# Yellowstone Visitor Guide 2020



**Travel Alert:** The road between Tower-Roosevelt and Chittenden Road will be completely closed to travel this year. See page 16 (back page) for details.

More information available at **go.nps.gov/yellroads**.

Plan plenty of time to get to your destination. **Yellowstone is worth pulling over for!** The speed limit in Yellowstone is 45 mph (73 kph) except where posted slower.



# **COVID-19** Precautions

Yellowstone is modifying visitor services to help prevent the spread of infectious diseases. **Some facilities and events will be closed or cancelled.** Please check locally, on the park website, and in the park app for current information and continue to follow CDC guidelines. As circumstances continue to change and we modify our operations as necessary, we thank you for your patience and cooperation.



**Come prepared.** Visitor services are very limited. **Expect wait times** at the park entrances.



Wear face-coverings in high-visitation areas and inside visitor facilities. A reduced number of visitors will be allowed in visitor centers at a given time.



Maintain social distancing of six feet (2 m), especially in high-visitation areas (on the boardwalks, in 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.

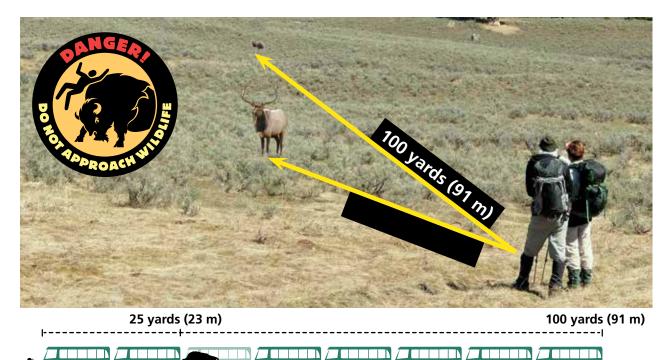


- Avoid touching your face.
- Sneeze or cough into a tissue, or the inside of your elbow.

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

# Inside

- 2 Welcome
- 4 Camping
- **5** Activities
- **7** Suggested itineraries
- 8 Famously hot features
- **9** Wild lands and wildlife
- **10** Area guides
- **15** Translations
- 16 Yellowstone roads map



Stay at least 100 yards (91m) away from bears and wolves, and at least 25 yards (23 m) away from all other wild animals.

### Watching wildlife

Watching wildlife in Yellowstone can be an amazing experience-unparalleled in the lower 48 states. All the large mammals present when Yellowstone became a park are here today: grizzly and black bears, wolves, mountain lions, elk, bison, pronghorn, moose, and bighorn sheep. You may also see a variety of birds, including bald eagles.

#### Looking for wildlife?

- To conserve energy, most animals are active in the cool of **dawn or dusk**.
- Animals are everywhere in the park, but it is easier to see them in open meadows and sagebrush than in dense forest.
- · Find a place with a broad view for your **binoculars** or spotting **scope**, and be prepared to wait.

### **Cell phone service**

Cell phone service is very limited in the park and surrounding areas. General cell coverage areas are marked on the park map (back cover). 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, please silence your mobile device while enjoying Yellowstone.



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

For your safety, and the safety of the animals please obey park rules:

- Stay at least 100 yards (91m) away from bears and wolves, and at least 25 yards (23 m) away from all other wild animals.
- If an animal moves closer to you, you must move to maintain the appropriate distance.
- Do not surround, crowd, or disrupt an animal's path of movement.
- If other visitors put you or wildlife in danger, leave the area and notify a park ranger.
- Spotlighting, or viewing animals with artificial light, is illegal.
- Calling to attract wildlife is illegal. You may not bugle to elk, howl at wolves, or make bird calls of any kind.
- Tracking wildlife with electronic equipment is not permitted.

### i<sup>®</sup> Wi-Fi

Wi-Fi is available to visitors at some hotels and lodges for a fee. Please check locally to see where available. The Horace M. Albright Visitor Center in Mammoth Hot Springs has free Wi-Fi. Data speeds are very limited outside of Mammoth Hot Springs.





### Store food securely

Do not feed any wildlife, including small mammals and birds. Consuming 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 how 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
- Cooking or eating utensils
- Stoves and grills
- Coolers and ice
- Pet food and bowls

wash basins

- chests • Garbage-bagged
- condiments, even if in containers • Cosmetics and toiletries

• Food, including

- · Pails, buckets, and
- or not

#### Pets

Pets are not allowed on trails or boardwalks, in the backcountry, or in hydrothermal basins. Where allowed, pets must be leashed and remain within 100 feet (30.5 m) of a road or parking area.

Do not leave a pet unattended, tied to an object, or without adequate food, water, shade, ventilation, or other basic needs. Owners must bag and dispose of pet waste. We recommend that someone in your group remain with your pet at all times to personally ensure their well being.

Information line	307-344-7381
ТТҮ	307-344-2386
Park entrance radi	o 1610 AM

# Park entrance radio 16

Yellowstone provides emergency response and ambulance service through the **911** system. **Medcor** provides medical care in the park, from emergencies to minor needs, at

- Mammoth Clinic (307-344-7965) year-round
- Lake Clinic (307-242-7241) check locally

• Old Faithful Clinic (307-545-7325) *check locally* Air evacuation and trauma care is provided by the **Eastern Idaho Regional Medical Center** and other area hospitals.



### **Accessibility**

A printed guide is available at all visitor centers and on the park website.

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.

### **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 www.nps.gov/yell/parkmgmt/lawsandpolicies.htm

### Lost and found

Call 307-344-5387 to report or retrieve items lost in lodging facilities. In other parts of the park, call 307-344-2109 or look online: https://go.nps.gov/lost-and-found



# Welcome to Yellowstone National Park

Yellowstone is a special place, and very different from your home. Like any grand adventure, your Yellowstone journey will take you to impressive new locations and introduce you to new experiences. There are different risks here than you may have faced before. You are responsible for your own safety.

We need your help to preserve the wildlife, natural features, and cultural treasures that bring so many visitors to Yellowstone. **The park rules protect you and also protect the park**. Follow the park rules for a safe and enjoyable visit. Please be a positive part of the Yellowstone experience. More guidance is described inside and online at **www.nps.gov/yell/planyourvisit/rules.htm**.

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 at **Yellowstone.org** or call (406) 848-2400.

**Park mission:** Preserved within Yellowstone National Park are Old Faithful and the majority of the world's geysers and hot springs. An outstanding mountain wildland with clean water and air, Yellowstone is home of the grizzly bear and wolf and free-ranging herds of bison and elk. Centuries-old sites and historic buildings that reflect the unique heritage of America's first national park are also protected. Yellowstone National Park serves as a model and inspiration for national parks throughout the world.

### Lodging, campground, and tour reservations

As one of Yellowstone's official concession companies, Yellowstone National Park Lodges offers lodging, camping, dining, and a variety of tours and activities. *Visit YellowstoneNationalParkLodges.com for changes to summer 2020 services due to Covid-19.* 

Reservations are available at park hotels and at: 307-344-7311 (TDD: 307-344-5395)

email: Reserve\_YNP@Xanterra.com

mailing address: P.O. Box 165, Yellowstone NP, WY 82190



# Make Memories to Last a Lifetime

# **A** Camping

#### **NPS-operated campgrounds**

Campsites are first-come, first-served at Mammoth, Norris, Indian Creek, Lewis Lake, Pebble Creek, Slough Creek. Arrive early to obtain a site, campgrounds fill quickly. Check-out is at 10 AM.

#### **Reservable sites**

Reserve sites at **Canyon**, **Bridge Bay**, **Madison**, **Fishing Bridge RV Park**, and **Grant Village** through Yellowstone National Park Lodges at 307-344-7311.

#### No overflow camping

There are no overflow camping areas available in Yellowstone. No camping or overnight vehicle parking is allowed in pullouts, parking areas, picnic grounds, or any place other than a designated campground. Additional camping may be available in neighboring communities.

#### Check-in and check-out

Registration desks at reservable campgrounds are open 7 AM to 10 PM during peak season, and 8 AM to 9 PM during early and late season. Check-out at reservable campgrounds is 11 AM.

#### Length of stay

Camping is limited to 14 days from July 1 through Labor Day (first Monday in September) and 30 days the rest of the year.

**Campfires** are allowed only in designated grills or rings in park campgrounds, some picnic areas, and specific backcountry campsites. Extinguish all campfires before leaving them.

#### Discounts

Holders of Senior and Access passes receive a 50 percent discount on camping fees except at Fishing Bridge RV.



#### **Quiet hours**

From 10 PM to 6 AM, no loud audio devices or other noise disturbances are allowed.

#### **Group camping**

Group camping (tents only) is available at Madison, Grant, and Bridge Bay for organized groups with a designated leader. Fees range from \$136 to \$399 plus tax and utility fee per night, depending on group size. Advance reservations are required at 1-307-344-5437 or **ynpsa@xanterra.com**.

#### Food storage boxes

Food storage boxes are available at each of the campsites at Indian Creek, Norris, Mammoth, Pebble Creek, Slough Creek, and Lewis Lake campgrounds. Many campsites in other campgrounds are also equipped with bear-proof storage boxes.



#### Key to campground features

- $\Delta$  ~ Sites you can reserve
- $\Omega \quad \text{Rate does not include tax or utility pass-through} \\$
- **‡** Site with full hook-ups
- A Accessible sites available
- F Flush toilets
- V Vault toilets
- S/L Pay showers/laundry onsite
- 2S Two showers included each night
- DS Dump station
- G Generators allowed 8 AM to 8 PM

In order of opening	Dates*	Rate	Sites	Elev (ft)	Features	RV sites
Mammoth	Check locally	\$20	85	6,200	A, F, G	Most are pull-through
Madison ∆	Check locally	\$27 Ω	278	6,800	A, F, DS, G	Call for availability and reservations
Fishing Bridge RV $\Delta$	Closed					
Norris	Check locally	\$20	112	7,500	A, F, G	2 sites are 50 ft (signed), 5 sites are 30 ft
Bridge Bay $\Delta$	Check locally	<b>\$27</b> Ω	432	7,800	A, F, DS, G	Call for availability and reservations
Tower Fall	Closed					
Canyon ∆	Check locally	<b>\$32</b> Ω	273	7,900	A, F, S/L, 2S, DS, G	Call for availability and reservations
Grant Village $\Delta$	Check locally	\$32 Ω	430	7,800	A, F, S/L, 2S, DS, G	Call for availability and reservations
Indian Creek	Check locally	\$15	70	7,300	A, V	10 sites are 35 ft, 35 sites are 30 ft
Pebble Creek	Check locally	\$15	27	6,900	A, V	Some long pull-throughs
Slough Creek	Check locally	\$15	16	6,250	A, V	14 sites at 30 ft – walk first to assess sites
Lewis Lake	Check locally	\$15	85	7,800	A, V	All sites are 25 ft or less

Openings are subject to change. We will continue to evaluate and adapt to changing COVID-19 guidance and adjust operations as needed.



### **Backcountry camping**

Overnight backcountry camping is allowed in designated sites and requires a permit. Permits can only be obtained by calling (307-344-2160) or emailing yell\_backountry\_office@nps. gov. Permits are free prior to Memorial Day. From Memorial Day through September 10, a per-person, per-night fee applies.

- Backpackers and boaters: \$3 per-person per-night (group maximum \$15 per night).
- Groups with stock animals: \$5 per-person per-night.

Detailed information on backcountry permit fees and making advanced reservations is available online at www.nps.gov/yell/ planyourvisit/backcountryhiking.htm and go.nps.gov/yellbackcountryreport



# Horses, mules, and other stock animals

Traveling in the Yellowstone backcountry with horses, mules, or llamas is an exciting way to see the park. By their very nature, these large animals have the potential to leave great impacts on the land around them. Permits are required for both day rides and overnight trips. To obtain permits and plan a safe, enjoyable, low-impact trip, please contact a backcountry office or look online at www.nps.gov/yell/ planyourvisit/horseride.htm

Trails typically open for stock use **July 1**. Some trails may open earlier or later depending on trail conditions. Proof of a negative **Coggins test** is required. Hay is prohibited in the backcountry and weed-free hay restrictions are enforced in other areas.



### Fishing season

General fishing season **opens May 23 and closes November 1, 2020**. Some areas remain closed until July 15. Fishing permits are required in Yellowstone; state-issued fishing permits are not valid within the park. Anglers 16 years or older need a permit; younger children can fish for free with a permitted adult.

Fishing regulations in Yellowstone protect the unique values of the park ecosystem and conserve native fish species. Copies of the complete park regulations are available whereever permits are sold and online at **www.nps. gov/yell/planyourvisit/fishing.htm** 

Possession limits and closures vary throughout the park. Anglers are responsible for knowing the regulations in the area they are fishing. Anglers are also responsible for knowing how to tell the difference between species. Native fish must be released unharmed back into the water immediately. These include:

- Arctic grayling
- cutthroat trout
- mountain whitefish

These tackle and gear restrictions apply:

- Hooks must be barbless.
- Tackle and lures must be non-toxic. Lead tackle is not allowed.
- Bait is prohibited.
- Felt-soled footwear is not permitted.



### Swimming Park waters are swift and cold

#### Park waters are swift and cold

- Swimming in hot springs or their runoff channels is prohibited.
- Swimming in park rivers is not recommended. Currents can be dangerously strong and fast.
- Swimming in Yellowstone Lake is not recommended. Average lake temperature is approximately 41° F (5° C).



# 🚔 Boating

The boating season **opens May 23 and closes November 1, 2020.** All watercraft (motorized boats, non-motorized boats, and float tubes) must have a **permit** and be **inspected for aquatic invasive species (AIS)** by park staff. Any watercraft suspected of harboring AIS will be subject to a non-chemical decontamination treatment.

Aquatic Invasive Species are nonnative plants and animals that can cause irreversible harm to the park ecosystem. New Zealand mudsnails, whirling disease, and lake trout have already resulted in loss of native fish and closure of some park areas.

Watercraft users and anglers are asked to inspect all items that may come in contact with park waters, ensuring that they are **clean**, **drained**, and **dry**.

Motorized boating is allowed on Lewis Lake and most of Yellowstone Lake. Only nonmotorized boating is allowed on most other lakes. Only one river is open to non-motorized boating: the Lewis River channel between Lewis and Shoshone lakes.

If you plan to boat in the park, please familiarize yourself with *Yellowstone National Park Boating Regulations*. Copies are available online www.nps.gov/yell/planyourvisit/boating.htm.

Certain Boats Banned. Boats with sealed internal water ballast tanks are temporarily banned in the park to minimize the risk of introducing aquatic invasive species.

#### **Boat permits & AIS inspections**

# Motorized & non-motorized boat permits & AIS inspections:

Grant Village Backcountry Office, Bridge Bay Marina Ranger Station, Lewis Lake Ranger Station.

# Angler float tube only permits & AIS inspections:

Locations above and North Entrance, Northeast Entrance, and Bechler Ranger Station. For more info and to schedule an appointment call 406-581-9040 or 406-823-9006.



# 🗴 Day hiking

More than 1,000 miles of hiking trails wind through Yellowstone National Park. Whether you hike for half a mile or more than ten, the backcountry can be an escape from the crowds and a chance to get in touch with the wilderness that Yellowstone preserves.

Ask at any visitor center for brochures describing day hikes throughout the park. Remember to ask about any seasonal closures, trail conditions, or wildlife sightings when you plan your hike. Be prepared for wildlife encounters, hike in groups of three or more, and carry bear spray on all hikes.



# Be prepared for bear encounters

Hiking in bear habitat has inherent risks. You are likely to be safer if you stay on roads and official trails but **your safety cannot be guaranteed**. Federal regulations require you to stay at least **100 yards (91m)** away from bears.

### Hiking in bear country



- BE ALERT watch for bears, fresh tracks, or scat.
- MAKE NOISE in areas with limited visibility.
- CARRY BEAR SPRAY and know how to use it.
- HIKE IN GROUPS of three or more people.
- DO NOT RUN, back away slowly.



### **Bear spray**

Bear spray is available for purchase in Yellowstone where stores are open.

### **Bear spray recycling**

Bear spray cannot be taken on airplanes or thrown in the trash. Canisters can be recycled in the park. Check locally or online for locations.

> Smoking is prohibited in geyser basins, on trails and boardwalks, in buildings, or within 25 feet (7.6 m) of entrances.



# Photography

Have reasonable expectations of your camera. A cell phone camera will not be able to capture the same resolution and detail as a more advanced camera with large lenses.

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

#### 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.

# \delta Bicycling

Bicycling is permitted on paved roads, parking areas, and designated routes. Bicycles are subject to the same traffic rules as automobiles and are prohibited on trails and boardwalks.

#### Park roads are narrow

and winding with few shoulders. Therefore, regulations require cyclists to ride single file, and we strongly recommend wearing a helmet and high-visibility clothing.

Road elevations range from 5,300 to 8,860 feet (1,615 to 2,700 m), and services and facilities are far apart. During April, May, and June, high snowbanks may make travel more dangerous.

Find information on the park website or pick up the *Bicycling in Yellowstone* brochure at a visitor center or ranger station.





### Activities for young people

#### **Junior Ranger Program**

If you are age 4 or older, you can become a Yellowstone Junior Ranger. This program is a way to introduce children—and those young at heart—to the natural wonders of the park and their own role in preserving these wonders for the future.





### Explore park heritage

Opportunities to connect to the past are everywhere in Yellowstone. Visit Mammoth Hot Springs to walk the self-guiding trail around Fort Yellowstone, which chronicles the U.S. Army's role in protecting the park. Other historic sites include the Fishing Bridge Museum, Obsidian Cliff, and the Old Faithful Inn and Historic District.

#### The Heritage and Research Center

(above) is located just beyond the North Entrance in Gardiner, Montana. This facility is home to Yellowstone's museum collection, archives, research library, archeology lab, and herbarium. To schedule an appointment, please call 307-344-2264.

Removing or possessing natural or cultural resources (such as wildflowers, antlers, rocks, and arrowheads) is strictly prohibited.

### Let someone else do the driving Authorized guides and outfitters

Many authorized guides and outfitters are ready to show you the wonders of Yellowstone, and each has a unique approach. Make sure that your guide, tour company, or other commercial service is fully authorized by the park. Report unauthorized operators to a park ranger, or contact Concessions Management at 307-344-2271. Authorized providers are listed on the park website at www.nps.gov/yell/ planyourvisit/guidedtours.htm

# Any commercial activity in the park requires a permit.

• Commercial filming, regardless of equipment, and photography with props or models, require permits. For more information call: 307-344-2722.

# FOREVER

Yellowstone Forever is the official nonprofit partner of Yellowstone National Park. Our mission of engagement and support through philanthropy and education for the park will ensure Yellowstone remains for generations to come. Visit **Yellowstone.org** 

# Make the Most of Your Visit

Yellowstone encompasses more than 2.2 million acres, most of it beyond the reach of roads. One could take an entire lifetime to experience the park and you would still never see it all. Here are some suggestions for making the most of the time you do have.

**Tour early in the day to avoid crowds:** Most people tour the park from 10:00 AM to 6:00 PM. Wildlife are most active at sunrise and sunset; arriving before 8 AM improves your chances of observing animals during their active periods. Park entrance gates are open 24 hours.

Visit a hidden gem: Take a day hike, or stroll one of our historic walking tours at Fort Yellowstone, Roosevelt Park and historic districts throughout the park. Explore nearby national park units, national forests, state forests, and state parks. The region offers a variety of public lands for recreation and enjoyment.

#### Only one day here?

- Drive to the Old Faithful area and walk around the Upper Geyser Basin.
- Visit Old Faithful and one other hydrothermal area, such as Norris, West Thumb, or Fountain Paint Pots. Follow boardwalks and maintained trails to witness hot springs, mudpots, fumaroles, and geysers.
- Begin in Hayden or Lamar valleys to look for some of the park's large animals. Bring binoculars or a spotting scope and enjoy animals from a safe distance.
- For a break from the road, consider one or two moderate day hikes. Always carry rain gear, extra food and water, and other emergency equipment when venturing into the backcountry.
- Have a picnic. Unpack your basket at 52 picnic areas throughout the park.

#### Two or more days?

- Explore one theme, such as geology, in depth. For example, visit Mammoth Hot Springs to see travertine formations and view the sedimentary layers of Mount Everts, then drive through glaciated terrain to the Tower-Roosevelt area. On the way, stop and view wildlife and birds at Blacktail Ponds.
- Visit Yellowstone Lake, the largest highelevation lake in the lower 48 states. Take in the spectacular views of West Thumb and the Absaroka Mountains from its shores. Explore the hot springs, mud pots, and geysers of the West Thumb Geyser Basin. Hike one of the local trails, such as the Scenic Lake Overlook near West Thumb.
- Slow down and try your hand at capturing the beauty of Yellowstone through journaling, painting, or simply observing.

# **Famously Hot Features**

Yellowstone was established in 1872 as the world's first national park primarily because of its unparalleled collection of geysers, hot springs, mudpots, and steam vents.



The bubbling mudpots of Fountain Paint Pots may be thicker or more active as local precipitation changes.

**Hot springs** are the most common hydrothermal features in the park. They vary from frothing mocha-like boiling water to clear and calm pools of tremendous depth.

**Mudpots** are acidic features with a limited water supply. Their consistency and activity vary with the seasons and precipitation.

**Fumaroles,** or steam vents, are the hottest hydrothermal features in the park. They are easier to see in cool weather.

**Travertine terraces** are found at Mammoth Hot Springs, where the interactions of water and limestone create chalk-white travertine.

**Geysers** erupt with steaming hot water. Variations in each geyser's underground reservoir determine whether it is regular and predictable—like Daisy Geyser in the Upper Geyser Basin—or irregular like Steamboat Geyser in Norris Geyser Basin.



#### How "faithful" is Old Faithful Geyser?

Since its first documentation in 1870, Old Faithful has been one of the more predictable geysers. Over time, the average interval between Old Faithful's eruptions has increased or decreased due to changes in its plumbing from ongoing processes and earthquakes. The Hebgen Lake Earthquake (1959), caused an increase in the time between eruptions. The average interval between eruptions of Old Faithful Geyser is 94 minutes  $\pm$  10 minutes, with intervals ranging from 54 to 114 minutes.

### Where geology and biology thrive

Descendants of the first life forms to evolve on Earth live in the extremely hot, sometimes acidic, habitats in and around hydrothermal features. The heat-loving microorganisms, called **thermophiles**, survive and thrive in Yellowstone's active volcanic environment.

Nourished by energy and chemical building blocks available in the hot springs, the microbes build vividly colored communities that vary depending on the types of microbes, the pH (acidity or alkalinity), temperature of the feature, and exposure to sunlight.

Millions of individual microbes can connect into long strands called filaments. Some filaments tangle, forming mats. Flowing water brings other microbes, organic matter, and minerals that add to the mat. Mats can be thin as tissue paper or thick as lasagna. Because of their fragility, they must not be touched.

Dozens of types of microbes from all three domains of life can exist in these mats, from Archea in the hottest, most acidic features to the more widespread Bacteria and Eukarya. Scientists continue to study the many mysteries of thermophiles and their extreme habitats in the living laboratories of Yellowstone's thermal areas and features.



Microorganisms thrive in hot springs and other hydrothermal features.



The trail to Lone Star Geyser begins about 3.5 miles southeast of Old Faithful.

### How do geysers work?

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 more than twice as hot as the surface boiling point of 199° F (93° C). The 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 it heats up.

As the water rises, steam forms. Bubbling upward, steam expands as it nears the top of the water column until the bubbles are too large and numerous to pass freely through the constrictions. At a critical point, the confined bubbles actually lift the water above, 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.

Stay on boardwalks and designated trails. Do not touch any thermal features and keep foreign objects out of springs. It can be windy so cinch your hats and secure your items.

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.

Yellowstone's geyser basins contain fountain-type geysers and cone-type geysers. Fountain-type geysers shoot water out in various directions from a pool of water. Conetype geysers, like Lone Star Geyser (*photo above*) erupt in a concentrated jet of water from inside a rock formation.

# Wild Lands and Wildlife



### Within the herd

Yellowstone is the only place in the United States where bison have lived continuously since prehistoric times. Yellowstone bison are special because they are America's largest bison population on public land and have not been hybridized through interbreeding with cattle.

Bison eat primarily grasses and sedges and are well-suited to both prairies and forests. With adult males weighing up to 2,000 pounds (907 kg), the bison is the largest land mammal in North America. This iconic ungulate is the National Mammal of the United States.

Yellowstone bison herds exhibit wild behavior, like their ancient ancestors. The herd is comprised of cows, calves, and some younger bulls. Mature bulls spend most of the year alone or with other bulls—except during the rut, or mating season. During the rut in July and August, mature males display their dominance by bellowing, wallowing, and fighting with other bulls. The winners earn the right to mate with receptive females.

After a gestation period of 9 to 9 1/2 months, calves are born in late April and May. Their orange fur makes them easy to see, even from a distance, and has earned them the nickname "red dogs." Look for bison in open country along the Lamar, Yellowstone, Firehole, and Madison rivers.

#### **Bison or buffalo?**

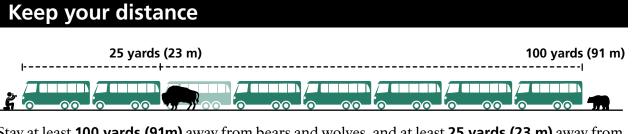
In North America, both "bison" and "buffalo" refer to the American bison (*Bison bison*). Generally, "buffalo" is used informally; "bison" is preferred for formal or scientific purposes. Early European explorers called this animal by many names. Historians believe that the term "buffalo" grew from the French word for beef, *boeuf*. American bison are a different genus than other buffalo in the world.



### Bringing up bear cubs

Both grizzly and black bear cubs are born in the deep winter months while their mother hibernates. In April and May, they begin to venture out with their mother as she digs for roots, insects, and squirrels. Cubs stay with their mother for two to three years before striking out on their own.

Look for black bears along the edges of wooded areas in the Lamar and Hayden valleys, or among the trees near Mammoth and Tower. Grizzly bears are usually seen in open areas. (See page 6 for information about safely recreating in bear country.)



# Stay at least **100 yards (91m)** away from bears and wolves, and at least **25 yards (23 m)** away from all other wild animals.

### Signs of change

The National Park Service anticipates that climate change will create significant challenges to the preservation of park resources, infrastructure, and visitor experience. Within Yellowstone specifically, scientists expect ecosystems to change due to increased temperatures



Climate change poses a major threat to sensitive species like the American pika (*Ochotona princeps*).

and changing rain and snow patterns. Some observed and expected effects of climate change are:

- The alpine zone may shift higher, decreasing or eliminating species that live in this important habitat.
- Wildland fire in the western states is expected to intensify. In Yellowstone, fires may be more frequent, but smaller and less intense.
- Insect or disease infestations may increase in trees.
- Declining wetlands will decrease essential habitat for frogs, salamanders, and many birds and insects.
- Grizzly bears may have less of their most nutritious foods, such as whitebark pine nuts and army cutworm moths.
- Native plants may be lost and replaced with nonnative invasive exotic plants more adapted to dryer conditions.



Blacktail Plateau, November 2019.

### **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 for visitors and researchers alike 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.

# **Old Faithful Village and Upper Geyser Basin**



A raven's perspective on Old Faithful.

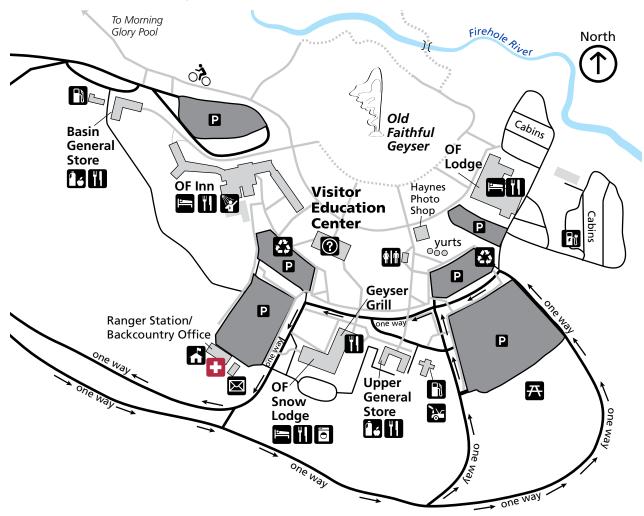
The Upper Geyser Basin, home of Old Faithful, hosts the majority of the world's active geysers. The concentration of hydrothermal features here provides ample evidence of Yellowstone's active volcano.

Partially molten rock, or magma, from this volcano may be as close as 3–8 miles (5–13 km) below your feet. Magma provides the first key ingredient for creating thermal features: heat. Rain and snow eventually supply the second ingredient: water. The water seeps down several thousand feet (more than a kilometer) below the surface where it is heated. Underground cracks and earthquake faults form the third ingredient: a natural "plumbing" system. Super-heated water rises through the plumbing to produce hot springs and geysers.

Old Faithful erupts more frequently than any of the other big geysers, although it is not the largest or most regular geyser in the park. During summer, rangers forecast eruption times for six major geysers. (Five are here; the sixth—Great Fountain—is in the Lower Geyser Basin north of Old Faithful.) However, a geyser's pattern of eruptions may change at any time.



Forecasted eruption times are posted in the Visitor Education Center and in many of the area facilities. You can also call **307-344-2751** (option 2), access predictions on the **Yellowstone National Park app**, or check the **@GeysersNPS** Twitter feed





Stay on boardwalks and designated trails. Do not touch any thermal features and keep foreign objects out of springs. It can be windy so cinch your hats and secureyour items.

#### Not all services available

 Medcor Medical Clinic Phone: 307-545-7325
 Emergency dial 911

#### **Old Faithful Visitor Education Center**

Dynamic exhibits about the world's most active hydrothermal area. Phone: 307-344-2750. Check locally.

**1** Yellowstone Forever Bookstore.

#### Lodging

Old Faithful Lodge and Cabins Old Faithful Snow Lodge Old Faithful Inn

#### 🖬 Food

Old Faithful Lodge and Cabins Bake shop Cafeteria

Old Faithful Snow Lodge Obsidian dining room Geyser grill

Old Faithful Inn Dining Room Bear Paw Deli

OF Basin (lower) Store Soda Fountain

#### 🖪 Fuel

Lower station and Upper station
Credit card fueling available 24 hours.
➢ Repairs
➢ Wrecker 406-848-7548
Liquid propane gas bottle exchange available.

#### Shopping

Old Faithful General Store: Sells groceries, souvenirs, and take-away foods. OF Basin (lower) Store Old Faithful Lodge gift shop Old Faithful Snow Lodge gift store Old Faithful Inn gift store

#### Other

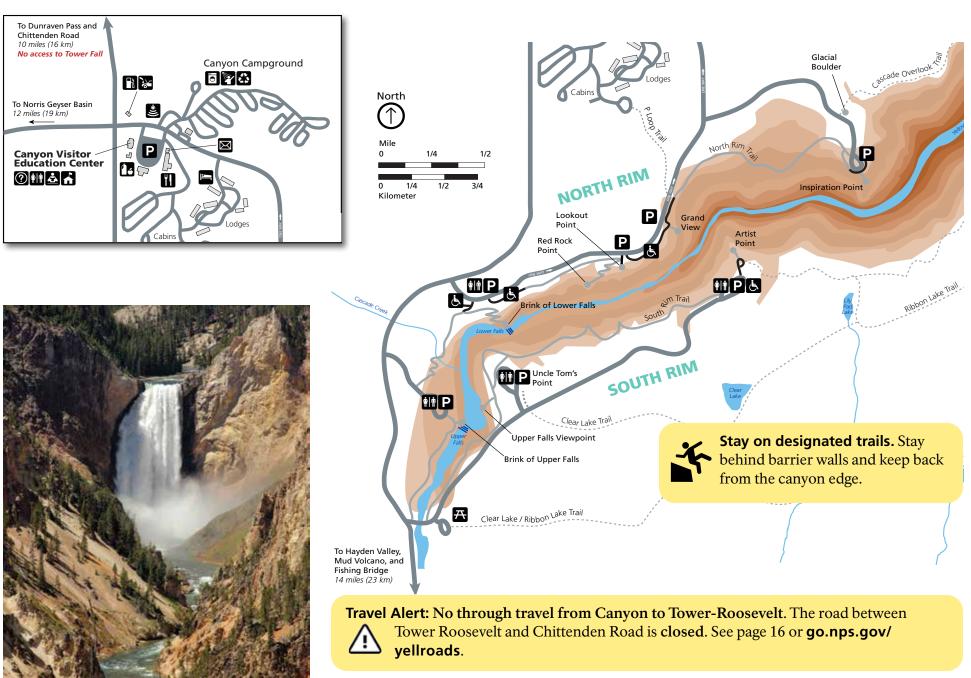
U.S. Post Office

Self-guiding trail booklets are available for the Upper Geyser Basin and the Old Faithful Historic District.

**Public restrooms** located in all visitor centers, stores, restaurants, hotels, gas stations, and at or near all picnic areas.

**Recycling** bins are located in the parking lot near the yurts, near trash bins at the General Stores, and in the parking lot near the Visitor Education Center.

# **Canyon Village and Grand Canyon of the Yellowstone River**



#### Not all services available

#### **②** Canyon Visitor Education Center

Learn about the Yellowstone supervolcano and the forces that drive regional geology. Phone: 307-344-2550. Check locally.

**2** Yellowstone Forever Bookstore

#### Lodging

Canyon Lodge Western cabins

# Campground Canyon Campground 2

#### 🖬 Food

- Canyon Lodge
- Eatery
- Falls Cafe
- Ice Creamery
- M66 Grill

General Store Soda Fountain

#### 🚹 Fuel

Credit card fueling 24-hours.
✓ Repairs
➢ Wrecker 406-848-7548
Liquid propane gas bottle exchange available.

#### Shopping

Canyon General Store Sells groceries, ice cream, souvenirs, apparel.

Yellowstone Adventures Store Sells camping and outdoor gear, footwear, fishing supplies.

Canyon Lodge Gift Store

#### Other

U.S. Post Office

Trail rides are offered daily.

A self-guiding trail booklet is available for this area.

**Public restrooms** are located at all visitor centers, stores, restaurants, hotels, gas stations, and at or near all picnic areas.

**Recycling** bins are located in the campground and near trash bins at the General Store.

#### The Lower Falls of the Yellowstone River.

The Grand Canyon of the Yellowstone River illustrates the park's complex geologic history in dramatic colors and shapes. The Upper and Lower Falls of the Yellowstone River add to the grandeur of this unique natural treasure.

This canyon formed when hydrothermal activity altered and weakened the bedrock, making the stone softer. The Yellowstone River eroded the weakened rocks to deepen and widen the canyon.

The 308-foot (93 m) Lower Falls marks the point where the volcanic bedrock beneath the river changes from hard rock, resistant to erosion, to the hydrothermally altered rocks common downstream. The 109-foot (33 m) Upper Falls marks a similar shift. The multi-hued layers of the canyon result from the hydrothermally altered rhyolite and sediments. Look closely at dark orange, brown, and green areas near the river for still-active hydrothermal features. Their activity—and that of water, wind, and earthquakes—continue to sculpt the canyon today.

# Lake Village, Fishing Bridge, and Bridge Bay



Yellowstone Lake, at 286 miles<sup>2</sup> is the largest high-elevation lake (above 7,000 ft) in North America. The only outlet, the Yellowstone River, is at Fishing Bridge. The lake is covered by ice from December to May or June.

Powerful geologic processes shaped the shoreline of Yellowstone Lake, which overlies the edge of the Yellowstone caldera. Glacial activity and volcanic events carved the central basin and ragged shores. A pyroclastic explosion created the West Thumb basin 174,000 years ago. Many of the area's 1,000 to 3,000 annual earthquakes occur under Yellowstone Lake, causing uplift and subsidence events which continue to reshape the water's edge.

Yellowstone Lake is also the site of one of the most extensive conservation efforts in the National Park Service. Park staff work to reduce the impact of invasive lake trout (Salvelinus namaycush) on the survival of the native population of cutthroat trout (Oncorhynchus clarkii bouvieri).

#### Not all services available

🖸 Medcor Medical Clinic Phone: 307-242-7241 **Emergency dial 911** 

#### **③** Fishing Bridge Museum and **Visitor Center**

See historic exhibits about the park's birds and other wildlife, and dive into the distinctive geology of Yellowstone Lake. Phone: 307-344-2450. Check locally.

**1** Yellowstone Forever Bookstore.



#### 🖿 Lodging

Lake Hotel and Cabins Lake Lodge and Cabins

**A** Campgrounds Fishing Bridge RV—closed 2020

Bridge Bay Campground

#### **Food**

Lake Hotel Restaurant Lake Hotel Deli Lake Lodge Cafeteria

Fishing Bridge General Store

#### 🗈 Fuel

Fishing Bridge station: credit card fueling 24-hours. **Repairs** Wrecker 406-848-7548

RV liquid propane tanks filled.

#### **Shopping**

Fishing Bridge General Store Sells groceries, ice cream, souvenirs, apparel.

Lake General Store Has groceries, snack bar, souvenirs, and apparel.

Bridge Bay Marina Store Sells camping and outdoor gear, snacks, and fishing supplies.

Lake Lodge Gift Store

Lake Hotel Gift Store

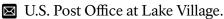
#### Bridge Bay Marina

**N** Backcountry Office located at the marina.

Boat launch ramp and dock slip rentals Motor boat rentals

One-hour Scenicruise boat tours of Yellowstone Lake.

#### Other



**Public restrooms** are located at all visitor centers, stores, restaurants, hotels, gas stations, and at or near all picnic areas.

### West Thumb



#### **West Thumb Information Station**

Pique your curiosity before exploring the boiling springs in the adjacent geyser basin on the shore of Yellowstone Lake. Ph: 307-344-7690

Check locally or call.

A self-guiding trail booklet is available for this area.

# Mammoth Hot Springs



Mammoth Hot Springs terraces are like living sculptures, shaped by the volume of water, the slope of the ground, and objects in the water's path. Travertine builds up rapidly here and causes the features to change quickly and constantly. Some vents will clog completely, new vents may form, and old vents may reopen. Sometimes the water is concentrated in a few springs while at other times it may spread across many outlets.

In every case, water follows the path of least resistance, whether above ground or underground. Scientists estimate that, at any given time, only about 10 percent of the water in the Mammoth Hot Springs system is on the surface. The features are always changing, but the overall activity of the entire area and the volume of water discharge remain relatively constant. Here, as in few other places on earth, rock forms before your eyes.

#### Not all services available

Medcor Medical Clinic Phone: 307-344-7965. Emergency dial 911

#### Horace M. Albright Visitor Center

Get immersed in the history of Yellowstone and the National Park Service, and the wildlife of Yellowstone's Northern Range. Phone: 307-344-2263. Check locally.

**1** Yellowstone Forever Bookstore.

#### Lodging

Mammoth Hot Springs Hotel Mammoth Hot Springs Cabins

**A** Campground Mammoth Campground

**Food** Mammoth Hotel Dining Room Terrace Grill

#### 🗋 Fuel

Credit card fueling 24-hours; year-round. Liquid propane gas bottle exchange.

### **Shopping**

Mammoth General Store

Sells groceries, ice cream, souvenirs, apparel. Has a public water bottle filling station. Mammoth Hotel Gift Store

Ρ

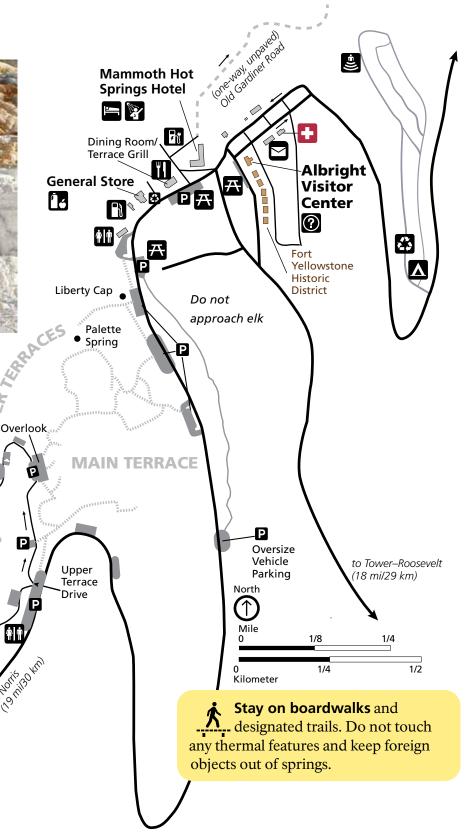
#### Other

U.S. Post Office

Self-guiding trail booklets are available for the Mammoth Terraces and Fort Yellowstone.

**Public restrooms** are located at all visitor centers, stores, restaurants, hotels, gas stations, and at or near all picnic areas.

**Recycling** bins are located near the General Store, the visitor center, the mammoth restrooms, and at the campground.

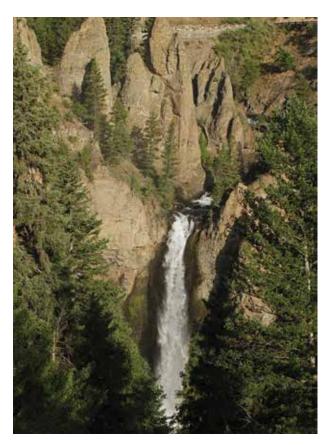


### Fort Yellowstone

For the decade after Yellowstone National Park was established in 1872, the park was under serious threat from those who would exploit, rather than protect, its resources. In 1886, the U.S. Army stepped in to help.

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 in preserving it for the future. They remind us that the resources we find within Yellowstone's boundaries are not only natural ones, but cultural as well. Our interactions with this wilderness continue to shape our idea of what a national park should be, just as they did during the days of Fort Yellowstone.

### Tower/Roosevelt



Tower Fall

# **Grant Village**



#### Not all services available

#### Grant Visitor Center

Explore the extraordinary ecological and social impacts of the historic fires of 1988. Phone: 307-344-2650. Check locally.

Backcountry Office located next door.Yellowstone Forever Bookstore inside.

Lodging

Grant Village

#### **Campgrounds**

Grant Village Campground 🛐 🖬 🔀 **Food** Grant Village Dining Room

Lake House at Grant

**Fuel** 

Credit card fueling 24-hours.

# Roosevelt Lodge cabins

**Campground** Tower Fall Campground - closed 2020

### **Food**

Lodging

Roosevelt Lodge Dining Room

### **Fuel**

Credit card fueling 24-hours, year round. Restrooms and C-store

### Shopping

**Z** Repairs

**Shopping** 

Grant Mini Store

fishing supplies.

Other

Wrecker: 406-848-7548

Grant General Store 🔀

Grant Lodge Gift Store

and at or near all picnic areas.

U.S. Post Office

RV liquid propane tanks filled.

Tower Fall General Store - closed 2020 Has groceries, snack bar, souvenirs, apparel, and a public water bottle filling station.

Roosevelt Mini Store Roosevelt Lodge Gift Store

### Norris



#### Norris Geyser Basin Museum and Information Station

Exhibits about the range of hydrothermal features in Yellowstone. Phone: 307-344-2812Yellowstone Forever Bookstore on site.

A self-guiding trail booklet is available for this area.

Advisory: When Steamboat Geyser erupts, dissolved minerals in the spray can damage glass and metal surfaces on vehicles. Park in this area at your own risk.

#### Museum of the National Park Ranger

Located one mile north of Norris, visit with retired rangers and explore the history of the park ranger profession. - closed 2020.

Campground Norris Campground Indian Creek Campground

# Madison

Madison Information Station
 Ph: 307-344-2821 Check locally.
 Yellowstone Forever Bookstore
 Campground

# West Yellowstone

#### **O** Visitor Information Center

Inside the West Yellowstone Chamber of Commerce find trip planning, fishing permits, and ranger programs. Phone: 307-344-2876

Chamber of Commerce:NPS Desk:Check locally.Check locally.

**Recycling** bins are located in the campground and near trash bins at the General Store.

**Public restrooms** are located at all visitor

centers, stores, restaurants, hotels, gas stations,

Groceries, snack bar, souvenirs and apparel.

Sells camping and outdoor gear, footwear,

# A Global Legacy

Yellowstone National Park was designated a UNESCO World Heritage Site in 1978, because it protects significant geological phenomena and processes. It is also a unique manifestation of geothermal forces, natural beauty, and wild ecosystems where rare and endangered species can thrive. As one of the few remaining intact large ecosystems in the northern temperate zone, Yellowstone's ecological communities provide unparalleled opportunities for conservation, study, and enjoyment of large-scale wildland ecosystem processes.

#### Yellowstone es un lugar peligroso

#### Mantenga distancia de los animales

- No se acerque ni alimente a ningún animal.
- Los bisontes, los osos y los alces han herido y matado personas.
- Manténgase a 100 yardas (91 m) de osos y lobos.
- Manténgase a 25 yardas (23 m) de todos los demás animales.
- Nunca corra si ve a un oso.
- Camine en grupos, haga ruido y lleve gas pimienta para osos.

#### Sea prudente en las zonas termales

- Permanezca en los paseos marítimos y en los senderos.
- El agua caliente puede causar graves quemaduras o la muerte
- Nunca corra ni empuje.
- Supervise a los niños en todo momento.
- No está permitido fumar en las cuencas de los géiseres ni en los edificios.
- Usted es responsable de su seguridad.

#### Yellowstone présente de multiples dangers

#### Restez à distance des animaux

- Ne vous approchez pas et ne nourrissez pas les animaux.
- Les bisons, les ours, et les wapitis ont déjà été à l'origine de blessés et de morts.
- Restez à 100 yards (91 m) des ours et des loups.
- Restez à 25 yards (23 m) de tous les autres animaux.
- Ne courez jamais devant un ours.
- Restez en groupe lors des randonnées, faites du bruit, et conservez un vaporisateur de gaz poivré sur vous.

# Soyez prudent (e) dans les zones thermales

- Restez sur les passages en bois et les sentiers.
- L'eau très chaude peut provoquer des blessures graves ou entraîner le décès.
- Soyez attentif / attentive à ne jamais courir, vous pousser ou vous bousculer.
- Surveillez constamment les enfants.
- Il est interdit de fumer dans les bassins des geysers et les bâtiments.

Vous êtes responsable de votre sécurité.

### Der Yellowstone-Park ist gefährlich

#### Halten Sie sich von Tieren fern

- Nähern Sie sich keinen Tieren an und füttern Sie sie nicht.
- Bisons, Bären und Elche haben in der Vergangenheit Menschen verletzt und getötet.
- Bleiben Sie 100 Yard (91 m) von Bären und Wölfen entfernt.
- Bleiben Sie 25 Yard (23 m) von allen anderen Tieren entfernt.
- Laufen Sie niemals von einem Bären weg.
- Wandern Sie in einer Gruppe, machen Sie Lärm und tragen Sie ein Bärenspray bei sich.

#### Vorsicht in Thermalbereichen

- Bleiben Sie auf Geh- und Wanderwegen.
- Das heiße Wasser kann zu schweren Verbrennungen oder Tod führen.
- Niemals laufen, schubsen oder stoßen.
- Achten Sie stets auf Ihre Kinder.
- Rauchen ist nicht gestattet in Geysirbereichen oder Gebäuden.

#### Sie sind für deren Sicherheit verantwortlich.

#### Национальный парк Йеллоустоун опасен.

- Перемещайтесь только по дощатым настилам и оборудованным тропам.
- Не бросайте в гидротермальные объекты предметы, в том числе монеты и мелкие камни.
- Не курите в зданиях и гейзеровых бассейнах.
- Не прикармливайте диких животных и птиц.
- В соответствии с законом все посетители должны держаться на расстоянии не менее 91 м (100 ярдов) от медведей и волков и не менее 23 метров (25 ярдов) от других животных, включая бизонов, вапити и койотов.

### Yellowstone è pericolosa

- Percorrere le passerelle e i sentieri.
- Non lanciate oggetti, come monete e sassolini, nelle formazioni idrotermali.
- È vietato fumare nei bacini dei geyser o negli edifici
- Non date da mangiare agli animali selvatici, compresi gli uccelli.
- La legge richiede che tutti i visitatori restino ad almeno 91 metri (100 iarde) da orsi e lupi, e ad almeno 23 metri (25 iarde) da tutti gli altri animali, inclusi bisonti, renne e coyote.

#### go.nps.gov/translate-ynp

### 在黄石国家公园要处处小心危险

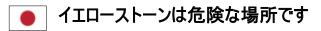
#### 请与动物保持距离

- 请勿靠近或给任何动物喂食。
- •野牛,熊和麋鹿都曾致人受伤或死亡。
- •请与熊或狼保持100码 (91米)的距离。
  - •请与其他动物保持25码 (23米)的距离。
  - 不要从熊面前逃跑。
  - •请结伴而行,制造噪音并携带防熊喷雾。

#### 请小心温泉

- 请勿离开木栈道或游径。
- 热水可导致严重烫伤或死亡。
- •请勿奔跑、推搡或拥挤。
- 请时刻照管好您的小孩。
- 间歇泉盆地或建筑物 内不允许吸烟。

#### 您对自己的安全负责。



#### 動物から距離を置いて下さい

- 絶対に動物に近づいたり、
   エサを与えたりしないで下さい。
- バイソン、熊やヘラジカが人に危害を加え、
   死に至るケースも発生しています。
- ・ 熊や狼からは100ヤード(91メートル) 離れて下さい。
- ・その他すべての動物からは25ヤード( 23メートル)離れて下さい。
- ・ 熊に出くわしても、絶対に走らないで下さい。
- ハイキングする時はグループで行動し、音を立て、熊撃退スプレーを携帯して下さい。

#### 高温地帯では注意して下さい

- ・ 遊歩道や小道を歩いて下さい。
- 高温地帯により重度のやけどを負ったり、
   死に至るケースがあります。
- 絶対に走ったり、押したり、
   押しのけたりしないで下さい。
- ・ 常にお子様から目を離さないで下さい。
- ・ 間欠泉盆地や建物内は禁煙です。

#### 自分自身の身の安全に責任を持って下さい。

- · 옐로스톤 국립 공원은 위험한 장소입니다.
- 보드워크와 등산로를 벗어나지 마십시오.
- 동전과 조약돌을 포함하는 물체들을 열수 구역에 던지지 마십시오.
- 간헐천 지대나 건물에서는 흡연이 허용되지 않습니다.
- 새를 포함하는 야생동물에게 먹이를 주지 마십시오.
- 법률에 의하면, 모든 방문객들은 곰과 늑대로부터 최소한 100야드(91미터), 그리고 들소, 엘크, 코요테를 포함하는 다른 모든 동물들은 최소한 25야드(23미터)의 거리를 유지해야 합니다.

