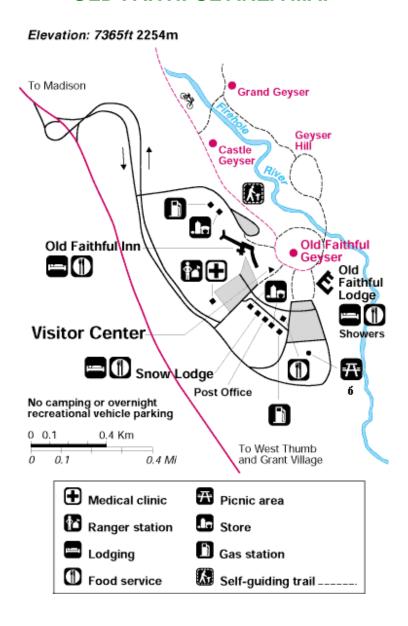
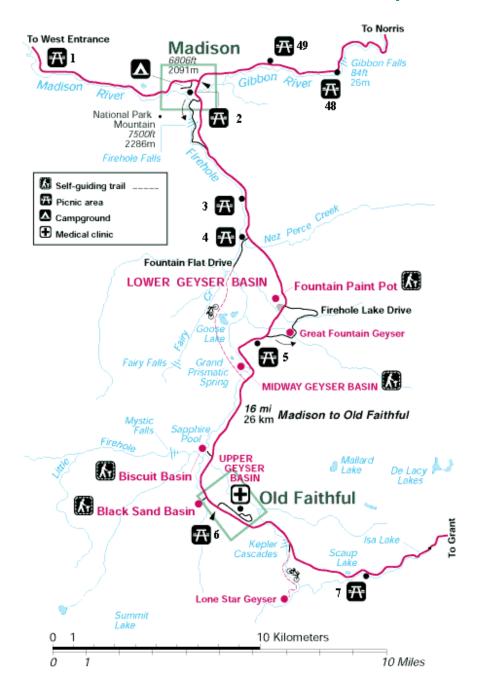
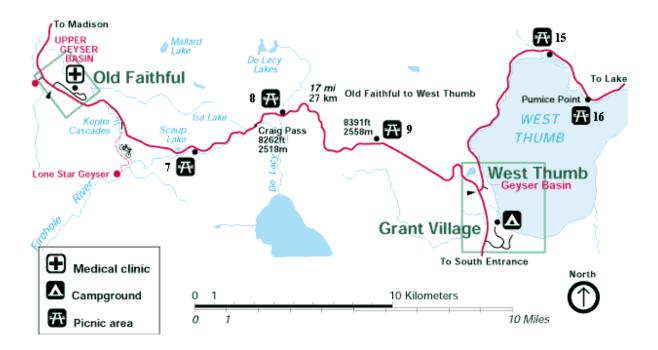
# **OLD FAITHFUL AREA MAP**



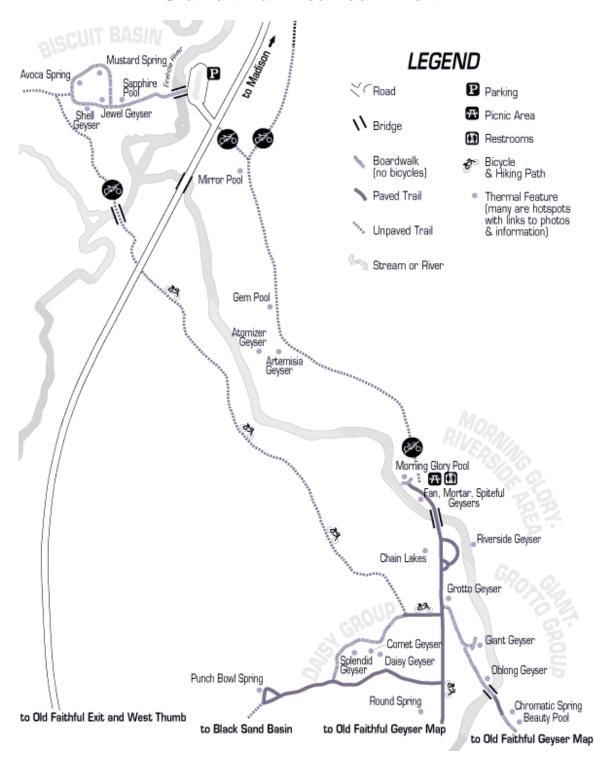
# **Old Faithful to Madison Road Map**



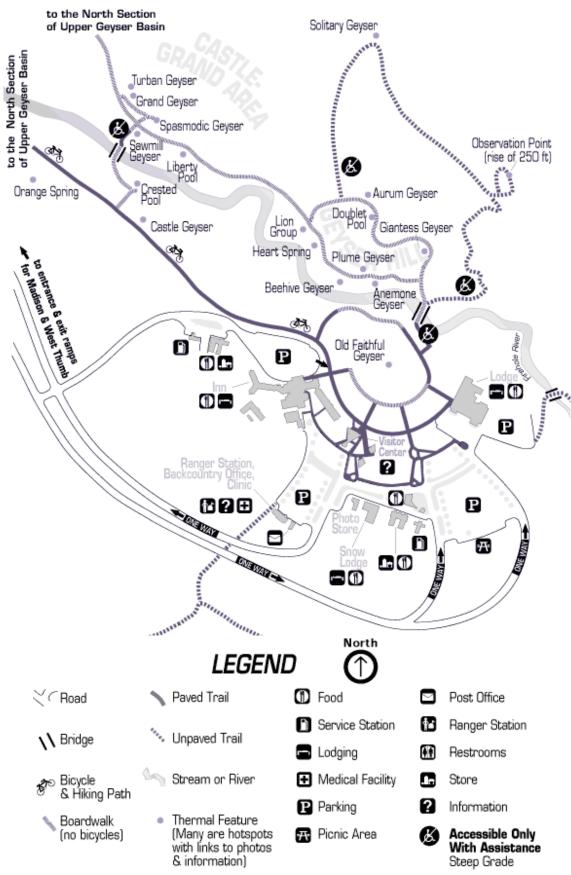
# Old Faithful to Grant Village Interactive Road Map



# Old Faithful Area Tour - North



# **Old Faithful Area Tour - South**



# Old Faithful Area Tour

#### Introduction

The largest concentration of geysers in the world is in the Upper Geyser Basin. Several of the more prominent geysers and hot springs are included on this tour with information concerning their eruption patterns, names, and relationships with other geothermal features.

# **Upper Geyser Basin - South Section:**

## **Old Faithful Geyser**



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. Its average interval between eruptions is about 91 minutes, varying from 65 - 92 minutes. An eruption lasts 1 1/2 to 5 minutes, expels 3,700 - 8,400 gallons (14,000 - 32,000 liters) of boiling water, and reaches heights of 106 - 184 feet (30 - 55m). It was named for its consistent performance by members of the Washburn Expedition in 1870. Although its average interval has lengthened through the years (due to earthquakes and vandalism), Old Faithful is still as spectacular and predictable as it was a century ago.

The largest active geyser in the world is <u>Steamboat Geyser</u> in the Norris Geyser Basin.

# **Giantess Geyser**

Infrequent but violent eruptions characterize Giantess Geyser. This fountaintype geyser erupts in several bursts 100 - 200 ft (30 - 60m) high. Eruptions generally occur 2 - 6 times a year. The surrounding area may shake from underground steam explosions just before the initial water and/or steam eruptions. Eruptions may occur twice hourly and continue for 4 - 48 hours.



#### **Doublet Pool**

Especially striking for its complex series of ledges, elaborate border ornamentation, and deep blue waters, Doublet Pool is an attractive subject for photographers. Occasionally, Doublet produces periodic vibrations underfoot, surface wave motion, and audible thumping. This is most likely the result of collapsing gas and steam bubbles deep underground.



# **Solitary Geyser**

When Yellowstone National Park was established this feature was known as Solitary Spring and it did not erupt. Water was diverted from the spring to a swimming pool which lowered the water level sufficiently to start eruptions. Even though the diversion channel was filled and the water returned to its original level in the late 1940s, this thermal feature has not returned to its stable hot spring condition. A temporary change in the water level has led to a long-term change in the nature of this portion of the geyser basin illustrating the delicate nature of these geothermal systems. Most eruptions today occur every 4 - 8 minutes and last about 1 minute. They are typically less than 6 ft in height.



#### **View from Observation Point**

Climbing the hill to Observation Point allows you to take in one of the best views of the Upper Geyser Basin. From this vantage point 250 ft above Old Faithful the panorama is spectacular.



# **Plume Geyser**

Plume Geyser erupts about every 20 minutes. Its 3 - 5 quick bursts can reach heights of 25 ft (8m). This is a relatively young geyser that came into existence when a steam explosion created its vent in 1922.



# **Beehive Geyser**



Beehive Geyser is magnificent. Eruptions usually occur twice each day with displays lasting 4 - 5 minutes. During an eruption, the narrow cone acts like a nozzle, projecting the water column to heights of 130 - 190 ft (40 - 55m).

# **Heart Spring**

Heart Spring was named by park geologist George Marler in or about 1959 apparently because its shape resembles a human heart. It is 7-1/2 by 10 feet at the surface and 15 feet deep.



## **Lion Group of Geysers**

The Lion Group consists of four geysers: Lion, Lioness, Big Cub, and Little Cub, which are all connected underground. Of these Lion has the largest cone and eruptions. Active phases normally occur each day. Eruptions of Lion Geyser last 1 - 7 minutes and are often preceded by sudden gushes of steam and a deep roaring sound, hence the name Lion.







# Sawmill Geyser

Sawmill Geyser's eruptions are highly variable, some lasting only 9 minutes while others may last over 4 hours. The typical interval between eruptions is 1 - 3 hours. Overall it is erupting about 30% of the time. Sawmill received its name because water spins in its crater as it erupts looking somewhat like the rotating circular blade of a lumber mill.

#### **Grand Geyser**

An eruption of Grand Geyser, the tallest predictable geyser in the world, occurs every 7 - 15 hours. A classic fountain geyser, Grand erupts from a large pool with powerful bursts rather than a steady column like Old Faithful. An average eruption lasts 9 - 12 minutes and consists of 1 - 4 bursts, sometimes reaching 200 feet (60m).



#### **Crested Pool**

Crested pool is 42 feet deep and is constantly superheated. At times the temperature drops to a mere simmer but it occasionally comes to a full rolling boil as well. When boiling violently the water may dome to heights of 8 - 10 feet.





# **Castle Geyser**

Castle Geyser has the largest cone and may be the oldest of all geysers in the basin. Its eruption pattern has changed considerably throughout its recorded history. Castle is currently erupting about every 10 - 12 hours. A water eruption frequently reaches 90 feet (27m) and lasts about 20 minutes. The water phase is followed by a noisy steam phase lasting 30 - 40 minutes.

# **Upper Geyser Basin - North Section:**

#### **Beauty Pool**

Truly deserving its name, Beauty Pool is noted for its rich, blue water framed by rainbow-colored bacteria. Its plumbing system is closely related to the neighboring Chromatic Spring.



#### **Chromatic Spring**

Chromatic Spring is closely related to Beauty Pool. During periodic energy shifts the level of one spring descends while the other rises and overflows. The time interval between shifts has ranged from a few weeks to several years.



#### **Giant Geyser**

Giant Geyser was dormant for many years after the energy shift in 1955. Since then, it has slowly become active again. During 1997, its eruptions occurred every 3 - 10 days. This spectacular geyser's eruptions last about an hour and can reach heights of 180 - 250 feet (55 - 76m). During eruptions small geysers nearby may also erupt.



# **Comet Geyser**

Comet Geyser is a member of the Daisy Group which also contains Daisy and Splendid Geysers. Comet has the largest cone of the three but has, by far, the smallest eruptions. The nearly constant splashing of Comet over a long period of time has resulted in its large cone. Eruptions rarely exceed 6 feet in height.

# **Splendid Geyser**

Splendid Geyser's eruptions are at times over 200 feet in height, making it among the tallest geysers in Yellowstone. Its eruptions are infrequent and difficult to predict except for the fact that it is more likely to erupt when a storm front rapidly reduces the barometric pressure in the area. This slightly reduces the boiling temperature in the plumbing system and occasionally triggers a splendid eruption.



# **Punch Bowl Spring**

This boiling, intermittent spring has produced a sinter lip that raises it above the basin floor. That "punch bowl" appearance gave this feature its name.



#### **Daisy Geyser**

Daisy Geyser erupts at an angle to a height of 75 feet (23m) for 3 - 5 minutes. Typically, Daisy is quite predictable, with eruption intervals of 110 - 240 minutes. An exception to this is when nearby Splendid Geyser erupts.





# **Grotto Geyser**

Grotto Geyser erupts about every eight hours. It splashes to a height of 10 feet (3m) for 1 1/2 to more than 10 hours. The weirdly shaped cone, that gives this geyser its name, may have resulted from geyserite covering the trunks of trees that once grew there.

## **Riverside Geyser**

Situated on the bank of the Firehole River, Riverside Geyser is one of the most picturesque geysers in the park. During its 20-minute eruptions, a 75 foot (23m) column of water arches gracefully over the river. Eruptions are about 5-1/2 to 6-1/2 hours apart. There is water runoff over the edge of Riverside's cone for an hour or two before each eruption. Many geysers have similar "indications" that they are about to erupt.





## Fan & Mortar Geysers

Fan and Mortar Geysers are in close proximity to one another and almost always erupt in concert. The interval between eruptions ranges from 1-1/2 days to months. Most eruptions last about 45 minutes. Mortar Geyser, pictured here, erupts to heights of 40 - 80 feet while Fan can reach heights of 100 - 125 feet.

#### **Morning Glory Pool**



Long a favored destination for park visitors, Morning Glory Pool was named in the 1880s for its remarkable likeness to its namesake flower. However, this beautiful pool has fallen victim to vandalism. People have thrown literally tons of coins, trash, rocks, and logs into the pool. Much of the debris subsequently became embedded in the sides and vent of the spring,



affecting water circulation and accelerating the loss of thermal energy. Through the years Morning Glory's appearance has changed as its temperature dropped. Orange and yellow bacteria that formerly colored only the periphery of the spring now spread toward its center.

#### **Biscuit Basin**

Three miles north of Old Faithful is Biscuit Basin, named for the unusual biscuit-like deposits formerly surrounding Sapphire Pool. Following the 1959 Hebgen Lake earthquake, Sapphire erupted, and the "biscuits" were blown away. Other notable colorful features in the basin are Jewel Geyser, Shell Geyser, Avoca Spring, and Mustard Spring.

## Sapphire Pool



# Conclusion

We hope you enjoyed your tour of the Old Faithful Area. Please re-visit our tour pages in the future as we plan to make major improvements in our tours including a more immersive experience including QTVR panoramas that will allow you to look 360 degrees around the scene. RealVideo clips will be included as well to bring the experience a little closer to actually being there.

# **Day Hikes Near Old Faithful**

Begin your hike by stopping at a ranger station or visitor center for information. Trail conditions may change suddenly and unexpectedly. Bear activity, rain or snow storms, high water, and fires may temporarily close trails.

# **Geyser Hill Loop Trail**

This short loop trail gives visitors a good chance of seeing a variety of geysers, from the ever-entertaining Anemone with its short intervals of 5-10 minutes to the impressive Beehive with its unpredictable eruptions reaching 100-150 feet!

Trailhead: Boardwalk in front of Old Faithful Visitor Center

Distance: 1.3 mile (3.3 km) loop

Level of Difficulty: Easy

Numerous other combination loops or one-way walks can be chosen in the Upper Geyser Basin. Features such as Castle, Grand, Riverside, and Daisy geysers along with Morning Glory Pool are easily accessed using the Old Faithful self-guiding trail map. Details on geyser prediction times may be obtained by stopping by the visitor center.

# **Observation Point Loop Trail**

This trail gains about 200 ft. in elevation to a prominent overlook providing a great view of the Upper Geyser Basin.

Trailhead: Firehole River footbridge behind Old Faithful Geyser

Distance: 1.1 mile (1.8 km) loop Level of Difficulty: Moderate

#### **Mallard Lake Trail**

This trail climbs through lodgepole pine forest (some burned areas from the 1988 fires) and along meadows and rocky slopes before terminating at Mallard Lake.

Trailhead: Old Faithful Lodge cabin area Distance: 6.8 miles (11 km) roundtrip

Level of Difficulty: Moderate

#### **Lone Star Geyser Trail**

This mostly level trail follows an old service road along the Firehole River through unburned forests of lodgepole pine. The geyser, which erupts approximately every 3 hours, puts on a delightful show. This trail can be accessed by bicycle with the final approach to the geyser on foot.

Trailhead: 3.5 miles southeast of the Old Faithful area, just beyond Kepler Cascades parking area.

Distance: 5 miles (8 km) roundtrip

Level of Difficulty: Easy

#### **Black Sand and Biscuit Basin Trails**

Easily accessed by boardwalks less than a mile in length, Emerald Pool, Sunset Lake, Jewel Geyser, and Sapphire Pool are among the features found in these less visited basins. Both areas are included in the Old Faithful area trail guide.

Trailhead: 0.5 and 2 miles north of Old Faithful area, respectively

Distance: Less than 0.5 (0.8 km) miles each

Level of Difficulty: Easy

#### Midway Geyser Basin Trail

The boardwalk leads visitors by impressive features including Excelsior Geyser and Grand Prismatic Spring.

Trailhead: Parking area 6 miles north of Old Faithful

Distance: 0.5 mile (0.8 km) loop

Level of Difficulty: Easy

#### **Fountain Paint Pot Trail**

Yellowstone's four types of thermal features can be seen in one short walk along this loop trail: geysers, hot springs, mudpots, and fumaroles. A trail guide is available for this area, which also includes the Firehole Lake Drive area.

Trailhead: Parking area 8 miles north of Old Faithful

Distance: 0.5 mile (0.8 km) loop

Level of Difficulty: Easy

# **Mystic Falls Trail**

This trail follows a lovely creek through a lodgepole pine forest before reaching the 70- foot falls. By following a series of switchbacks, an overlook of the Upper Geyser Basin can be reached before looping

back to join the main trail.

Trailhead: Back of the Biscuit Basin boardwalk

Distance: 2.4 miles (4 km) roundtrip Level of Difficultly: Moderate

# **Fairy Falls Trail**

At 200 feet high, Fairy Falls is an impressive backcountry sight. It can be reached from two different trailheads. The first trailhead, 1 mile south of the Midway Geyser Basin, begins at a steel bridge across the Firehole River and follows the Fountain Freight Road hiking/biking trail for approximately 1 mile before the hiking-only trail to Fairy Falls branches off on the left. The second trailhead, 1/2 mile south of the Nez Perce picnic area on the Fountain Freight Road, follows the hiking/biking path from the northern end, 1-3/4 miles to the junction with the Fairy Falls trail.

#### Trailhead:

1) Steel Bridge parking area 1 mile south of the Midway Geyser Basin

2) Fountain Freight Road parking area 1 mile south of Nez Perce picnic area on the Fountain Freight Road

Distance: 5 miles (8.3 km) from trailhead #1; 7 miles (5.5 km) from trailhead #2

Level of Difficulty: Easy



#### Did You Know?

Some groups of Shoshone Indians, who adapted to a mountain existence, chose not to acquire the horse. These included the Sheep Eaters, or Tukudika, who used dogs to transport food, hides, and other provisions. The Sheep Eaters lived in many locations in Yellowstone.

# **Old Faithful Area Natural Highlights**

The Upper Geyser Basin

Be sure to take our online tour of the basin.



Yellowstone, as a whole, possesses close to 60 percent of the world's geysers. The Upper Geyser Basin is home to the largest numbers of this fragile feature found in the park. Within one square mile there are at least 150 of these hydrothermal wonders. Of this remarkable number, only five major geysers are predicted regularly by the naturalist staff. They are Castle, Grand, Daisy, Riverside, and Old Faithful. There are many frequent, smaller geysers to be seen and marveled at in this basin as well as numerous hot springs and one recently developed mudpot (if it lasts).



# **Lower Geyser Basin**

This large area of hydrothermal activity can be viewed by foot along the boardwalk trail at Fountain Paint Pots and by car along the three mile Firehole Lake Drive. The latter is a one-way drive where you will find the sixth geyser predicted by the Old Faithful staff: Great Fountain. Its splashy eruptions send jets of diamond droplets bursting 100-200 feet in the air, while waves of water cascade down the raised terraces. Patience is a virtue with this twice-a-day geyser, as the predictions allow a 2 hour +/- window of opportunity.

Fountain Flats Drive departs the Grand Loop Road just south of the Nez Perce picnic area and follows along the Firehole River to a trailhead 1.5 miles distant. From there, the Fountain Freight Road hiking/biking trail continues along the old roadbed giving hikers access to the Sentinel Meadows Trail and the Fairy Falls Trail. Also along this path is the only handicapped-accessible backcountry site in the Old Faithful district at Goose

Lake.

# **Midway Geyser Basin**

This geyser basin, though small in size compared to its companions along the Firehole River, holds large wonders for the visitor. Excelsior Geyser reveals a gaping crater 200 x 300 feet with a constant discharge of more than 4,000 gallons of water per minute into the Firehole River. Also in this surprising basin is Yellowstone's largest hot springs, Grand Prismatic Spring. This feature is 370 feet in diameter and more than 121 feet in depth.

#### **Lone Star Geyser Basin**

This backcountry geyser basin is easily reached by a 5-mile roundtrip hike from the trailhead south of Old Faithful. Lone Star Geyser erupts about every three hours. There is a logbook, located in a cache near the geyser, for observations of geyser times and types of eruptions.

#### **Shoshone Geyser Basin**

Shoshone Geyser Basin is reached by a 17-mile roundtrip hike that crosses the Continental Divide at Grant's Pass. This basin has no boardwalks, and extreme caution should be exercised when travelling through it. Trails in the basin must be used. Remote thermal areas, such as this, should be approached with respect, knowledge, and care. Be sure to emphasize personal safety and resource protection when entering a backcountry basin.



#### Firehole River

The river derives its name from the steam (which they thought was smoke from fires) witnessed by early trappers to the area. Their term for a mountain valley was "hole," and the designation was born. The Firehole River boasts a world-famous reputation for challenging fly-fishing. Brown, rainbow, and brook trout give the angler a wary target in this stream.

# Craig Pass/Isa Lake

Both names are used to describe the same location seven miles south of Old Faithful on the Grand Loop Road. At 8,262 feet along the Continental Divide, Isa Lake is a uniquely confusing feature. During spring runoff, it drains into both the Atlantic and Pacific Oceans at the same time! (And backwards, too!) The west side of the lake flows into the Firehole drainage and, eventually, the Atlantic throughout the year. The east side, during spring, flows toward the Snake River drainage and the Pacific.



Continental Divide at Craig Pass



#### Waterfalls

Kepler Cascades is the most easily reached waterfall in the district. A marked pullout just south of Old Faithful and a short walk from the car offers the visitor easy access to view this 125-foot cascade.

Mystic Falls and Fairy Falls: (see <u>Day Hiking Trails</u> section for information on these features).



Did You Know?

There are more people hurt by bison than by bears each year in Yellowstone. Park regulations state that visitors must stay at least 25 yards away from bison or elk and 100 yards away from bears.

# **Old Faithful Area Geologic Highlights**

Evidence of the geological forces that have shaped Yellowstone are found in abundance in this district. The hills surrounding Old Faithful and the Upper Geyser Basin are reminders of Quaternary rhyolitic lava flows. These flows, occurring long after the catastrophic eruption of 600,000 years ago, flowed across the landscape like stiff mounds of bread dough due to their high silica content.

Evidence of glacial activity is common, and it is one of the keys that allows geysers to exist. Glacier till deposits underlie the geyser basins providing storage areas for the water used in eruptions. Many landforms, such as Porcupine Hills north of Fountain Flats, are comprised of glacial gravel and are reminders that as recently as 13,000 years ago, this area was buried under ice.

Signs of the forces of erosion can be seen everywhere, from runoff channels carved across the sinter in the geyser basins to the drainage created by the Firehole River.

Mountain building is evident as you drive south of Old Faithful, toward Craig Pass. Here the Rocky Mountains reach a height of 8,262 feet, dividing the country into two distinct watersheds.

Yellowstone is a vast land containing a landscape that is continually being shaped by geological forces.



#### Did You Know?

There were no wolves in Yellowstone in 1994. The wolves that were reintroduced in 1995 and 1996 thrived and there are now over 300 of their descendents living in the Greater Yellowstone Area.

# **Old Faithful Area Historic Highlights**



#### **Old Faithful Historic District**

This designation applies to the developed area adjacent to Old Faithful Geyser, which contains many historic structures.

#### **Old Faithful Inn**

Built during the winter of 1903-04, the Old Faithful Inn was designed by Robert C. Reamer, who wanted the asymmetry of the building to reflect the chaos of nature. The Old Faithful Inn is one of the few remaining log hotels in the United States. It is a masterpiece of rustic architecture in its stylized design and fine craftsmanship. Its influence on American architecture, particularly park architecture, was immeasurable. The building is a rustic log

and wood-frame structure with gigantic proportions: nearly 700 feet in length and seven stories high.

The lobby of the hotel features a 65-foot ceiling, a massive rhyolite fireplace, and railings made of contorted lodgepole pine. Its incredibly large space can be experienced on many different levels and from many different vantage points. The visitor can stand in the middle of the lobby and look up at the exposed structure, or climb up a gnarled log staircase to one of the balconies and look up, down, or across. Wings were added to the hotel in 1915 and 1927, and today there are 327 rooms available to guests in this National Historic Landmark.

The inn is currently operated by <u>Xanterra Parks & Resorts</u>. Information regarding reservation procedures is available through their website.



Old Faithful Inn Lobby



#### **Old Faithful Lodge**

Unlike the Inn, the current Old Faithful Lodge is a result of numerous changes dating back to the early days of tent camps provided by companies like Shaw and Powell Camping Company and Wylie Permanent Camping Company. These camps were erected throughout the park and offered shelter before hotels and lodges were built. Both companies had facilities at Old Faithful. By 1917, auto traffic into the park was increasing, and it was decided that some camps could be eliminated. Yellowstone Park Camping

Company emerged and operated on the old site of the Shaw and Powell camp, the present day site of the Lodge. In 1918, a laundry was built on the site and construction continued on the facility until 1928 when the Lodge reached its present configuration.

Cabin-style accommodations are available at Old Faithful Lodge. Often confused with the other two hotels in the area, Old Faithful Lodge houses a cafeteria, gift shop, coffee shop, and the front desk where guests check in.

The lodge is currently operated by <u>Xanterra Parks & Resorts</u>. Information regarding reservation procedures is available through their website.

# **Lower Hamilton Store**

Built in 1897, this is the oldest structure in the Old Faithful area still in use. The "knotty pine" porch is a popular resting place for visitors, providing a great view of Geyser Hill. (The oldest building at Old Faithful was built as a photo studio in 1897 for F. Jay Haynes. Originally located 700 feet southwest of Beehive Geyser and about 350 feet northwest of the front of the Old Faithful Inn, it now stands near the intersection of the Grand Loop Road and the fire lane, near the crosswalk.)



# Nez Perce Creek Wayside

This exhibit tells the story of the flight of

the Nez Perce through Yellowstone in 1877. A band of 700 men, women, and children entered the park on the evening of August 23rd, fleeing 600 Army regulars commanded by General O.O. Howard. The Nez Perce had been told to leave their homeland and move to a reservation. They fled their ancestral home in the Wallowa Valley in northeastern Oregon on June 17, 1877, and by the time they entered the park, several battles, including a fight at Big Hole (another NPS site), had occurred.

During the two weeks they were in the park, the Nez Perce bumped into all 25 known people visiting the new park at that time, some more than once. Camps were plundered, hostages taken, and several people were killed or wounded.

After leaving the park, the Nez Perce tried reaching the Canadian border but were stopped by General Nelson Miles, who had reinforced General Howard's command. Some Nez Perce were able to slip into Canada, but the remaining 350 tribal members led by Chief Joseph surrendered to General Miles. This is where Chief Joseph gave his famous speech, "I will fight no more forever." The 1,700-mile flight that included Yellowstone National Park had come to an end. Today, Nez Perce Creek and the nearby wayside exhibit are reminders of their visit.

#### **Howard Eaton Trail**

Named for an early park outfitter and guide, the Howard Eaton Trail paralleled the Grand Loop Road in many places. Remnants of this old horse trail are maintained and used by hikers today. Here in the Old Faithful District, the trail provides a less traveled route to Lone Star Geyser from the developed area.



#### Did You Know?

Yellowstone contains approximately one-half of the world's hydrothermal features. There are over 10,000 hydrothermal features, including over 300 geysers, in the park.

# **Old Faithful NPS Visitor Facilities**

The Visitor Center is in temporary quarters near the Old Faithful Lodge. Please look for signs or ask for directions upon arriving in the area. Evening ranger-led programs are presented during the summer and the winter seasons. The Yellowstone Association sales outlet here provides a large selection of their merchandise.



The proposed new visitor education center at Old Faithful

# **Backcountry Office & Clinic**

The combination ranger station, backcountry office, and clinic are located across the west parking lot from the visitor center. This facility also houses the office of the District Naturalist and the district library.



#### Did You Know?

Lake trout are an invasive species of fish that is decimating the native cutthroat trout population in Yellowstone Lake.

# Frequently Asked Questions at Old Faithful

#### Q. When does Old Faithful erupt?

**A.** Basic prediction of Old Faithful is dependent upon the duration of the previous eruption. During visitor center hours, geyser statistics and predictions are maintained by the naturalist staff. People speak of the average time between eruptions. This is misleading. The mathematical average between eruptions of Old Faithful is currently 74 minutes, but it doesn't like to act average! Intervals can range from 45-110 minutes. Visitors can check for posted prediction times in most buildings in the Old Faithful area.

## Q. How high does Old Faithful erupt and how long will it last?

**A.** Old Faithful can vary in height from 100-180 feet with an average near 130-140 feet. This has been the historical range of its recorded height. Eruptions normally last between 1.5 to 5 minutes.

## Q. I heard Old Faithful isn't as faithful as it used to be. Is it slowing down?

**A.** It depends on what you call faithful. The famous geyser currently erupts around 20 times a day and can be predicted with a 90 percent confidence rate within a 10 minute variation. Prior to the 1959 earthquake, Old Faithful erupted 21 times per day. That's a significant decrease in activity for geologists tracking each eruption, but to visitors seeing one or two eruptions . . . it looks just fine.

## Q. How many gallons of water are expelled during an eruption?

**A.** It depends on the duration of the eruption. Scientists estimate that the amount ranges from 3,700 gallons (for a short duration of 1.5 minutes) to 8,400 gallons (for a longer duration of 4.5 minutes).

#### Q. How hot is the water in Old Faithful?

**A.** During an eruption, the water temperature at the vent has been measured at 204°F (95.6°C). The steam temperature has been measured above 350°F!



#### Did You Know?

Some groups of Shoshone Indians, who adapted to a mountain existence, chose not to acquire the horse. These included the Sheep Eaters, or Tukudika, who used dogs to transport food, hides, and other provisions. The Sheep Eaters lived in many locations in Yellowstone.