On Yellowstone's Geysers

by Shelby DeWaard

My shoes kick up dust as I amble toward the rustic looking lodge. The sign out front reads "Old Faithful Visitor Education Center." My family and I enter through impressive glass doors, the cool air conditioning a break from Wyoming's sweltering summer heat. We are on a vacation to Yellowstone National Park, in search of what we've heard to be unparalleled natural beauty. The park has over ten thousand thermal features. From rainbow hot springs to aptly named "mudpots" (consisting of what appears to be a bubbling pool of thick chocolate), the park draws a massive tourist presence from all over the world. Today, we are part of this group. Walking through it, the visitor center is a hybrid of a museum and a ski lodge. A myriad of displays provide information on everything from wildlife to geyser activity. Meanwhile towering windows overlook the beige plain, home to an unparalleled number of geysers.

The most famous of these is called Old Faithful. In keeping with most tourists, we are eager to witness the eruption of this geyser, renown for its predictability. Old Faithful has been erupting consistently since it was discovered in the nineteenth century. Like a terrestrial heartbeat, it bursts forth approximately every ninety-one minutes. Sauntering over to the information desk, I check the predicted eruption times. We are fortunate to discover there will likely be one in a mere thirty minutes. Braced for the heat of the day, we exit the center and approach the benches surrounding the geyser site. Then the waiting begins. The expectant crowd slowly grows, as the impending eruption draws people off the wooden bridges that crisscross the plain. Like a drunken spider web, the skinny timber trails lead toward the many other geysers here, while keeping guests a safe distance from the intense heat and acidic water that makes such phenomena possible.

My younger brothers grow antsy as the minutes stretch on. Though teeming with action a few hundred feet below the surface, Old Faithful appears as nothing more than a mound in the earth. What we cannot see is a rare geological process at play. In order to create a geyser, several unique conditions must manage to line up. Fissures must be present to feed groundwater deep into the earth. Additionally, the very life of a geyser depends on the presence of searing heat emanating from the earth's very core. In the case of Yellowstone, this heat is from an underground supervolcano with enough magma to wreak havoc on the entire continent. As we grow drowsy staring at what my brothers deem "a boring hole," water below our feet is becoming superheated. The close confines of the ground prevent it from turning to steam, despite being at a temperature much higher than its boiling point. While our interest continues to dwindle up above, the heated water is lying in wait for a small decrease in pressure—when it can expand and explode furiously from the ground.

The crowd stands with cameras ready, eager to capture the moment the first puff of steam rises like a dragon's

breath. We wait for our chance to see nature's power demonstrated. We seek to be impressed, amazed, entertained. Finally, a rumbling silences the mumbles of children and parents alike. With that small warning, steam begins to pour from the mound we've all but forgotten. Like an iron heating up, the vapor intensifies. Entertained, yet not awestruck, the crowd stands still. Just when it seems like it has ended—that we have witnessed all Old Faithful has to offer—a spurt of water materializes from the steam. Rising into the sky like a festering cyst finally lanced, a fountain materializes. From the depths Old Faithful lets out a roar, filled with power, with anger. Thousands of gallons are flung into the sky. Time is frozen. How else to explain the continued flow, rising like the trail of a launched rocket? It goes on too long. A fine spray of droplets hits my unmoving face, bearing the sulfuric perfume of Mother Earth. There is too much water. There is too much power. I am struck by my smallness as the force of the Earth itself continues to expel more water, more steam.

The fountain reaches its zenith. Only then does the Earth resume its rotation, does time resume its pace. Like a magician, the fountain is there and then gone. The hole is a hole once more. Only the water staining its mouth proves the eruption was anything more than a dream.

I am in a daze, awed by what I have witnessed. It is little wonder Native Americans paid respect to the "spirits" in Yellowstone's geysers. Geysers were not approached without prayers and supplications, even sacrifices. The very rumblings I have just heard myself were once likened to the armies of the earth sharpening their weapons. It is not surprising that early explorers misinterpreted the Natives' reverence for fear. What mortal man could look at such a thing and not be afraid? Yet as I stand in stupor, the crowd is already moving away, resuming chatter over what to have for lunch, where to visit next. The incredible display is fading from memory, the last wisps of steam long departed. The act is over and it's time to move on.

Migrating onto the network of footbridges, my family and I observe more geysers, each uniquely named and known for the amount of steam it produces, or the way in which it erupts. None however, have the sheer magnitude of Old Faithful. Unsurprisingly, Old Faithful was the first geyser in Yellowstone to be named by the Washburn-Langford-Doane expedition of 1870. (This expedition was comprised of the first Europeans to come across Yellowstone.) Yet the geysers are so much more than the sanitized "nature fix" today's crowd has come for. Rainbow colors in various pools are made possible by acidic water on par with battery acid. Water temperatures exceed several hundred degrees. A sign catches my eye. It depicts a young boy with a camera falling into a steaming pool. A frantic mother is shown standing on the boardwalk, pointing with despair. "Dangerous ground," the sign reads, as it warns of stepping off of the boardwalk. In fact, warning signs are everywhere. It seems in the attempt to reduce nature to entertainment, it is easy to forget the lurking danger that makes the wilderness wild. The first scalding ever recorded in Yellowstone involved a member of the original 1870 expedition, who became separated from the group. The first death occurred when a seven-year-old child fell into a hot spring in 1890. Since then, scaldings and deaths have been consistently recorded. Children are disproportionately involved in these accidents. Perhaps, it is due to their innate need to push boundaries. Or perhaps merely the inability-the innocent unwillingness-to accept that man is not invincible. The child in me yearns to touch the colorful pools, to run and peer into Old Faithful's hot belly. Yet age has given

me fear, a unique awareness of my own mortal nature.

Interestingly, there are no recorded deaths of Native Americans at the hands of geysers. Though we "moderns" smirk at the primitive idea of appearing the spirits of geysers, we bear the casualties of attempting to bend nature to our will. I glance back at the education center-small with distance I hadn't noticed we had covered. Such a building would have been sacrilege to those Native Americans of old. As with most instances of European exploration, the white man came in and drove the natives out. Rumors spread about the "primitive savages" not wanting to live in the area due to fear, justifying encroachment onto tribal land. Yet, it was believed by the natives that Yellowstone was gift from the gods to the tribes.

In keeping with its holy nature, Yellowstone was used for vision quests. A vision quest is a coming of age ceremony. It marks the transition from child to adult. On a quest, an individual wanders the wild, with little food or supplies. The goal is to find oneself spiritually, to connect with nature it all its wildness.

I am connected with the geysers. I look over the steaming plain. Mentally I erase the bridges, the crowds, the visitor center. I feel the sun on my hair, the heat from above combining with the ancient heat from below. I am unaware of the small heat my own body contributes. Perhaps we have lost ourselves. Or indeed, perhaps we have found ourselves, and given up the ability to become lost. Wandering this plain, the crowds are distracted. A billion thoughts flutter through minds like aimless butterflies. They distract the fragile stream of our consciousness. Rather than the total eclipse of all else in the mind—a reminder of man's place as a mere parasite on the earth—the geyser has served as merely a blip on the screen for the majority. We have attempted to take a force bigger than each and every one of us and calmly tame it, like a beast. Yet as I wander through the park with a dazed sense of awe, I realize that this beast will not be tamed. It refuses to be so reduced. It fights back. Every death, every scalding, every cyclic outburst is a sign of its displeasure, like the foaming spittle of a crazed animal.

It seems that losing the self in the presence of nature ended with the coming of the white man to Yellowstone. Contrary to the immersive awareness of self and nature in Native vision quests, the park is now merely a checklist on a list of "natural wonders" to be seen on family vacations. It may be the creation of the park that deserves the blame for this contrast. The word "park" brings to mind the idea of peacefulness. Natural beauty serves as a backdrop to human activities. From grandparents playing chess on benches, to children frolicking, parks serve as an embodiment of tranquility. There is tranquility in Yellowstone. The soothing repetition of Old Faithful's rumbles, the shimmer of crystal pools, invite calm reflection. Yet this tranquility is not watered down with safety. It comes from the wildness of nature, the realization of man's pitiful place. It comes from the recognition of nature's unsuppressed outbursts reflected in oneself.

To consider such a wild expanse a "park" does not do it justice. Indeed, the current state derives from a history of human irreverence. In the early days of the park as a tourist attraction, this was quite noteworthy. Rather than share my and the natives' awe for Old Faithful, one common practice was to throw laundry into the mouth of the geyser. While magma heated the water, the clothing was agitated and sanitized. The eruption was merely a circus-like display, a fountain of jackets

and pants shot out to be collected and dried. Despite the continued occurrence of the occasional death, Old Faithful was treated like a sideshow attraction. It was nothing more than a toy to momentarily delight in and then become bored with.

As we left the park, I slowly came back to myself. It was like swimming to the surface after a deep dive, or waking from a heavy slumber. The wispy tendrils of my thoughts solidified, and became my own once more. I couldn't help but wonder-with morbid fascination-when the next death would occur. Would a seemingly tranquil pool claim one of the children I saw running about? Or perhaps the overconfident twenty-somethings by the mud pot display-would they be the next sacrifice to appease nature's wild spirit? Even as I fought to hold onto to my brief connection with nature, each step towards the car was tearing at the bonds. I was separating back into a tame individual. Each inch back toward normalcy caused another degree of fadedness to settle over my fragile window of understanding. And then, we closed the car doors and drove away. We were again situated in the complacency of thinking we knew our place in the world.

Works Consulted

"About Old Faithful - The Most Famous Geyser in the World." *Yellowstone Park.* N.p., 10 Feb. 2016. Web. <u>www.yellowstonepark.com</u>

Crystal, Ellie. "Vision Quest - Crystalinks." Vision Quest - Crystalinks. Web. www.crystalinks.com/visionquest.html

Ferry, David. "A Brief History of Deaths in Yellowstone's Hot Springs." Outside Online. Outside Magazine, 16 June 2016. Web. www.outsideonline.com

King, Hobart. "What Is a Geyser?" Geology and Earth Science News, Articles, Photos, Maps and More. N.p., n.d. Web. http://geology.com/articles/geyser

Lackner, Adam. "History and Little Known Facts About Old Faithful." N.p., 25 May 2016. Web. www.brushbucktours.com

Landry, Alysa. "Native History: Yellowstone National Park Created on Sacred Land." *Indian Country Today Media Network.com*. N.p., 1 Mar. 2014. Web.. http://indiancountrytodaymedianetwork.com