

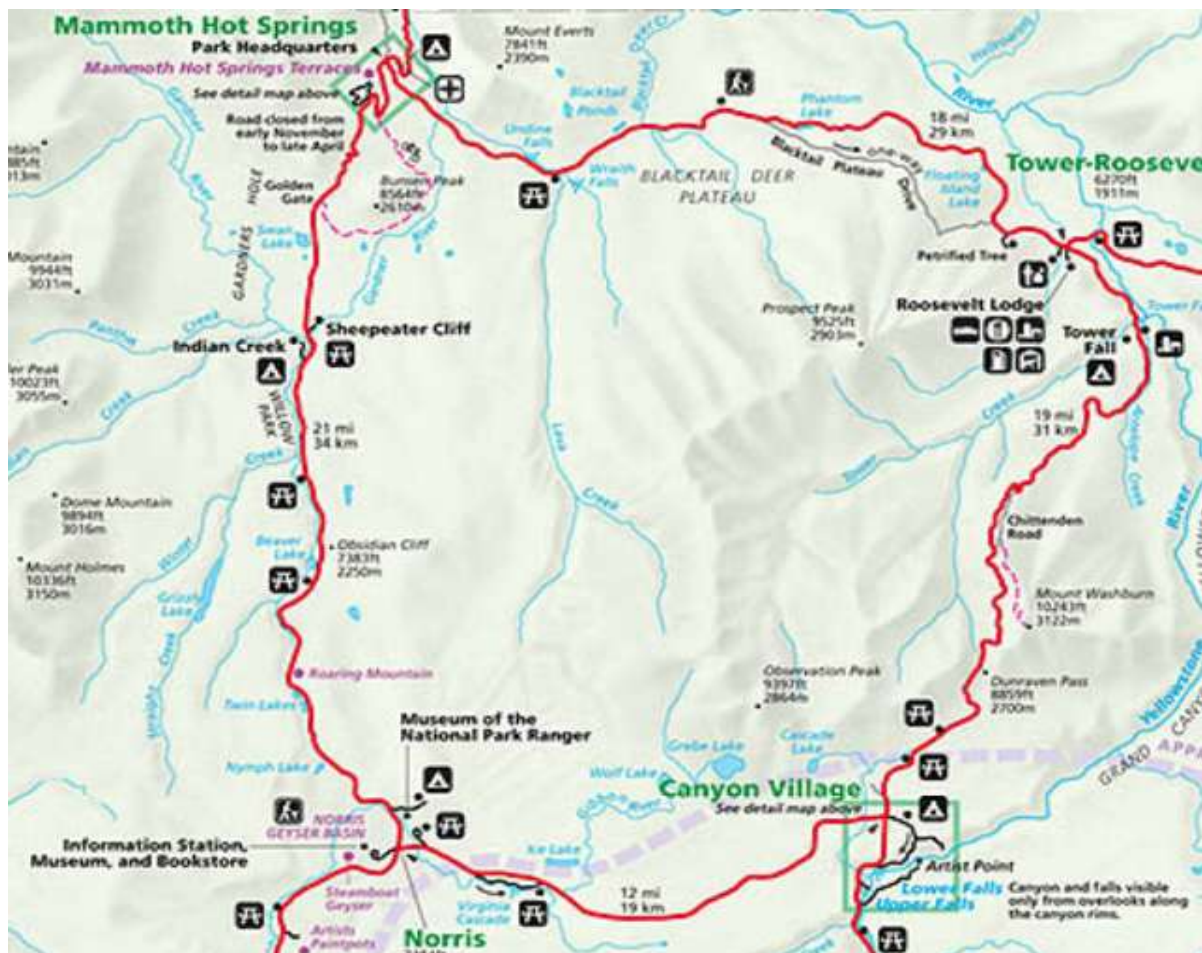
THU 18.8.

First, let me refer back to my previous chapter and correct my terminology – instead of “Toilet hut” the US English uses “Restroom”.



On this little map we can see our entrance to the NP, which was via a small town **West Yellowstone**. Since the YNP is so vast, most of the tourists (including us) tend to see it by following “a figure of eight” or “two loops” by car and stopping at the most important locations.

So yesterday, after booking our Norris camp site, we did the upper loop of the Grand Loop Road. From **Norris** (bottom left) to **Mammoth Hot Springs**, where after seeing the hot springs, we visited The Albright Visitor Centre and Museum.





Now, on Thursday morning we were to do the lower loop of the Grand Loop Road. After breakfasting at sub zero temperature (remember the elevation being 2281m) we went south of Norris, towards **Old Faithful Geyser**. On the way there we had stopped several times to see various smoking locations. After seeing enough of this smoking hell, I decided not to go in the field at the next such place, **Lower Geyser Basin**, but instead stay at a car park and watch the show there: cars, coaches, motorbikes and people; also, I was hoping to get a signal for my mobile phone, as for about a week

we could not have been able to call our base at home.

*The location of a “smoking hell”, where I stayed at the car park and talked to an old man from Texas*



So, I sat on a seat next to an elderly man (in his late 70's). As I was sitting on a seat, sulphur smell in the air made me to sneeze. The man next to me said: “Bless you”. I replied “Thank you.” Then I asked him if there was a signal for a mobile phone. He said. “No, you’re in the middle of nowhere”; then I sneezed 2x again, and said bless you 2x again, to which I replied thank you. He said he was from Texas, and when this volcano exploded (some 630 000 years ago), the ash fell down there in Texas, too

(the chamber with magma had Ø 50km). When the old man was leaving (departing on a coach with other visitors) he said to me: “You have a good trip, Sir.” Well, I never! Nobody called me Sir, never



in my life. I guess in England it was a term used in general conversation during the Dickensian times. But this man, coming from Texas, was obviously using The Old American English, and that was it. I remember when in 1969 I arrived to England as a young man, and I started to work at a Camping /Sports Centre, I called one workman/electrician “Sir” couple of times (as I learned it in my old Teach Yourself English textbook). And George (an electrician) soon corrected me (well not so soon, in a day or two, because I think he must have enjoyed being called “Sir”), and said to me not to call him “Sir”. So, this old gentleman from Texas, who said “bless you” every time I sneezed, and “You have a good trip, Sir,” had left me in a cultural shock!



*On the way to Old Faithfull we passed this spectacular picture: **Grand Prismatic Spring***



The 1st photo can only be taken by professional photographers from the hills above (an area not accessible to average tourists), while lower photo can be taken from a wooden pathway by us, the visitors (notice the small dots/people behind “The blue pool”).

### OLD FAITHFULL GEYSER

In 1870, during the Washburn-Langford-Doane Expedition, this was the first geyser in the park to receive a name. It is one of the most predictable geothermal features on Earth. Since 2000, it has erupted every 45-120 minutes.



*We arrived at about 12 o'clock, and while I was sitting on these old logs and having my tin food lunch, the geyser suddenly erupted in front of us at 12.30 (there were well over one hundred people there waiting).*

Eruption height: 32-56 m.

Duration: 3- 10 minutes.

Discharge: 14 – 32m<sup>3</sup>

The **geothermal areas of Yellowstone** include several geyser basins in Yellowstone National Park as well as other geothermal features such as hot springs, mud pots, and fumaroles. The number of thermal features in Yellowstone is estimated at 10,000. A study that was completed in 2011 found that a total of 1283



geysers have erupted in Yellowstone, 465 of which are active during an average year. These are distributed among nine geyser basins, with a few geysers found in smaller thermal areas throughout the Park.



*Old Faithful and Big Dipper (a picture taken in 2014 by an unknown photographer). I just had to include this spectacular photo from Wikipedia.*

After the show I went into the main hall of Old Faithful complex where I bought myself a cup of coffee and sat down by the window overlooking the geyser location. At the same table there was an elderly couple from New York and from what they were saying, they must have done a lot of travelling. I was curious about these friendly tourists. Our talk came to Grand Canyon, too. They had been to Phantom Camp, at the bottom of Grand Canyon, on mules; went down one day and up the following day.

This reminded me of my trip there in 1999. I walked it with my friend Jochen, from Germany, all in one day. We started at 7 a.m., down along South Kaibab Trail (11.4km), average gradient 20%. Then along the River Colorado Trail (3.6km). Midday temperature at Phantom Camp was 40-50°C. Finally climbing back to The North Rim on Bright Angel Trail (13km); average gradient 10%; arriving utterly exhausted at 19.30 p.m.

Amongst other things the man said that at Mt. Rainier there is a camp half way up to the top (going from the Visitors Centre), and beyond that you must have a permit. I had enjoyed talking to these people very much indeed, but unfortunately I had to drink up my coffee and say good bye to them, as I was to meet my travelling partner.

Alas, I had waited for him for another 90 minutes before he returned. He was deeply sorry to be late, but he wandered into **Upper Geyser Basin**, and it was such a vast area, that although he was almost running through it (taking pictures), it was impossible to come back time. Pity I could not have continued that most interesting conversation at the main hall.



Well, while I was waiting for VP, I took several pictures at the car park, here are some of them:



*Two long distance cyclists left their bikes and went to see the Geyser*



*An odd fellow*



*A family's day out; walking from the Old Faithfull Geyser to their car*



#### *At the General Store*

A place where tourists do their shopping, eat and drink coffee. An old man, on a seat outside the General Stores, talking to his neighbour, said that he had lived in many places, and now when he settled at Glacial NP, he reckoned it to be one of the best places ever. Good to hear that, as we're going that way, too!



#### *Wildfire in Yellowstone National Park.*

About thirty-five natural forest fires are ignited each year by lightning, while another six to ten are started by people— in most cases by accident. As wildfire is a natural part of most ecosystems, plants that are indigenous to Yellowstone have adapted in a variety of ways. Douglas-fir has a thick bark which protects the inner section of the tree from most fires. Lodgepole Pines —the most common tree species in the park— generally have cones that are only opened by the heat of fire.



After seeing this famous location of Yellowstone NP we continued towards West Thumb Geyser Basin. Before getting there we crossed Continental Divide at elevation 2500m. It extends from the Bering Strait to the Strait of Magellan, and separates the watersheds that drain into the Pacific Ocean from (1) those river systems that drain into the Atlantic Ocean (including those that drain into the Gulf of Mexico and the Caribbean Sea), and (2) along the northernmost reaches of the Divide, those river systems that drain into the Arctic Ocean. The Divide crosses into Wyoming within Yellowstone National Park

and continues southeast into Colorado.

Arriving to West Thumb Geyser Basin we first looked for the Visitor Centre at Grant Village. *Info at Visitor Centre: Bisons – Caution: stay at least 25 m away; stay in your car; buffalo watches you, you watch its tail, if it goes up, it's time to move away, don't occupy its space; it can run 60km / hour.*



We continued towards the **Yellowstone Lake**, which is the largest body of water in Yellowstone National Park. The lake is 2,357 m above sea level and covers 350 km<sup>2</sup> with 180 km of shoreline. While the average depth of the lake is 42 m, its greatest depth is at least 120 m. Yellowstone. In winter, ice nearly 0.91 m thick covers much of the lake except where shallow water covers hot springs.



*There are even geysers in the lake. Walking on wooden pavement is easy and comfortable*





*Yellowstone Lake as seen from Two Ocean Plateau, looking north. The lake's great depth and purity causes it to absorb all colours of visible light except blue, resulting in its characteristic indigo blue*



*Back at the car park I noticed this familiar transport solution related to cyclists. You cycle and they take care of you and everything else.*

**Who are they?** This is what Tom Hale, Founder & President says: *“Freedom... discovery... energy... inspiration... engagement... serendipity. These are some of the words Backroads guests use to describe why they love exploring by bike and on foot.*

*Active travel is about journeying through a fascinating region under your own power. On foot and on a bike, you can really get a visceral sense of place. Without any filters, you're free to truly be where you are. The wind in your face. The sun on your back. Reconnecting with yourself and others. The feeling that right now, and for the next few days, you control your own destiny. And always just ahead, the next unexpected moment you'll carry with you forever: a ruined castle shrouded in mist as the sun appears over the mountains... a flock of birds rising in a shimmering cloud from a vast river delta... a waiter lighting lamps on the café tables, saluting the village priest as he climbs the cathedral steps... For nearly 40 years, Backroads has been setting the stage for moments like these in every corner of the globe—raising the bar that all such travel should aspire to. And while it may sound like boasting, we don't think anyone does it better. Let us show you why...”*

From Yellowstone Lake we continued on Grand Loop towards Canyon Village, where we had a good meal and then finally returned back to Norris Camp. What a day!

FRI 19.8.

This morning we were up very soon again, around 5.30 a.m. You see, the darkness comes here rather early, at about 8.30pm, and being really cold, we simply went to bed early, at about 9 pm.

In the morning the temperature was below zero and we hurried up to get going. Our first location was rather close (about 2 km) – **Norris Geyser Basin**.

On the diagram you can see our Norris Camp and our first location today- NGB. We were some of the first visitors and early morning atmosphere (forgetting the sulphur smell) was fantastic – quiet place with almost nobody just us, lovely visibility and amazing views!







*"The place where the HELL bubbled up" (said famed trapper Jim Bridger, in the 1850s)*



The Norris Geyser Basin is the hottest geyser basin in the park and is located near the northwest edge of Yellowstone Caldera (created 640,000 years ago).

***Steamboat Geyser*** is the world's tallest currently-active geyser. During major eruptions, water may be thrown more than 91.44 m into the air

Steamboat's major eruptions last from 3 to 40 minutes, and are followed by powerful jets of steam. Steamboat does not erupt on a predictable schedule, with recorded intervals between major eruptions ranging from four days to fifty years. The geyser was dormant from 1911 to 1961. Minor eruptions 3–5 m are much more frequent. After an eruption, the geyser often vents large amounts of steam for up to 48 hours. The last eruption of Steamboat Geyser occurred on 3 September 2014.

Prior to 1904, Waimangu Geyser, in New Zealand, had some taller eruptions capable of reaching 490 m, but in 1904, a landslide changed the local water table, and since then, Waimangu has not erupted.





After seeing this fascinated place we continued, once again along the Lower loop and visited the **Upper Geyser Basin**, including the **Old Faithfull Geyser**. This time we knew (well VP knew) where to go and what to see. I was glad VP took me back again as the scenery was really out of this world!

Here are some fantastic pictures; the colour is caused by microorganism / bacteria that live in that hot water full of minerals (notice even green colour of algae at the photo from **Norris Geyser Basin**).



*Blue Star Spring near Old Faithful Geyser*

The various geyser basins are located where rainwater and snowmelt can percolate into the ground, get indirectly superheated by the underlying Yellowstone hotspot, and then erupt at the surface as geysers, hot springs, and fumaroles. Thus flat-bottomed valleys between ancient lava flows and glacial moraines are where most of the large geothermal areas are located. Smaller geothermal areas can be found where fault lines reach the surface, in places along the circular fracture zone around the caldera, and at the base of slopes that collect excess groundwater.



*Silex Spring at Fountain Paint Pot*



*VP is very keen to return back to Upper Geyser Basin. "Come on, hurry up", he says.*

Due to the Yellowstone Plateau's high elevation the average boiling temperature at Yellowstone's geyser basins is 93 °C. When properly confined and close to the surface it can periodically release some of the built-up pressure in eruptions of hot water and steam that can

reach up to 120 m into the air (see Steamboat Geyser, the world's tallest geyser). The water cools significantly while airborne and is no longer scalding hot by the time it strikes the ground, nearby boardwalks, or even spectators. Because of the high temperatures of the water in the features it is important that spectators remain on the boardwalks and designated trails. Several deaths have occurred in the park as a result of falls into hot springs. Prehistoric Native American artefacts have been found at Mammoth Hot Springs and other geothermal areas in Yellowstone. Some accounts state that the early people used hot water from the geothermal features for bathing and cooking.





In the 19th century Father Pierre-Jean De Smet reported that natives he interviewed thought that geyser eruptions were "the result of combat between the infernal spirits." "The Lewis and Clark Expedition travelled north of the Yellowstone area in 1806. Local natives that they came upon seldom dared to enter what we now know is the caldera because of frequent loud noises that sounded like thunder and the belief that the spirits that possessed the area did not like human intrusion into their realm. The first white man known to travel into

the caldera and see the geothermal features was John Colter, who had left the Lewis and Clark Expedition. He described what he saw as "hot spring brimstone." Beaver trapper Joseph Meek recounted in 1830 that the steam rising from the various geyser basins reminded him of smoke coming from industrial smokestacks on a cold winter morning in Pittsburgh, Pennsylvania.

From Upper Geyser Basin we continued towards Yellowstone Falls, where once again we marvelled over "the water-power".



*At the car park, I admired an old piece of engineering: the pre-war model of a yellow-shuttle-bus*





As it was lunch time, we stopped at Canyon Village Centre and had a good meal – roast beef and rice-at the local restaurant. I sat outside at a table where I joined an elderly American couple.

The gentleman's name was Norman and I'd had a most interesting talk with him. My friend VP left me to it and went to study his map. Norman, as a young Jewish boy managed to escape from Nazi Europe. His whole family was killed in concentration camps by the Nazis. Norman's wife was born in Hungary. Norman, who was a retired professor, remembered visiting Switzerland many

years ago, and at a restaurant, when the waiter spoke German, he had to grip his knees under the table since he was so upset when hearing the German language for the first time since the WW2. Norman gave me his card. At the age of 74 is Ambassador of Volunteers for Israel ([www.vfi-usa.org](http://www.vfi-usa.org); VFI volunteers are a diverse group of American men and women ages 17+ with a common goal: to support Israel with the best gift they can give...themselves).



After we've had our meal at the Canyon Village, we drove back towards our camp. Close to the camp, I dropped VP at the Norris Geyser Basin (which was only about 2km from Norris camp) and he said that he would walk back to the camp after seeing a bit more of the NGB. It was early afternoon, about 2.30 p.m.

*Our campground has 3 loops-A,B,C – Solfatera trail is at the top; The Geyser Basin is at the bottom.*

I drove back to our camp site, planning to walk to Ice Lake (from Norris Camp along the **SOLFATERA TARIL**). Before leaving the camp I went to see the rangers at camp reception and made some enquiries about this trail I was about to take. No spray against the bears and walking alone – well, the rangers did not like that very much and suggested I walk with other two girls who had just arrived and had the same plan - to walk towards Ice Lake on the Solfatara Trail (from the Latin, *Sulpha terra*, "land of sulfur"). Eventually the girls did not go, so I went on my own.





I started my walk on SOLFATARA TRAIL from the camp at about 3 p.m. My only defence against the bears was to make noise. So, at first I tried to sing some tunes; that did not last me long, as I ran out of them; so I was just whistling, even that did not last me too long either-as my throat got dry. So, I just made noise with my walking sticks-dragging them on the path or hitting them together. The noise was supposed to be made before any bend behind which a bear could be loitering about; but as there were so many bends, I had to be noisy all the time.



*The trail was going through the most beautiful landscape I have ever seen*

After about 1km I came to a crossing of two paths and turned right; from here it was to be 6km to the Ice Lake.

On this new path, leading through the most beautiful woodland and grassland, young pines and openings, mostly on the edge of the woodland, I noticed some bear dung, and I realised they were using the same path as me. I thought to myself that if a bruin appears, I will try to climb the nearest tree to me, although this would mean that I would most certainly be awfully injured by dry, sharp stamps of broken branches. After a while I came to a spot where my path led through young pines (about 4m tall) and there were no trees to climb. Even more dodgy was the fact, that in that young vegetation there, on both path sides, were the barricades of dry, cut young trees that were left there after some deliberate tree clearing. This meant that should any bruin be walking on this path against me, it would have no room to avoid me, no room to leave the path. So, no trees for me to climb and

no room for bear to change its walking direction. When I realised it, I admit, I was rather scared (on reflection, after doing 9 walks on my own during this holiday, this must have been the most scaring one), especially when the path was turning all the time – no straight run longer than 5m.



*Bear's dung and barricades of dry timber on path*

Anyway, I encouraged myself by making noise with the walking sticks once again. Fortunately this



dicey place was not that long, only about 200 m, and then again my path continued through most lovely terrain. Unfortunately, after about 4km from the cross-path, the trail disappeared into a large meadow and there was no trace of it. It became clear to me that not too many



people had been walking through here. The meadow was long and wide. Within that meadow there were small patches of dwarf willow growth, in which again a bruin could be resting being protected by the shade (I thought). In far distance (about 1km), where the meadow ended, there seemed to be

some kind of a plastic mark on a tree, but I had no clue whether it referred to the path or not, as no paths in US NP are marked, you must use your map (which I did not have). So, after some



hesitation, I turned back and at the cross-path I went about 1km on the other trail just for the purpose of walking, as I still had enough time before darkness. In total I must have walked  $1+5+1\text{km} \times 2 = 14\text{km}$ . When I returned back to our campsite VP was there already. It was about 7 p.m. and the darkness fell in another hour. Looking at the map several days later, I found that SOLFATARA CREEK TRAIL was 10.1km long (one way), so from the point of my turning, it must have been 4 km to the Ice Lake.

As I said, Mr. Cowboy (with two German girls), was our camp-site neighbour, but other interesting neighbours were on the other side of us. These were four women from Pennsylvania. They flew to Salt Lake City (Utah) rented a SUV car and had been camping in several NP. There were – two young girls, their mother and their grandmother. We got to know them through moving a second table from our site onto their site. This we did together with a ranger who organised it. The grandma (in her 60's) was very curious about our camping system-sleeping in that car (they themselves had two tents) - but when she saw our den, she just laughed.

*Info at Visitor Centre: Due to the human activities there were 13 bears killed in YNP every year.*



*At one of those numerous car parks along the Lower Loop, I could not notice this vehicle which belonged to a young couple. That is the way to travel. Well done!*

Up till now we had done 3902 km.