadway. Do not block any portion of the road with tripods, chairs, or other objects. Do not block the free flow of traffic.



A winter photography group.

Ski and Snowshoe



YELLOWSTONE OFFERS A VARIETY OF ENJOYABLE, challenging skiing and snowshoeing trails. Track is set on a few trails, others may be groomed, and all unplowed roads and trails are open to skiing and snowshoeing.

Equipment rental is available in several nearby communities. **Ski shop services**—including lessons, rentals, and repairs—are available at the Bear Den Ski Shop at Mammoth Hot Springs.

Brochures with general trail maps and descriptions are at warming huts and ski shops. **One-way or round-trip skier shuttles** may be offered to specific trails in the park for a fee.

DRESS FOR SUCCESS

Even in Yellowstone's severe winter temperatures, you can be comfortable and safe if you prevent chilling and overheating by wearing the right clothes.

- **Wear several adjustable layers** including wind protection and insulated undergarments.
- **Avoid clothes that are too tight.** They restrict circulation and increase the chance of frostbite.
- **Do not wear cotton clothes of any kind,** including jeans, sweatshirts, underwear, or socks. They retain moisture and put you at risk of hypothermia.

Cross-country skiers on the Bunsen Peak Road Ski Trail.

ETIQUETTE

- **Do not walk on snowshoe or ski trails.**
- **Snowshoe parallel to the ski track.**
- **Yield to faster skiers or those going downhill.**
- **Detour around wildlife. Do not approach.**

For detailed information on winter trails, routes, and safety, contact the Central Backcountry Office (307-344-2160) or request a Winter Backcountry Trip Planner (available online or at visitor centers).

Authorized Guides

MANY AUTHORIZED GUIDES AND **outfitters** are ready to show you Yellowstone's wonders, and each has a unique approach. Find authorized guides, tour companies, or other commercial services at go.nps.gov/YELLtours.

Report unauthorized operators to a park ranger or contact Concessions Management at 307-344-2271.



YELLOWSTONE NATIONAL PARK IS assisted in fulfilling our mission by our official non-profit partner, **Yellowstone Forever**. Proceeds from Yellowstone Forever educational bookstores, Institute, and philanthropic efforts support priority park projects and visitor education.

Find more information:

- Visit **Yellowstone.org**
- Call 406-848-2400

A Permit Is Required for All Commercial Activity in Yellowstone

A permit is required for commercial filming, regardless of equipment, and photography with props or models. For more information, call 307-344-2722.

The Yellowstone Forever Institute introduces thousands of students to the park's natural wonders. Programs range from one day to three weeks and highlight the park's amazing wildlife, geothermal areas, rich history, and awe-inspiring wilderness.

Programs are perfect for curious adults and families who want to explore the park with a knowledgeable guide.

Visit **Yellowstone.org** to view the course catalog and register.

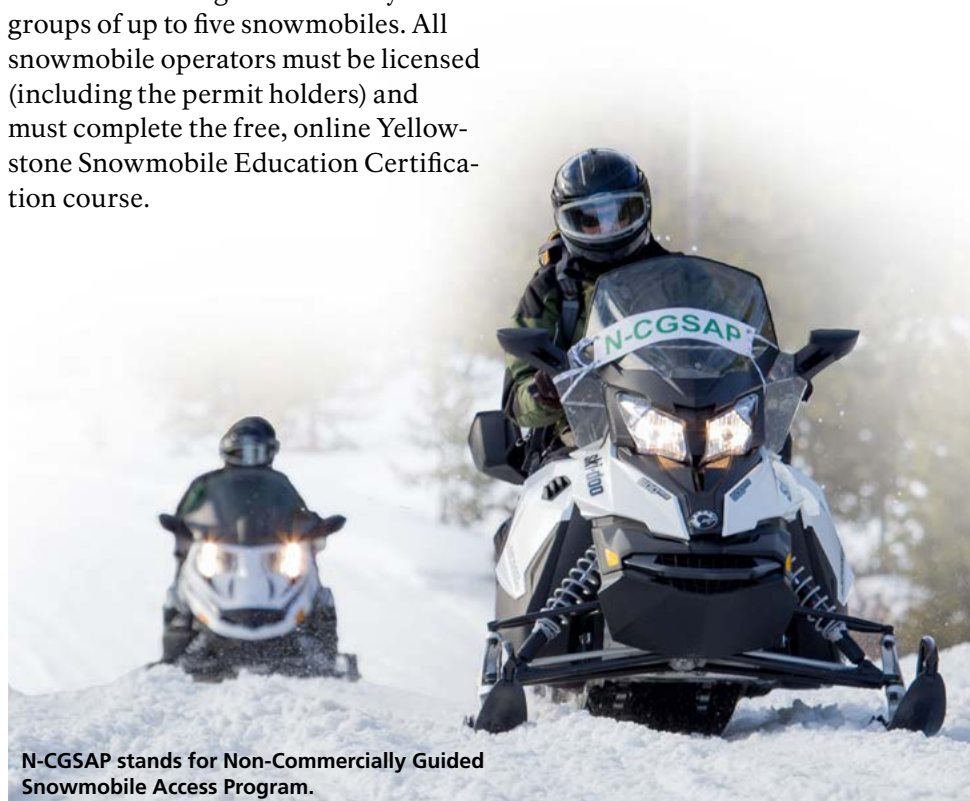
Self-Guided Snowmobiling

VISITORS INTERESTED IN GUIDING a **small, one-to-three day, private (not commercial) snowmobile trip** through Yellowstone in winter can find details and apply online at **recreation.gov**.

Permit holders are considered non-commercial guides and may lead groups of up to five snowmobiles. All snowmobile operators must be licensed (including the permit holders) and must complete the free, online Yellowstone Snowmobile Education Certification course.

Beginning October 1, unclaimed or canceled permits can be obtained with a first-come, first-served reservation through **recreation.gov**.

For more information, visit go.nps.gov/ncgsap.



N-CGSAP stands for Non-Commercially Guided Snowmobile Access Program.

Wild in Winter



Hayden Valley in winter.

AS REMARKABLE AS YELLOWSTONE IS DURING the rest of the year, in winter the park is a magical place: steam and boiling water erupt from natural cauldrons in the park's ice-covered surface, snow-dusted bison exhale vaporious breaths as they lumber through drifts of white, foxes and coyotes paw and pounce in their search for prey in the deep snow, and gray wolves bay beneath the frozen moon.

WINTER ADAPTATIONS

Yellowstone in winter is also a place of vulnerability. Wildlife endure extremes of cold, wind, and the absence of ready food. Park conditions in this most severe of seasons become a matter of life and death. To survive, plants and animals are forced to adapt.

Here are some adaptations you can mimic to more comfortably and safely enjoy your winter visit:

- Deer, elk, and bison sometimes follow each other through deep snow to save energy. *When skiing and snowshoeing through fresh snow, take turns breaking trail.*
- Mammals molt their fur in late spring to early summer. Incoming guard hairs are longer and protect their underfur. Additional underfur grows each fall and is made of short, thick, often wavy hairs designed to trap air. A sebaceous (oil) gland, adjacent to each

hair canal, secretes oil to waterproof the fur. Mammals have muscular control of their fur, fluffing it up to trap air when they are cold and sleeking it down to remove air when they are warm. *Wear multiple layers, including wind and waterproof outerwear, to adjust to changing conditions.*

- Snowshoe hares have large feet to spread their weight over the snow. Martens and lynx grow additional fur between their toes to give them effectively larger feet. *Increase the surface area of your feet with skis or snowshoes.*

WINTER SOUNDSCAPES

Yellowstone's soundscape is the total of all the sounds within the park, including those that can't be heard by human ears. Some sounds are critical for animals to locate a mate or food or to avoid predators. Others, such as those produced by weather, water, and geothermal activity, may be a result rather than a cause of ecological processes.

Human-caused sounds can mask the natural soundscape. The National Park Service's goal is to protect or restore natural soundscapes where possible and to minimize human-caused sounds while recognizing that they are generally more appropriate in and near developed areas.

Human-caused sounds that mask the natural soundscape are, to some extent, unavoidable in and near developed areas. However, the potential for frequent and pervasive high-decibel noise from oversnow vehicles has made the winter soundscape an issue of particular concern in Yellowstone.

Every now and then, turn off any engines or music. Listen to the sounds of winter. What do you hear? How do the sounds around you impact your experience?

CLIMATE CHANGE

In Yellowstone, scientists expect ecosystems to change due to increased temperatures and changing rain and snow patterns. Some observed and expected effects of climate change include:

- Average temperatures are higher now than they were 50 years ago, especially during spring.
- Snowpack throughout the area is decreasing and snow is melting faster in the spring. This could impact agriculture and municipal water supplies downstream.
- The alpine zone may shift higher, decreasing or eliminating species that live in this important habitat.

How might warmer temperatures affect the winter scenes that surround you?

Surviving Winter's Edge

BISON ARE ICONIC ANIMALS OF THE AMERICAN West and, with adult males weighing up to 2,000 pounds (900 kg), the largest land mammal in North America. The herd is made up of cows, calves, and some younger bulls. Mature bulls spend most of the year alone or with other bulls, except during the rut (mating season).

Bison are well-adapted to Yellowstone winters. Their thick fur and layers of fat keep them insulated in average low temperatures of -30°F (-34°C). Their massive humps are made of muscles supported by long vertebrae and are used like snowplows, swinging side to side to sweep away the snow and uncover grasses and sedges underneath.

Despite these adaptations, bison (and other wildlife) in winter have limited energy reserves. **Help protect bison and yourself by always staying at least 25 feet (23 m) away.**

Bison or Buffalo?

In North America, both "bison" and "buffalo" refer to the American bison (*Bison bison*). Generally, "buffalo" is used informally, while "bison" is preferred for formal or scientific purposes.

Early European explorers called this animal by many names. Historians believe that the term "buffalo" grew from the French word for beef, *boeuf*.

American bison are a different genus than other buffalo in the world.



Bison
(*Bison bison*)

Rules and Regulations

Drones

Launching, landing, or operating unmanned aircraft (drones) on lands and waters administered by the National Park Service is prohibited.

Camping

Camping is allowed only in designated campsites. No overnight camping is allowed in pull-outs, parking areas, picnic grounds, or any place other than a designated campground. Additional camping may be available in neighboring communities. Overnight backcountry camping is allowed in designated sites and requires a permit.

Swimming

Swimming in hot springs is always illegal and is extremely dangerous. Obey swimming and wading closures where marked.

Firearms

Firearms are allowed in national parks pursuant to state and federal regulations. They are prohibited in facilities where signs are posted, such as visitor centers, government offices, and some concession operations. Discharge of firearms is prohibited. Possession and use of weapons, such as air guns, bows and arrows, spears, and slingshots, is also prohibited. Details are available at [go.nps.gov/yell-laws](https://www.nps.gov/yell-laws).

Smoking

Smoking is prohibited in geyser basins, on trails, in buildings, or within 25 feet of building entrances.

Side Mirrors

Detachable side mirrors must be removed when not pulling a trailer.

Wildlife

For the safety of wildlife and yourself, the following are prohibited and carry legal penalties, including fines:

- Remaining near or approaching wildlife within **any distance** that disturbs or displaces the animal
- Spot lighting wildlife (viewing with lights)
- Imitating elk calls or using buglers
- Imitating wolf howls
- Tracking wildlife with electronic equipment

Leave No Trace

Take only pictures. It is illegal to remove or possess natural or cultural resources such as wildflowers, antlers, rocks, and arrowheads.

This is only a partial list of regulations. For more information, consult 36 Code of Federal Regulations and the Superintendent's Compendium, available at [go.nps.gov/yell-laws](https://www.nps.gov/yell-laws).

Store Food Securely



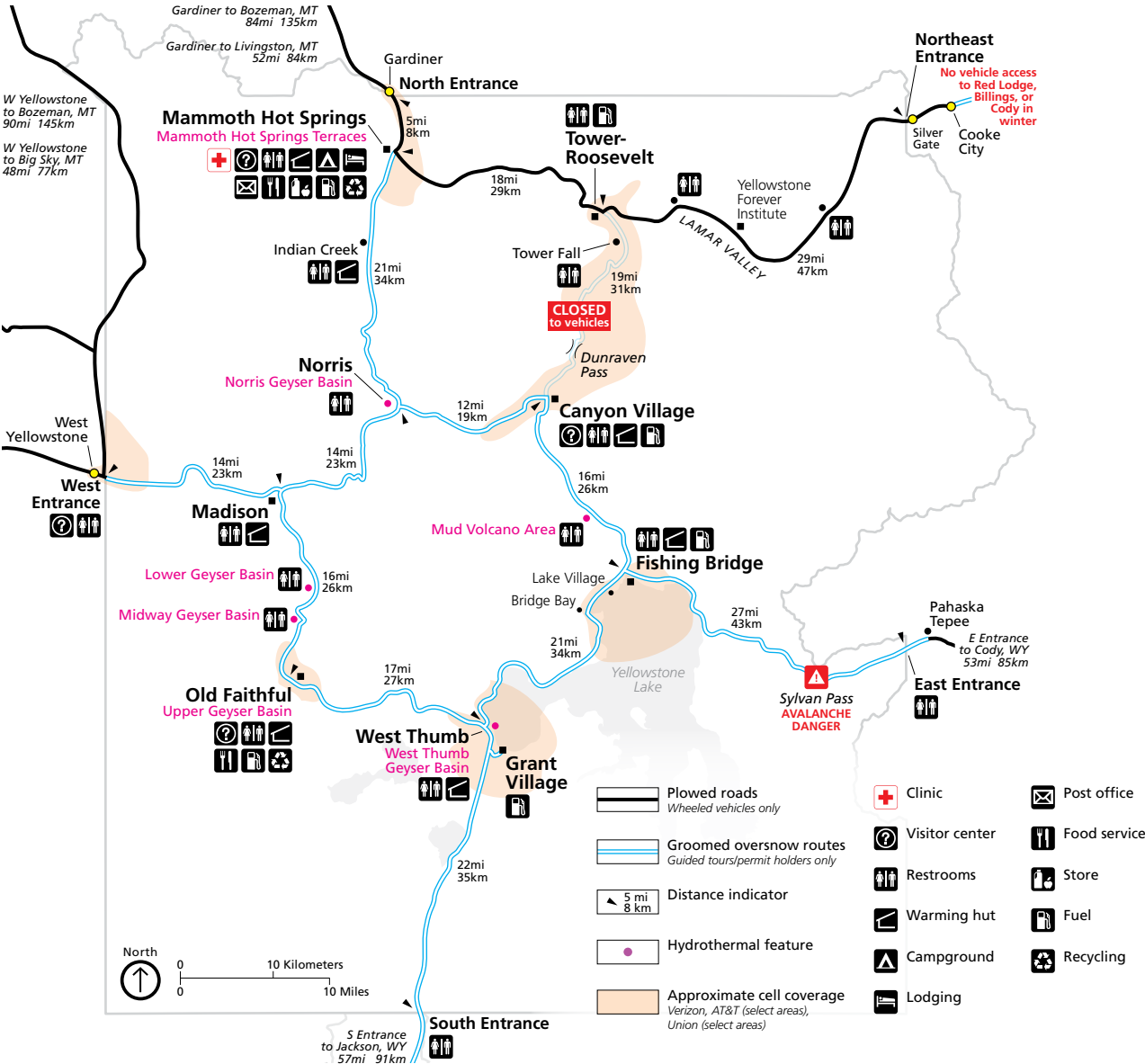
Do not feed any wildlife, including small mammals and birds. Eating human food is unhealthy and encourages aggressive behavior that may require animals to be destroyed.

All food, trash, and scented items must be kept inaccessible to bears at all times. Tents, truck beds, and picnic tables are not secure. In some areas, ravens have learned to unzip packs and scatter the contents.

None of these items, even if clean and empty, may be left unattended at any time:

- | | |
|---------------------------------|--|
| • Water and beverage containers | • Food, including condiments even if in containers |
| • Cooking or eating utensils | • Cosmetics and toiletries |
| • Stoves and grills | • Pet food and bowls |
| • Coolers and ice chests | • Pails, buckets, and wash basins |
| • Garbage, bagged or not | |

Park Roads



Road Status Updates

Hotline 307-344-2117
Online [go.nps.gov/YELLroads](https://www.nps.gov/YELLroads)
Mobile alerts text 82190 to 888-777

Drive Cautiously

The park speed limit is 45 mph (72 kph) unless posted slower. Icy and wet roads require extra attention.

Watch for wildlife on or near roadways.

Keep the road clear at all times, even when watching wildlife. Don't stop, stand, or walk in the road. Use a pullout if you need to stop for any reason.

Oversnow Travel End Dates

March 1, 9pm	East Entrance to Lake Butte Overlook (Sylvan Pass) Check the park website or app for a possible change to the travel end date between East Entrance and Lake Butte Overlook (Sylvan Pass).
March 7, 9pm	Mammoth to Norris Junction
March 9, 9pm	Madison to Norris to Canyon
March 14, 9pm	Canyon to Fishing Bridge
March 15, 9pm	Remaining groomed roads

Spring Road Opening 2021

Year-Round	N Entrance to Northeast Entrance
April 16, 8am	Mammoth to Old Faithful; Madison to West Entrance; Norris to Canyon
May 7, 8am	Canyon to Lake; Lake to East Entrance (Sylvan Pass)
May 14, 8am	West Thumb to Old Faithful; Lake to S Entrance; Tower Jct to Tower Fall
May 28, 8am	Beartooth Highway