

YELLOWSTONE

Grand Loop Drive Interpretive Guide

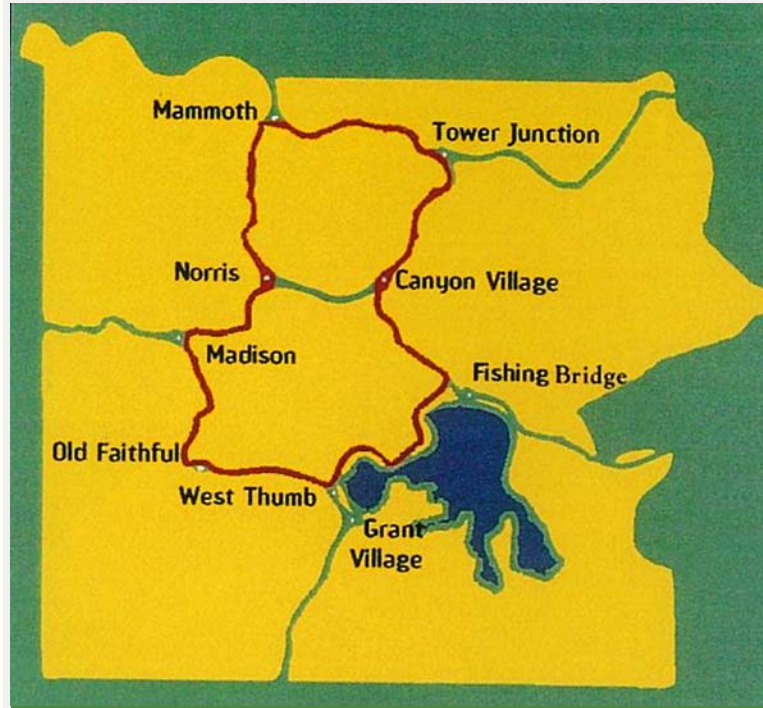
It's like having an interpretive ranger along for the ride!

(Excerpts: first 6 of 46 pages)



Explore and Experience America's First National Park

David Gafney



Introduction - The Grand Loop

This eBook will serve as your interpretive guide to the magnificent Grand Loop Drive traversing the heart of Yellowstone National Park. You are about to experience one of the world's greatest wilderness preserves. For 142 miles, the Grand Loop Drive not only travels through forests, meadows and mountains, but will take you through or by the Earth's largest concentration of geysers and geothermal features, one of North America's greatest wildlife spectacles, a petrified forest, the continent's largest high elevation lake and a canyon carved by the Yellowstone River so colorful that it left 19th century explorers and artists speechless. When you make the effort to understand the geology, plant and animal ecology and the human story behind this magnificent wilderness, it's easy to conclude that the old adage "truth is stranger than fiction" must have been thought up with Yellowstone National Park in mind!

We will start our tour in front of Albright Visitor Center at Mammoth Hot Springs. The bracketed numbers on the left represent mileage for those traveling in a clockwise direction (toward Tower), while those on the right are for those traveling in a counterclockwise direction (toward Norris) around the Loop. If traveling counterclockwise, turn to page 44 and work your way toward page 1. If you are starting your trip around the Grand Loop at Tower Jct., turn to page 8; if starting at Fishing Bridge, turn to page 17; if starting at West Thumb Jct., turn to page 20; and if starting at Madison Jct., turn to page 31.



The hot springs at Mammoth

Mammoth Hot Springs

[The Start] Since the nineteenth century, Mammoth has served as the administrative center of the park. Many of the buildings, including the Albright Visitor Center, were originally part of Fort Yellowstone. Between 1886 and the creation of the National Park Service in 1916, the U.S. Army had the job of protecting and managing the park. Perhaps the most important contribution made by the army during this period was its role in stopping the slaughter of the park's bison, elk and other large grazing animals. This reached its peak during the 1870's. In fact, during just one season, a couple of hide hunters known as the Bottler brothers are believed to have killed more than 2000 of the park's elk. Check at the visitor center or in the park newspaper for the schedule of history tours of Ft. Yellowstone conducted by NPS interpretive rangers during the summer months.

More than 50 hot springs in the area have formed the extensive travertine terraces that give Mammoth Hot Springs its name. Just south of the Visitor Center are both a trail system of boardwalks through the lower terraces and a one-way drive through the upper terraces. From this road, take the short walk out to Canary Springs for a look at one of the most colorful and thermally active areas. For a more detailed description of the formation of these terraces see page 43 of this road guide.



Mt. Everts

Mt. Everts and the Gardner River

[1.0-2.0 | 139-141] Leaving Mammoth Hot Springs, the road descends to a high bridge over the Gardner River, and then begins to climb through sagebrush meadows and groves of Douglas-fir. Rising to the north is a high mesa-like mountain named for Truman C. Everts, a member of the 1870 Wasburn-Langford-Doane Expedition, who became separated from the expedition and wandered in the wilderness for forty days. He was near death when found by a prospector named “Yellowstone Jack” Baronett. The expedition leaders had offered a \$600 reward for the recovery of Evert’s body. Yellowstone Jack, however, was never paid the reward because he had not found the “body”, but rather, the living Truman C. Everts.

Stop at a pull-off and take a closer look at Mt. Everts. The structure of a landform such as this can speak volumes about the timeless history of our planet. Most of the mountain (3500 feet of it) is made of tilted layers of sedimentary rock - layers of marine shale, to be more specific, which dip to the west at a slope of 15 or 20 degrees. A fundamental presumption of geology is that sediments (that later become sedimentary rock) are laid down horizontally. To have been subsequently tilted must have required very powerful earth forces. Today, plate tectonic theory explains how forces, powerful enough to tilt and uplift a mountain, may come about. Continents ride on plates that “drift”, being pushed by convection forces within the Earth’s semi-molten mantle. North America in its westward drift has overridden a

plate that underlies the Pacific Ocean. This, along with the possibility that “exotic terrains” - islands and small continents that have collided with and become fused to the western edge of North America - may explain the source of the earth forces that are responsible for much of the dramatic and beautiful landscapes of the American West. The tilted layers of Mt. Everts are Cretaceous in age (deposited in a shallow sea, 100 million years ago). Near the top of Mt. Everts look for the “unconformity” or the dividing line that separates the tilted sedimentary layers below from a horizontal layer that caps the mountain. Common sense tells us that this layer was laid down some time after the sedimentary layers were formed and tilted. The cap rock of Mt. Everts is the Huckleberry Ridge Welded Ash, a rock that resulted from a huge volcanic explosion - one of three that have rocked the Yellowstone region during the last two million years.

Undine Falls

[4.5 | 137.5] A pull-off on the north side of the road provides a view of this 50-foot high falls that flows over a 700,000 year-old lava flow that has solidified into basalt.

Wraith Falls

[5.5 | 136.5] A short walk to the south will bring you to Wraith Falls. Here a harder, more resistant basalt abuts a softer, more erodible shale to form a “nick point” where stream erosion has been slowed. Waterfalls are often found at these contact points between more and less resistant rock.



Skyrocket or Scarlet Gilia



Yellowstone River and the Northern Range

The Northern Range

[12 - 17 | 125 - 130] Along this stretch of road expect some spectacular scenery in an open country of sagebrush meadows interspersed with forests of Douglas-fir. Pull-offs along the way provide views into the distant Black Canyon of the Yellowstone River. Pyramid-shaped Hellroaring Mountain can be seen rising to the north among the wild Beartooth Mountains. The 700,000-acre Beartooth Wilderness of the Gallatin National Forest protects the heart of this range, which is composed largely of uplifted blocks of “basement rock,” billion-year-old granite and gneiss. This open country is called the Northern Range and is home to an elk herd of more than 10,000 animals. Other wildlife you may see in the Northern Range includes coyotes, moose, mule deer, bison, pronghorn antelope, bighorn sheep, black and grizzly bears, and since 1995, the gray wolf.



Gray Wolf

The Return of the Wolf

In 1995, 13 wolves trapped in the wilds of Canada were released in Yellowstone, after being held in enclosures for an acclimation period. The following year 16 more were released. The original plan called for at least two more releases, but these were deemed unnecessary when it was determined that those already released were having lots of pups - sometimes two or even three litters per pack - a phenomenon seldom seen in wild wolves. Within just a few years the park had a population of more than 80 adult wolves roaming in nine packs that ranged in size from 4 to 14 individuals. Here in the northern part of the park, the favored prey animal is elk, of which there is an abundance. The wolves tend to take the very old, the very young, and the sick or weak, thus contributing to the overall health of the herd. It has taken the public and the government a long time to come to understand the real value of large predators and the role they play in a healthy ecosystem. The gray wolf restoration program is proving to be a successful attempt to undo a past mistake - the government encouraged extermination of large predators during the early part of the twentieth century in a misguided effort to "help" the elk and other large grazing animals. While the wolves are doing very well in a biological sense, they have faced legal challenges from the livestock industry and others who oppose this program. But the wolves are back in Yellowstone. Their mournful howls can be heard again in the night, and each year a few fortunate park visitors will have the thrill of seeing a pack emerge running from the woods into the open meadows of the Northern Range, in an age-old cooperative pursuit of prey.

To Order/download Yellowstone, an Interpretive Guide –
[Click Here \(\\$3.95\)](#)



Lamar River

To Order/download Yellowstone, an Interpretive Guide –
[Click Here \(\\$3.95\)](#)

Other books and eBooks by David Gafney:

- **Zion National Park, an Interpretive Guide (eBook \$3.95)**
- **Wanderings, Reflections of a Wilderness Nomad (eBook \$9.95, Print Edition \$12.95)**

Text & Photography by David Gafney

© *copyright 2010*

<http://www.DaveGafneyPhoto.com>