



# CYCLE GREAT YELLOWSTONE GYC BRINGS THE WORD

BY JEFF WELSCH



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**LD TO GYE**

With inspiring scenery around every bend, the tour is designed to educate about and garner support for the Greater Yellowstone. Courtesy of GYC

**I**t all began, really, on a warm September evening in a dusty rodeo arena in Pendleton, Ore.

Filling two-thirds of the colorful Pendleton Round-Up stadium were the usual suspects: ranchers and cowboys in their best hats, Wrangler jeans, cowhide boots and silver belt buckles. Across the arena, as if in the visitors' section at a college football game, sat some 1,500 t-shirt, shorts and sandals clad Cycle Oregon bicyclists.

Before the bucking and roping began, the announcer welcomed the Cycle Oregon visitors and expressed appreciation for their desire to absorb the regional culture. As he did, a rousing round of applause rose from locals just as eager to share and showcase their community.

That's when it hit me: The GYC needed an event like this. A way of reaching and educating an entirely new segment of society about the Greater Yellowstone Ecosystem. Let's call it using innovation to do conservation.

Two years later, that vision is about to become a reality. On August 18, 2013, the Greater Yellowstone Coalition's Cycle Greater Yellowstone ([www.cyclegreateryellowstone.com](http://www.cyclegreateryellowstone.com)), a fully supported, first-class, week-long tour designed to lure 1,000 cyclists plus an entourage of several hundred to immerse themselves in the region kicks off.

Putting feet to the pedals amid the lodgepole pines in West Yellowstone, the 450-mile route will convey riders along rivers and mountain valleys and include overnights in or around the towns of Ennis, Livingston, Gardiner, Cooke City, Cody and, after taking a spin through Powell, Wyoming, climax with an out-and-back ride from the mountain village of Red Lodge, Montana to the tundra of the Beartooth Plateau as the grand finale.

Though staging such a large event is daunting, capitalizing on the enormous popularity of cycling will offer measurable and immeasurable benefits for the region, communities, riders and GYC. It is, to paraphrase a cliché, a win-win proposition.

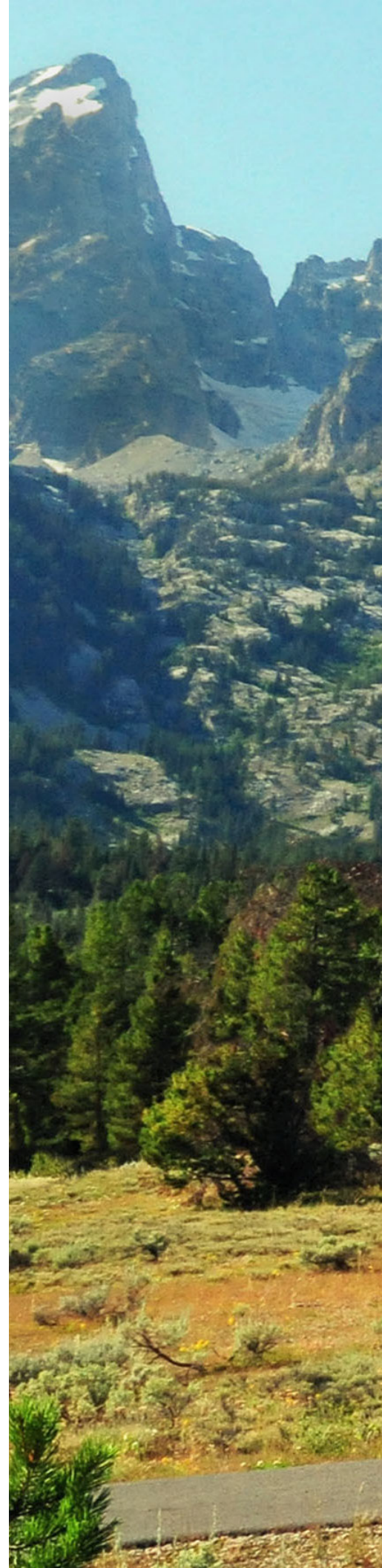
For GYC, it is an unparalleled opportunity to inspire and inform a regional, national and international audience about the wonders of one of the planet's last great largely intact temperate ecosystems. As we commemorate our 30<sup>th</sup> anniversary, Cycle Greater Yellowstone is a unique way to build lasting rapport between GYC, cyclists and the towns whose economic vitality is critical to Greater Yellowstone's ecological and spiritual health. And it goes without saying that we hope the event will lead to a desire to support protection of the Greater Yellowstone Ecosystem.

Designed to be challenging yet manageable, cyclists will rise from their tents for breakfast, spend the morning and early afternoon pedaling, arrive in camp for a hot shower, spill into the communities for much of the afternoon, then return to camp for evening programs that feature educational talks and entertainment.

In 2010, I pedaled Cycle Oregon and witnessed first-hand the high-energy flow of goodwill and camaraderie between event organizers, cyclists and communities. This was best reflected in a photo of two posteriors on a Pendleton barstool, one wearing Wranglers and the other Spandex, each with a beer in hand saluting the other.

Conservatively, we estimate a \$2-3 million direct annual impact in the region and an incalculable benefit from the many cyclists whose week here will move them to return again and again. We are already hard at work planning for 2014, which, with Jackson Hole, Wyoming as the starting point, will showcase the southern portion of Greater Yellowstone.

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In 2014, the tour will showcase the southern portion of Greater Yellowstone. Rick and Susie Graetz



# The First Explorations

## The First of Three

Introduction by Rick Graetz

Compilation of diaries and reports  
by Aubrey L. Haines



David E. Folsom. Courtesy of YNP.

Three explorations to the Yellowstone Country in the period Autumn 1869 thru Summer 1871 led directly to the creation of Yellowstone National Park.

“We trace the creation of the park from the Folsom-Cook expedition of 1869 to the Washburn expedition of 1870, and thence to the Hayden expedition of 1871, Not to one of these expeditions more than to another do we owe the legislation (March 1, 1872) which set apart this “pleasuring-ground for the benefit and enjoyment of the people”— Nathaniel P. Langford—YNP’s initial superintendent who served without pay from 1872-1877 to help preserve the area as a national asset.

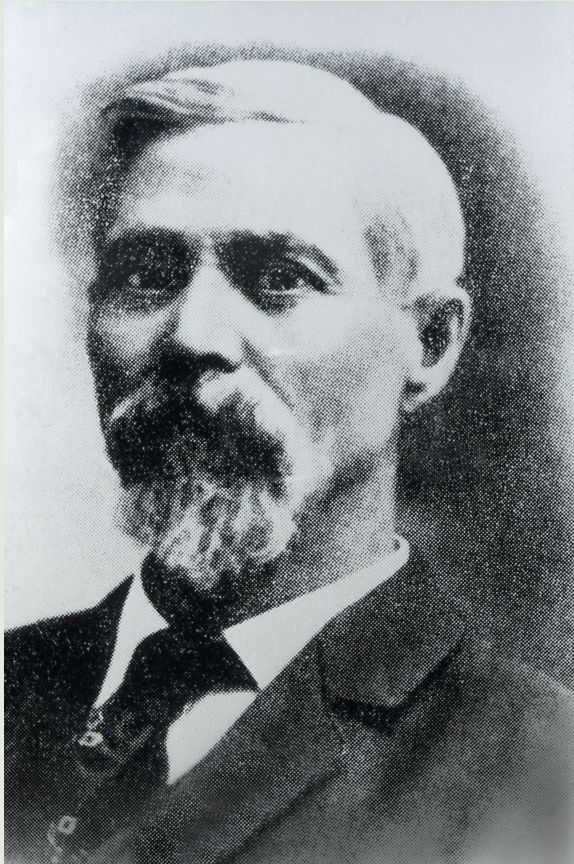
The territory which is now the Yellowstone National Park was unexplored and uncharted until shortly after the Civil War. Although occasional travelers brought back outrageous reports of geysers, volcanic fires and sulfurous, steaming springs, they were generally not believed. How-

ever, it was these reports and the interest they caused that led to the first successful investigation of the Yellowstone area.

Stories from these journeys are many and fill volumes. Aubrey L. Haines, Yellowstone’s historian from 1959 until 1969, took the wealth of information available through numerous sources, and compiled them in one chapter in what this writer considers to be THE definitive books on Yellowstone’s past: *The Yellowstone Story—Volumes One and Two—Revised Editions*, which were published through the University Press of Colorado for the Yellowstone Association. Permission has been granted for use of the writings.

In 1869, motivated by a desire for adventure as well as the wish to map the hearsay of the region, Charles W. Cook and two companions, William Peterson and David E. Folsom departed Diamond City, Montana Territory. Despite encounters with hostile Indians, a shortage of

# ons of Yellowstone



Charles W. Cook. Courtesy of YNP.



William Peterson and wife Jess. Coutesy of YNP.

food and supplies, and other dangers and hardships, the trio completed the exploration and confirmed the reports of earlier and less literate visitors.

For the most part the words that begin with the next paragraph appear as Haines wrote them in 1977.

In the spring of 1865, Father Francis Xavier Kuppens, a young Jesuit priest attached to the old St. Peter's Mission on Sun River near present Great Falls, Montana, had an opportunity to accompany a group of Piegan Indians on a buffalo hunt in the country between the Missouri and Yellowstone rivers. In the course of that practical evangelism he heard about the Yellowstone region. In his words, "many an evening in the tent of Baptiste Champagne or Chief Big Lake the conversation, what little there was of it, turned on the beauties of that wonderful spot... There was

sufficient in the tale to excite my curiosity."

Father Kuppens was able to induce some of the young men to take him into the area... and there he saw what he termed the "chief attraction," including the Grand Canyon and the geysers of the Firehole basins.

Late in October of that same year, while the sights of the Yellowstone trip were yet fresh in Kuppens' mind, a party of horsemen going from Helena to Fort Benton was caught in a sudden, savage blizzard from which they took shelter at the mission. The nearly frozen riders included Acting Territorial Governor Thomas Francis Meagher, Territorial Judges Hezekiah L. Hosmer and Lyman E. Munson, two deputy United States marshals, X. Beidler and Neil Howie, and Cornelius Hedges."

Their entertainment, during several storm-bound days at the mission, included much about the Yellowstone trip of Father Kuppens, who says:

“I spoke to him [Meagher] about the wonders of the Yellowstone. His interest was greatly aroused by my recital... None of the visitors had ever heard of the wonderful place. Gen. Meagher said if things were as described the government ought to reserve the territory for a national park. All the visitors agreed that efforts should be made to explore the region and that a report of it should be sent to the government.”

There was no opportunity to make the proposed exploration until 1867 when the Montana Volunteers erected forts—Elizabeth Meagher and Ida Thoroughman—that served to shield the Gallatin and Yellowstone valleys from the raiding Sioux. With a Yellowstone expedition at last feasible, the Virginia City Montana Post of June 29, 1867, carried this announcement:

“The Expedition to the Yellowstone country mentioned a short time since is now organized, and it is the purpose of the party to start from the camp on Shields River [Ida Thoroughman] in about two weeks... A number of gentlemen have expressed a desire to join the party.”



The Yellowstone River just north of present-day Gardiner, 1871. Courtesy of USGS

The expedition was crippled at the last moment by Meagher's death in the waters of the Missouri River at Fort Benton. None of the territory's influential men cared to absent themselves in the Yellowstone wilderness during the period of readjustment that followed, and the projected exploration degenerated to a scout by a company of Montana Territorial Volunteers under Captain Charley Curtiss, accompanied by Surgeon James Dunlevy. Though the newspaper coverage describes the expedition as proceeding to "within a few miles of the lake near the head of this great valley," it evidently was terminated at the Mammoth Hot Springs, where the field correspondent became enamored with the possibility of developing a borax mine. As an exploration, the expedition was somewhat of a dud, its only value being in the encouragement it gave to a further effort by "some select party, well prepared and equipped."

A number of the interested gentlemen who failed to go up the Yellowstone River with the Curtiss-Dunlevy expedition in 1867 made feeble attempts to organize parties to explore the Yellowstone in 1868 and 1869. Regarding the latter, the Helena Herald for July 29, 1869, announced:

"A letter from Fort Ellis, dated the 19th, says that an expedition is organizing, composed of soldiers and citizens, and will start for the upper waters of the Yellowstone the latter part of August, and will hunt and explore a month or so. Among the places of note that they will visit, are the Falls, Coulter's Hell and Lake, and the Mysterious Mounds. The expedition is regarded as a very important one, and the result of their explorations will be looked forward to with unusual interest."

A shortage of troops due to the Indian unrest deprived the expedition of an escort, however, and all but three of the citizens refused to go without such protection. The bold ones were David E. Folsom, Charles W. Cook, and William Peterson, and, according to the latter, their decision to go regardless was somewhat impetuous... Cook said, "If I could get one man to go with me, I'd go anyway." Peterson spoke up, "Well, Charley, I guess I can go as far as you can," and Folsom added, "Well, I can go as far as both of ye's," so they started the next day.

Cook and Folsom were rather untypical Quakers, while Peterson was a former deep-water sailor, but long residence in the mining camps of the northern Rocky Mountains had prepared them for such an expedition. All were good shots, well versed in woodcraft, and self-reliant; Folsom was trained in surveying and Peterson was a packer with practical experience gained in freighting to the Idaho mines. Yet, their own confidence in their ability was not shared by the friends who saw them off with such parting remarks as, "good-bye, boys, look out for your hair"; "if you get into a scrap, remember I warned you"; "if you get back at all you will come on foot," and "it's the next thing to suicide."

In addition to their five horses (three for riding and two for packing) the "outfit" included a repeating rifle, Colt revolver, and sheath knife for each, one double-barreled shotgun, ammunition, fishing tackle, five pairs of blankets, two buffalo robes, an axe, a small camp kettle, coffee pot, two frying pans, three tin cups, four tin plates, three knives, forks and spoons, to which they added (at Bozeman, the last place where supplies could be purchased) 175 pounds of flour, 25 of bacon, a ham, 30 pounds of sugar, 15 of ground coffee, 10 of salt, 10 of dried fruit, 50 of potatoes, and a dozen boxes of yeast powder... and some items dictated by individual wisdom (Cook brought a pair of French field glasses; Folsom a pocket compass and thermometer, and Peterson had two balls of stout cord).

On the first evening after leaving the Gallatin Valley, Cook, Folsom, and Peterson camped on the bank of the Yellowstone near the ford by which the miners crossed to Emigrant Gulch... they made a late start, but they somehow missed the ford and arrived at the Bottler ranch... At the time, the brothers were out hunting in order to add to the stack of antelope and elk hides, which was their "cash" crop.





Fort Ellis, 1871, served as a base of operations for exploring what would become YNP. Courtesy of YNP.

**A**s a result of the late start, the day's journey ended only three miles beyond the ranch when a chilling afternoon rainstorm forced the party to camp early under a tent improvised from blankets. It was a place of blue noses and chattering teeth, from which they were glad to depart promptly the next morning.

A little more than eight miles from that camp they came upon a solitary wickiup on the bank of Tom Miner Creek. It was a barely adequate structure of poles thatched with grass, occupied by two old Indian women who were busy gathering and drying chokecherries. By the repeated

use of the word Tonkey, the elder of the two made it clear that they were Sheepeaters. The three adventurers rode on without discovering what message the Indians tried to communicate by pointing up the river and counting to thirty by opening and closing both hands three times.

While they scrambled over and around the jumble of slide-rock in Yankee Jim Canyon a band of antelope dashed by so close that Cook was able to bag one with the shotgun. Soon after that fortunate encounter, they "camped close to the river on a narrow bottom and fared sumptuously on antelope steak and trout from the water."



Bannock Indian Trail. By continuing on the Indian route, the Folsom party could have passed easily up the Yellowstone Valley; but they mistrusted the southward jog and struck off eastward through the rough country closer to the river, which was their guide. The day's journey produced only a chance meeting with more Sheepeater Indians (of whom they were unnecessarily alarmed, for these Indians had no more sinister objective than to cadge a little ammunition or some matches). From them the party learned what the old women had tried to tell them: simply that there were thirty lodges of their people on the trail ahead. A mile farther on, about where Tower Junction now is, they reached the Bannock Indian Trail, leading to a good campsite near the ford by which that route crosses to the east bank of the Yellowstone.

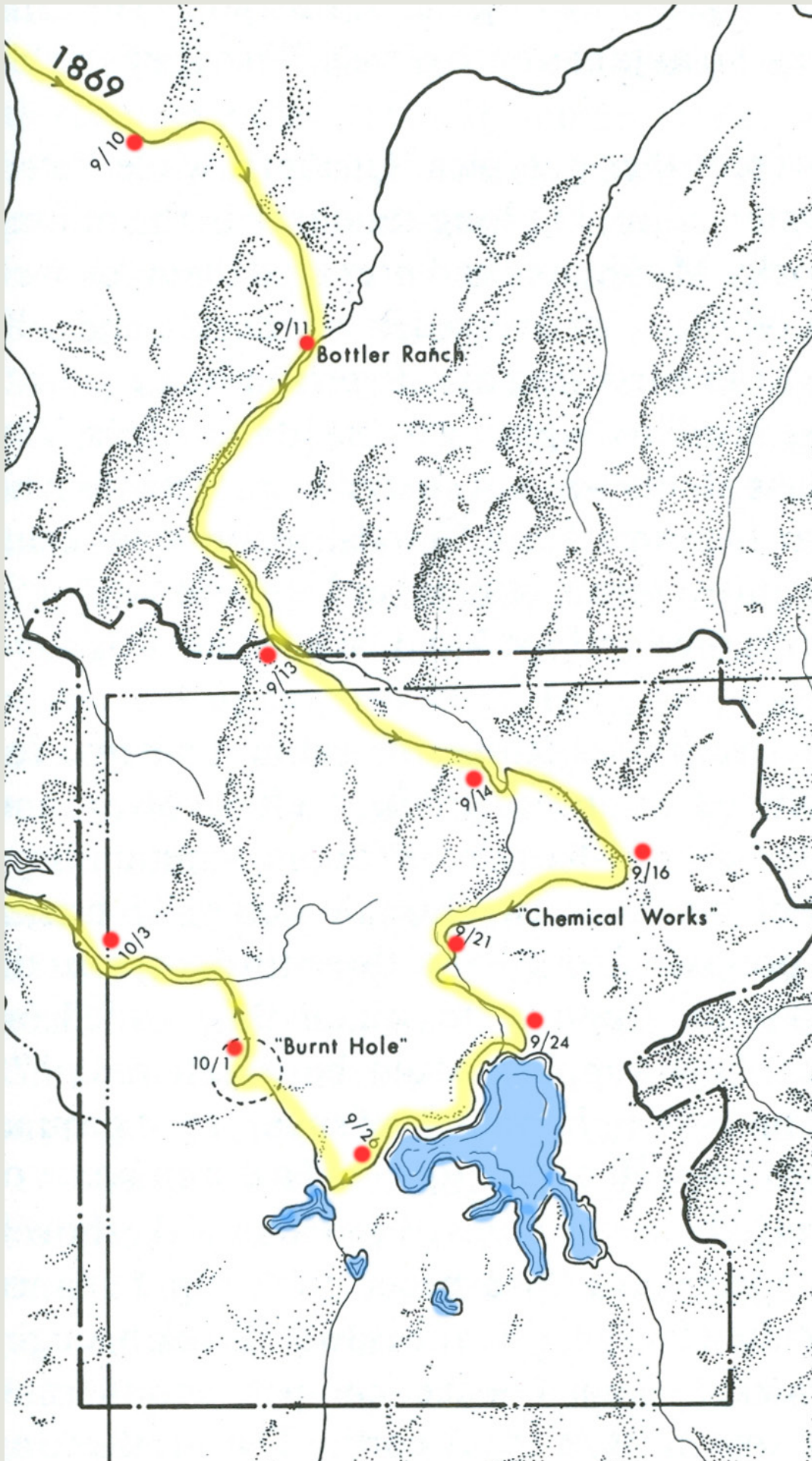
The presence of hot springs and other features in the vicinity induced the party to layover a day to explore their first Yellowstone wonders. Scrambling over the Overhanging Cliff, with its fine view of the outcropping columnar basalt arrayed along the opposite wall of the canyon, they descended to the Calcite Springs and proceeded to poke about the springs and vents that are undoubtedly the source of John Colter's tantalizing note on the Clark Map of 1812. While collecting specimens there, Cook nearly ended up in a steam vent later found to have a temperature of 194 degrees. Folsom thought he took his narrow escape rather coolly, considering the temperature. The ramble was concluded with a visit to the foot of Tower Fall (though they did not name it) on the return to camp.

From information obtained from prospectors who had been in the area at an earlier date, it was understood that the canyon beginning a short distance above their camp was continuous to the Falls of the Yellowstone, an obstacle "through which no one had been able to pass." The Folsom party therefore decided to cross the river at the ford opposite their camp, follow the valley of the East Fork (Lamar River) for a day's travel, and then cross over the Mirror Plateau in a direction calculated to bring them out near the falls. The route was successful but tedious.

That first night after crossing the Yellowstone River they camped in a forest-rimmed glade just below Calfee Creek. There, a feeling of loneliness oppressed them as they listened to the voices of the night. Folsom says,

**O**n September 13 the journey continued up the Yellowstone River past Devils Slide to the mouth of the Gardner. There, the ancient Indian trailway forked, one branch ascending Gardner River and the other paralleling the Yellowstone while climbing onto the Blacktail Deer Creek Plateau to pass around Black Canyon. They took the latter route to a pleasant campsite in an open meadow near the head of Rescue Creek.

The Indian trail they had followed to that point trends southward from the meadow, crossing a low ridge to a junction with the east-west thoroughfare known as the



“The wolf scents us afar and the mournful cadence of his howl adds to our sense of solitude. The roar of the mountain lion awakens the sleeping echoes of the adjacent cliffs and we hear the elk whistling in every direction... Even the horses seem filled with a feeling of dread, they stop grazing and raise their heads to listen, and then hover around our campfire as if their safety lay in our companionship.”

The trek across the Mirror Plateau toward the Falls of the Yellowstone began with a steep ascent up Flint Creek. The weather, which was dismal at the outset, turned increasingly stormy, and they sought shelter early in a grove of spruce trees below the summit. In that refuge they were comfortable enough in the blanket tent throughout the storm.

The morning of September 19 dawned clear and cold, with the snow-covered landscape glistening in the bright sunshine, which presaged a better day. Progress was slow after the plateau was reached: they traveled five miles to an overnight camp west of Wrong Creek on the first

day; an equal distance on the second brought them to the vicinity of Josephs Coat Springs, where they spent the afternoon investigating the very active thermal features and killing an elk to replenish their meat supply.

**T**he way was easier on the twenty-first with no underbrush or fallen timber, and Cook was riding ahead, followed by the two packhorses to which he was momentarily giving his attention, when his saddle horse stopped abruptly. “The animal had halted on the brink of the Grand Canyon in the notch between Artist and Sublime points.” Cook Says, “I sat there in amazement, while my companions came up, and after that, it seemed to me it was five minutes before anyone spoke.” After that first awe-inspiring view, the Folsom party made their way along the rim of the canyon, past the two falls, to a grassy bench on the east bank of the Yellowstone above the present Chittenden Memorial Bridge, and there they camped.

The following day they spent at the falls: “a day that has been a succession of surprises,” according to Folsom, who thought, “language is inadequate to convey a just conception of the awful grandeur and sublimity of this masterpiece of nature’s handiwork.” While there they measured the height of both falls with Peterson’s ball of twine and a forked stick. This was accomplished by Cook lying prone upon the rock at the lip of the fall and paying out the twine over the stick in accordance with signals from Peterson, who stood below where he could observe the descending weight. The result obtained for the Upper Fall (115 feet) was remarkably close to the accepted figure of 109 for that drop; at the Lower Fall, where mist and tur-

bulence interfered with the work, they did not do so well.

On September 23, the Folsom party left that “beautiful, picturesque, magnificent, grand, sublime, awful, terrible” Grand Canyon of the Yellowstone and continued on the east side of the river to a crossing opposite Crater Hills. Much of the day went into exploring the many thermal features there and at Mud Volcano, near which they camped for the night. The Mud Volcano was particularly impressive. Then, as now, it was a mud-filled cave opening upon a hillside, but the power of its frequent and regular activity was so great the three explorers could hear every explosion at their camp a half-mile away and imagined they could feel the ground tremble beneath them (as it did in the immediate vicinity of that awe-inspiring grotto.)

Soon after breaking camp the following morning, the Folsom party recrossed the Yellowstone River at what would later be known as the Nez Perce ford and followed the east bank to the outlet of the great, blue lake that extended into mountain-girt “arms” nearly twenty miles to the south. Turning east along the lake shore, they found a pleasant campsite on the grassy bench west of Mary Bay. At that place they were able to take their choice of ducks, geese, and trout to augment their dwindling supplies; indeed, it was the condition of the larder which decided them to turn homeward after marking their ultima Thule with a piece of rock on which Folsom inscribed their names and the date, and then inserted in a mortise in a pine tree.

Returning to the outlet of the lake, the Folsom party forded the Yellowstone at a riffle in the vicinity of the pres-



The Bottler Ranch in the Paradise Valley near today's Emigrant. Courtesy of USGS

ent Fishing Bridge and continued along the north shore of the lake, intending to cross in a westerly direction into the drainage of the Madison River, which they knew would lead them back to the settlements of Montana Territory. About noon they came to Bridge Bay, the present site of a crowded campground and bustling marina. Folsom's description of that little Paradise Lost is nostalgic now:

“We came to a small grassy opening upon the opposite side of which was a beautiful little lake, separated from the main lake only by a sandbar, which the surf had thrown up across the narrow neck, which formerly connected them... This was about one thousand yards across and was nearly reefed. Large flocks of geese and ducks were feeding near the shore or floating gracefully on its smooth surface. Beyond the lake the timber was tall and straight and to appearances as thick as cane in a southern swamp. This was one of the beautiful places we had found fashioned by the practiced hand of nature, that man had not desecrated.”

He added that it looked so inviting, with cool shades and a “vision of a supper upon fat ducks,” they decided to camp there.

On the twenty-sixth, the journey continued along the lake shore to the hot spring area now known as West Thumb, where they found so much to see that they laid over two days before pushing directly west, across the pine-covered ridges lying between Lake Yellowstone and the Firehole River headwaters of the Madison. As they were ascending the ridge west of Thumb Bay, Folsom took a final look at Yellowstone Lake in its mountain setting:

“...this inland sea, its crystal waves dancing and sparkling in the sunlight as if laughing with joy for their wild freedom. It is a scene of transcendent beauty, which has been viewed by few white men, and we felt glad to have

looked upon it before its primeval solitude should be broken by the crowds of pleasure seekers, which at no distant day will throng its shores.”

A due west course on the twenty-ninth led the Folsom



Devil's Slide, near Gardiner, is a landmark mentioned in the FCP diaries. Ri

party to Shoshone Lake near its northernmost bulge. They escaped from those geographically confusing environs as deLacy's prospectors had six years earlier by ascending the stream now known as DeLacy Creek and crossing over the Continental Divide onto White Creek, which led them into the Lower Geyser Basin after three days of rugged, cross-country traveling.

Thus, it was evening of October 1 when they rode out

of the timber opposite the Great Fountain Geyser just as it began to play. Cook says, "The setting sun shining into the spray and steam drifting towards the mountains gave it the appearance of burnished gold, a wonderful sight." Their reaction was to take off their hats and yell with all their might! They camped on White Creek, just above the geyser.



Having previously obtained some information from prospectors, they were able to identify the locality as the Burnt Hole or Death Valley. The latter designation seems to have created some apprehension, for Folsom says: “Although we experienced no bad effects from passing through the ‘Valley of Death,’ yet we were not disposed to dispute the propriety of giving it that name.” Indeed, the absence of faunal life gave support to such a misinterpretation; but how were they to know that the ungulates, and their predators, preferred greener pastures among the mountains at that season, or that the Firehole River was barren because the native fish of the Madison drainage were blocked-out by waterfalls?

A layover of a day allowed the Folsom party to visit the Middle Geyser Basin – the “Hell’s Half Acre” of Victorian tourists – where they noted that the stream of hot water discharged was sufficient to warm the Firehole River to blood heat a quarter of a mile below. Their observation that one spring about 250 feet in diameter “had every indication of spouting powerfully at times” is probably the first recognition of the eruptive nature of Excelsior Geyser.

The homeward journey was completed on October

11, making the elapsed time longer than anticipated and causing friends some concern. Of the immediate flurry of interest in this exploration, N.P. Langford says:

“On his return to Helena he Folsom related to a few of his intimate friends many of the incidents of his journey, and Mr. Samuel T. Hauser and I invited him to meet a number of the citizens of Helena at the director’s room of the First National Bank in Helena; but on assembling there were so many present who were unknown to Mr. Folsom that he was unwilling to risk his reputation for veracity, by a full recital, in the presence of strangers, of the wonders he had seen... But the accounts which he gave to Hauser, Gillette and myself renewed in us our determination to visit that region during the following year.”



A published account of the experiences of the Folsom party was given limited circulation quite by chance. In September 1868 Cook had met a Mr. Clark... and in the course of conversation told him some of the rumors concerning the Yellowstone region. The easterner's interest was so aroused that he proposed they explore the area; a proposal which got as far as a visit to Helena to discuss the project with "Judge" H. N. McGuire. His advice was that it was too late in the season for such a venture, and Mr. Clark returned to his eastern home without the experience of a Yellowstone trip.

Soon after returning from the 1869 exploration, Cook received a letter from Clark... He wanted to know what had been found. By return mail he was given information on the exploration from which the Folsom party had just returned, which so intrigued Clark he offered his services in finding a publisher for an article covering their adventures.

Both the New York Tribune and Scribner's (or Harper's) magazine refused the manuscript because "they had a reputation that they could not risk with such unreliable material." A less exacting publication, the Western Monthly Magazine of Chicago, finally accepted the account and published it in the issue of July 1870 under Cook's name (probably because he was the one known to Clark).

**D**uring the winter following the Folsom party's return from the Yellowstone wilderness, David Folsom went to work in the Helena office of the newly appointed and just-arrived surveyor general of Montana Territory, Henry D. Washburn. There, Folsom met that other civil engineer and Yellowstone explorer, Walter W. deLacy, and together they revised deLacy's "Map of the Territory of Montana..." which had first appeared in 1865, with a view to presenting the Yellowstone region with greater accuracy. This 1870 edition, which came off the press in time to serve the Washburn party of that year, was a tolerably good map, portraying the Yellowstone Lake correctly for the first time as well as relating the various drainages and features with reasonable accuracy.

Folsom gave General Washburn much detailed information on the Yellowstone region and its wonders, and he is credited with a similar suggestion to that made by Thomas Meagher in 1865 – that the area should be reserved for public use as a park. The basis for Folsom's suggestion is apparent in certain remarks made years later by his old comrade, C. W. Cook, at the park's Golden Anniversary celebration at Madison Junction in 1922.

"The night before we came to this junction we camped a little way up the Firehole River. We had decided to make that the last camp on our exploration and to follow the Firehole down to the Madison River and home. In the camp that night we were talking over the great array of natural marvels we had seen and the scenic beauty of the area we had traversed.

Peterson remarked that probably it would not be long before settlers and prospectors began coming into the district and taking up land around the canyons and the geysers, and that it would soon be all in private hands.

I said that I thought the place was too big to be all taken up, but that, anyway, something ought to be done to keep the settlers out, so that everyone who wanted to, in future years, could travel through as freely and enjoy the region as we had.

Then Folsom said, "The Government ought not to allow anyone to locate here at all."

"That's right," I said, "It ought to be kept for the public some way."

"None of us definitely suggested the idea of a national park. National parks were unknown then. But we knew that as soon as the wonderful character of the country was generally known outside, there would be plenty of people hurrying in to get possession, unless something was done."

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Not much has changed at Mammoth Hot Springs since William H. Jackson took the photo on the left in 1872. In 2010, modern day photographer Will Klaczynski captured the same site. (Left) Courtesy of USGS and (right) Will Klaczynski

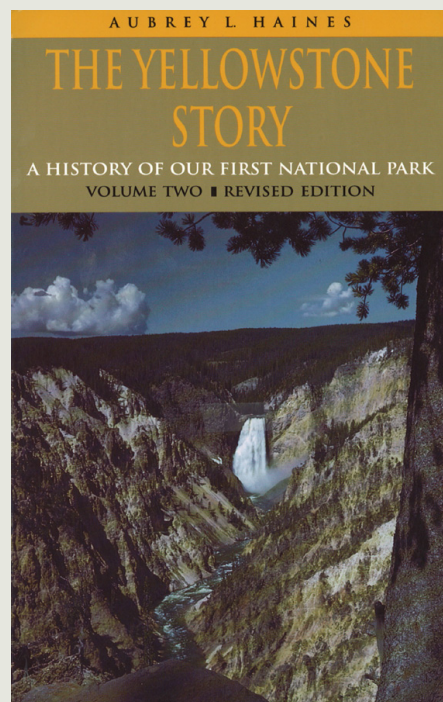
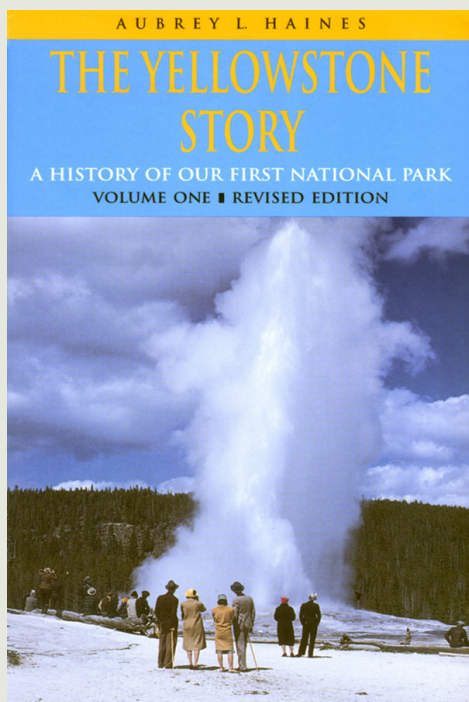
These then, were the contributions of the Folsom party of 1869: a descriptive magazine article, a greatly improved map, a suggestion for the reservation of the public interest, and the encouragement of the Washburn Party which followed their footsteps in 1870.

The second of the three articles outlining the Washburn Exploration will be in the next *The University of Montana's Crown of the Continent and Greater Yellowstone Initiative* e-magazine

*Aubrey L. Haines was Yellowstone National Park's historian from 1959 until 1969.*

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We highly recommend *The Yellowstone Story*, both Volumes 1 and 2 by Aubrey L. Haines. You can purchase these as well as research other Yellowstone oriented titles by visiting the Yellowstone Association's website [www.YellowstoneAssociation.org](http://www.YellowstoneAssociation.org)



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# Citizen Science

**A**s a University of Montana student majoring in Japanese, Evan Holmstrom never envisioned he would one day be using a field guide to identify animal droppings. He was, after all, a fan of punk rock concerts and a self-professed science-fiction movie aficionado—not a scientist.

That all changed his sophomore year when a friend convinced him to volunteer on a science inventory trip into the Sapphire Range. One trip turned into two and two into three. Four years later, Evan is now a trip leader, hiking the ridge tops and forested trails of Montana's last remaining wild places, documenting what he sees, and teaching what he has learned to other volunteers.

"It was a way for me to expose myself educationally to the natural sciences. I felt a conviction and had a responsibility. I was trying to learn as much as I could," he related.

Evan's exposure into this world is just the tip of the iceberg

of a growing development that is redefining what it means to be a scientist. It's a movement that is also getting people more involved in natural resource issues that have traditionally been the sole domain of trained technocrats and federal agencies.

*This is the Era of the Citizen Scientist.*

The practice of 'citizen science' has been around long before someone found a name for it. One hundred and thirteen years ago, a young member of the Audubon Society decided to organize a Christmas bird count. Instead of one pair of eyes in the sky, he recruited 27 volunteers. Today, that tradition has tens of thousands of participants and is the longest running citizen science survey in the world.

As technology has morphed over the last century, so too



Proof that citizen scientists are not “all work and no play.” A field crew takes a break in the Gallatin Range, Hyalite- Porcupine-Buffalo Horn Wilderness Study Area. Bob Allen

# in the Greater Yellowstone

By Jared White

has the citizen scientist. School kids can now download apps onto their smart phones that, when paired with the correct microphone, will monitor bat species in the night’s sky and upload the information to a central database for analysis.

In an era when even a middle-schooler can deliver data as dependably as a trained professional, you can bet it’s hard to figure out who is and who isn’t a citizen scientist. Unfortunately, there is no Peterson’s field guide to help out. Young or old, artists or plumbers, drivers of Subarus or Ford pick-up trucks, they have no distinct plumage patterns, having been spotted in both Patagonia fleece and canvas Carhartt vests. Only one thing is for sure: there are a whole lot of people willing to try it out.

According to Catherine Filardi, who has been managing citizen scientists like Evan as part of the University of Mon-

tana’s Wilderness Institute Program, that sheer number of volunteers is the primary strength of the movement. Filardi has never had a problem filling up her trips and says her volunteers, with minimal training, are capable of providing factual and meaningful data.

Each summer, the Institute trains and sends multiple groups of volunteers into remote areas of Montana’s backcountry to collect data that has either never been captured before, or was collected so long ago it’s officially antiquated. In just a few summers, her volunteers have inventoried 95 percent of the trail system across Montana’s seven remaining Wilderness Study Areas. The data is now helping managers establish an actual reference point to figure out whether the wild character of these landscapes is changing, and if so, what to do about it.

The actual information her citizen scientists provide is important because fewer and fewer professionally paid workers are around to do it themselves. As Filardi explains, “When the funding dries up, one of the first things to go is an actual field presence on the land. If the data isn’t collected, then the agencies don’t have an accurate pulse of the land that they are supposed to be managing.”

But behind all the numbers and objective scientific measurements the citizen scientists are capturing, Catherine wonders if perhaps there isn’t something else going on—something more emotional and more place-based simmering just below the surface. “The question,” Filardi asks, “is how this experience is impacting our volunteers. Does it create long-term engagement and stewardship in these natural resource issues playing out around them?”

### The Gallatin Range – a Natural Laboratory

Such questions are being experimented with in the

Gallatin Mountain Range at the northern edge of the Greater Yellowstone Ecosystem. Multiple organizations (including The Wilderness Society) are currently building on a citizen-science model to get more local folks aware of the range’s exceptional values and to engage them in efforts to protect it.

The Gallatin Range is after all, an ideal landscape. Just steps from 21st century health care and an international airport, wildlife still roam the hills and forests above a valley rapidly expanding with people.

Meet Kurt Meyers, a semi-retired carpenter who enjoys a vigorous cross-country ski. Kurt lives with his wife and two dogs at the northern tip of the Gallatin Range in Bozeman. An article on citizen scientist winter tracking excursions in the local newspaper last year gave him the idea to tag along on a few.

After three days of skiing alongside local biologists while looking for evidence of wolverine, lynx and fisher, he has found he doesn’t look at things the same way he used to. Now Kurt slows down, searches for signs, and



A UM Wilderness Institute leader confers with citizen scientists UM Professor of Mathematics David Patterson (right) and his daughter Gilly (center). The Big Snowy Mountains Wilderness Study Area. Courtesy of the UM Wilderness Institute.

tries to figure out what is happening around him.

“I’m always trying to piece together the clues of what I see in the snow,” he told me over the phone. “It’s funny, when you’re looking for it you start to realize there is a whole lot more going on out here than just you skiing.”

Does this awareness translate into actual engagement on natural resource issues as Catherine Filardi wonders?

“I think it fosters stewardship because you begin to take it more personally, and in that respect I have become more aware of the issues,” answers Kurt. “Rather than hearing about groups working to protect things, you start to inherently care about them yourself and that matters.”

## A New Voice in the Conversation:

The Gallatin Range could use a few more citizen scientists. Decades of conflicts over the management of this last unprotected roadless area adjacent to Yellowstone National Park have primarily focused on the impacts of conservation on recreational use. Newspaper headlines and federal agencies have drawn out the disagreements among user groups, but have failed to talk about the deterioration of elk security habitat, or the value of clean water supplies.



Collecting data on winter migration paths. Ben Donatelle

What we need is some perspective. As local communities look ahead to collaborative discussions to chart a future for their backyard backcountry, citizen scientists will be strong advocates reminding us there is far more going on out there besides backpacks, mountain bikes, skis and snowmobiles to name a few. There is still a wildness to those hills, and the citizen scientist is positioned to deliver both the science driven numbers and the thoughtful empathy needed to help us figure out what to do with it.

Back at the University of Montana’s Wilderness Institute, Filardi reflects on her volunteer, Evan Holstrom, and his transformation from Japanese major to amateur naturalist to eventual crew leader. She is inspired and hopeful, “A piece of the future of wilderness is growing and informing active citizens, who are not just using and learning from wilderness, but are aware of what it takes to be stewards of the land.”

*Jared White is the communications manager for the Wilderness Society.*

# The Cinnabar

By Steve Thompson

After a day hunting elk in the rugged Cinnabar Basin north of Yellowstone National Park, three of Montana's leading conservationists swapped stories and shared their dreams for the future of this landscape they cared so deeply about. It was 1982, and the day Len Sargent, Jim Posewitz, and Phil Tawney conceived the idea of the Cinnabar Foundation. The three men, along with Len's wife Sandy, pledged to raise money to provide long-term support to conservation groups in Montana and the Greater Yellowstone region.

Their friendship had been forged through the fiery trials faced by Montana's fledgling conservation movement in the heady years following the 1972 Constitutional Convention in which Montana became the first state to guarantee its citizens a "clean and healthful environment." In particular, they became close allies in the successful 1970's-era fight to block the proposed Allenspur

Dam that would halt the free-flowing Yellowstone River and divert its waters to produce the steam required for coal-fired power plants.

With the Yellowstone River protected, the Cinnabar Foundation set to the task of bolstering Montana's young conservation groups. Resources were slim, and grants in the early 1980s ranged from a whopping \$200 to \$923.

Robin Tawney Nichols, in her 2008 biography of Len and Sandy Sargent, *A Legacy of Activist Philanthropy*, writes that early Cinnabar Foundation board meetings always convened at the Sargent Ranch toward the end of Montana's big-game hunting season, and they did not last long. "We'd turn that 20 minutes worth of board work into three days of elk hunting," recalls Posewitz, who served as the foundation's part-time executive director until his retirement in 2010.

# Foundation



Len and Sandy Sargent... In Robin Tawney's words, "a committed couple who combined activism with philanthropy to make a difference." Courtesy of the Cinnabar Foundation

In 1988, Len's personal wealth soared into the millions when his minority share of a family-owned media company was purchased by relatives. And that's when the Sargents — and the Cinnabar Foundation — became significant philanthropists in support of conservation in Montana and the Yellowstone region.

Tragically, Len and Sandy Sargent and Phil Tawney all died in the mid-1990s. But today an entirely new board of directors guides the foundation, which remains true to the vision and priorities of its founders. Nearly 30 years after its creation, more than 1,400 grants totaling \$6 million to hundreds of different organizations, schools and universities have been awarded.

Since the Cinnabar Foundation was legally incorporated in 1983, the diversity and number of conservation groups in the region have soared, as have the challenges

for conserving Montana's and the Yellowstone region's clean waters, abundant wildlife, public wildlands, wide-open landscapes, and recreational access.

As Montana's homegrown conservation fund, the Cinnabar Foundation invites concerned individuals and families to create their own conservation legacy by investing in the foundation's mutual fund for conservation. [www.cinnabarfoundation.org](http://www.cinnabarfoundation.org)

*Steve Thompson is the executive director of the Cinnabar Foundation. He can be reached at [steve@cinnabarfoundation.org](mailto:steve@cinnabarfoundation.org).*





LPHS students get out and witness first hand what is happening in the landscape around them. Will Klaczynski

# ter Yellowstone **Collaboration**

**Lone Peak High School and the University of Montana**

By Patty Hamblin, Paul Swenson, and Nancy Shiel



**O**n a chilly September evening all 35 members of Lone Peak High School's freshman and sophomore classes could be found huddled around a campfire at the Red Cliff Campground, ten miles south of Big Sky, Montana. In an attempt to meet LPHS's mission of place-based education, this was an educational three-day, two night camping trip in which the campers studied geological and geographical elements of the landscape where they live.

The outing was just one of many chances for students to explore possibilities for their capstone project—a new graduation requirement enacted last spring to help create more well-rounded graduates who will be better prepared to enter life after high school, whether that be in college or in the work force. The capstone project incorporates community and school service and culminates in an internship in a field of study that interests them.

With place-based education at the forefront of progressive pedagogy, one of the goals at Lone Peak High School is to aid in students' understanding of the natural world that surrounds them. Teachers created an event that was designed to do just that. Place-based education provides dynamic learning experiences that contrast with the standard classroom environment. In a typical language arts class, students are asked to imagine what the wind feels like on their faces as they stand atop a rise on a ridge. In the expeditionary classroom, students actually get to feel this sensation.

At the beginning of the fall expedition, students were challenged to consider their place in the environment and how they would respond or adapt to dramatic shifts in their day-to-day routines. What would you do if your life were turned upside

down? How would you respond if your route to work was changed? What would happen if the land before you were laid bare? In reality, it was not their lives that were tossed about, but in the Meadow Creek drainage just five miles south of their campsite, the lives of the plants and animals there had abruptly been altered.

During the very wet spring of 2011, a pre-historic landslide was reactivated in this drainage, sliding 500-800 meters—about a half-mile. Consequences of the event included disruption of the migration routes of several large mammal species, including elk and deer, it dammed Meadow Creek creating several new ponds, and turning old ponds that had formed on the original landslide into hilltops, and laying bare soil and rock that had not been exposed to the surface in thousands of years. This new landscape is the area of study chosen for LPHS students. "It's going to be a long term study, one that the school will be involved with over many years," stated science teacher Paul Swenson. "I hope that several students get excited about the opportunity to study a large disturbed region such as this and see it change over time."

Students in Mr. Swenson's integrated science courses and in environmental science teacher Nancy Sheil's classes study plant succession, geology, soil science, water science, and other biological and physical sciences that can be applied to this unique area. In addition to the sciences, students will also be expected to incorporate concepts from other disciplines. Using documentary photographs and video to show long term effects of weathering, slide movement, plant succession and animal adaptation to their new surroundings; applying journalistic techniques and skills to record, interpret, and publish findings from



Will Klaczynski



Will Klaczynski



Sitting across from the Meadow Creek landslide, students take notes as Paul Swenson lectures on the geology of the slide. Will Klaczynski

the research as it develops each year; utilizing skills from their language arts classes to polish the documentations for publication; and applying the knowledge base gained in studying an unstable, unpopulated area to one whose locale is similar and then identifying the potential social and economic impacts that development on unstable land may bring... all of this is designed to aid in and round out a student's understanding of the diverse ecosystem in which they live.

Several expeditions have been scheduled to give students multiple opportunities to consider options for their capstone project and, perhaps, ultimately a career. They are expected to get their hands dirty and become immersed in these endeavors in hopes of finding something that truly interests them. In addition to the LPHS teachers taking the lead role in this project, the University of Montana has made a commitment to study similar attributes and changes in the Meadow Creek drainage. With the assistance of University of Montana geography professor and part-time Big Sky resident Rick Graetz, our young scholars are being introduced to the myriad possibilities of interesting and genuine career paths available to them.

Admittance processes are becoming quite competitive today and many colleges and universities are looking for students who stand out in some unique way. The diverse opportunities

afforded to LPHS students will certainly give them a leg up when it comes to college applications. Our high schoolers, with the help of their teachers and UM and BYU-Idaho advanced students, are putting together portfolios that show the experiences they have had working in the field. Portfolio pieces might include a video of a lecture series, an article published in any number of newspapers and journals, or slides showing a student-led field course. The combination of college level studies and stellar student portfolios will no doubt impress admittance offices.

One of the major goals set forth at the school is instilling in students a desire to become actively engaged in their community on a more personal level. It is our hope they will begin to care about what happens to the landscape they live in and want to become an integral part of the decisions being made about it. We think we are on track to fulfill our mission.

*Patty Hamblin teaches English, Paul Swenson's specialty is integrated science courses and Nancy Sheil is the environmental science instructor at Montana's newest high school, Lone Peak High School in Big Sky.*

# THE EPIC STORY *of* YELLOWSTONE

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# EMPIRE *of* SHADOWS

"George Black has written a masterful and riveting history of the exploration of Yellowstone. *Empire of Shadows* will forever change our understanding and conception of this sacred American place."—DAVID GRANN, author of *The Lost City of Z*

GEORGE BLACK



# Book Review/Recommendation

By Jerry Fetz

Jim Bridger, John Bozeman, John Colter, Pierre-Jean De Smet, Malcolm Clarke, Two Bears, John Mullan, Heavy Runner, Chief Joseph, Thomas Francis Meagher, Brigham Young, Thomas Moran, Joe Kipp, Henry Dana Washburn, William Tecumseh Sherman, Phil Sheridan, Samuel Hauser, Nathaniel Pitt Langford, Teddy Roosevelt, Gustavus Cheyney Doane, and countless more famous names from 19<sup>th</sup> century Montana and western history, many of them memorialized as names of places, towns, and mountains: they are all found here in this magisterial book by George Black. Among the various things he accomplishes in this book, Black has taken these names, many of them etched in the landscape and on the maps of Montana, Wyoming, and the inland West, as well as featured in countless history books and novels of our part of the West, and placed them side-by-side or one after another in the bigger history, the larger “epic” story of our part of the American West which he tells here with vast knowledge, honesty, nuanced understanding, linguistic skill, imagination, and as a terrific story teller.

The book’s title: *Empire of Shadows: The Epic Story of Yellowstone*, although somewhat less than clear in meaning when one starts turning the pages, is soon realized in a very impressive way by all that follows. “*Empire of Shadows*” suggests a story about events, people, places, and movements of history that often aren’t readily visible at first glance. “Empire” and “Epic” suggest grandeur, importance, and a long and complex story. The story of the exploration of and expeditions into Yellowstone; the difficult and unsettling tales of the conflicts between the Europeans and Americans (fur traders, gold seekers, explorers, Civil War refugees, soldiers, ranchers, railroad builders, settlers) and the original inhabitants of the region—as well as the various tribes’ interaction amongst themselves; the stories of the growth of the European-American presence (commercial forts, towns, farms and ranches, businesses and, later, industries); the down-sizing of the territory available to the Natives and the drastic diminution of their ways of life—they are all woven together by George Black into a genuine “epic story” of grand, dramatic, and (sometimes) tragic, proportions.

So where does “Yellowstone” come into this ambitious narrative? And what is meant here by “Yellowstone?” This book (thoroughly researched, with an extensive set of notes and a huge bibliography, in 5 parts, 35 chapters, 428 pages, plus a wonderful set of historic photos) can certainly be read productively and wonderfully as a marvelous and informative (and even entertaining) history of the Montana territory in the 19<sup>th</sup> century prior to statehood. But it is also, and more importantly, as the title implies, a history of “Yellowstone:” of the river, of the people and peoples who lived on or near it, crossed it, used it, oriented themselves by it; of what we have come to call the “Greater Yellowstone” area, stretching from Montana and Wyoming in the east and south to Idaho in the West; and, of course, of the explorations and the establishment of “Yellowstone National Park,” the first national park in the world.

The Yellowstone River and its several tributaries are woven like threads through the entire story. Early myths ascribed to the Native tribes in the region about this frightening place; anecdotes, vignettes, and full-blown stories about the first white explorations of “the Yellowstone” and its increasing importance for the European-Americans; seeming digressions about people and issues and places removed in distance from “the Yellowstone” which gradually, however, take on significance as the history of the Montana territory unfolds between the 1830s and the 1880s and as the River (Yellowstone), region (Greater Yellowstone), and the park itself (Yellowstone Park) become historical sites, crucial symbols, and important players in the seemingly inexorable, but untidy and conflicted history of the region as it marches forward toward the 20<sup>th</sup> century: ALL of this and more is found in *Empire of Shadows*.

And the reader is taken into the heart of the “epic” battles between the Natives (sometimes noble, sometimes not so noble) and the “manifest destiny” toting European-Americans (ditto) who intrude on the Natives, alter by accident and by design their ages-old ways of life and living, and comes out with an understanding and appreciation for the ambiguities of history that are often left out of

“As George Black unfurls the epic story and the many smaller stories that, like the river’s tributaries, flow both in and out of the main stream, the reader is taken into the exceptional lives of a multitude of players, especially the most important ones, and quickly forgets that they seemed initially to be digressions from the “epic story” of Yellowstone. At least that’s how it was for this enchanted reader.”

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“history books” and are consigned to the “shadows.” And, it perhaps goes without saying, the reader is led (willingly) into the geological and natural wonders of this magical place, the core of which was to become Yellowstone National Park in March, 1872, this “Wonderland” as one of its earliest nicknames termed it, following both the rivers and canyons, climbing the almost insurmountable peaks and mountain ranges, and confronting the mysterious geysers, cauldrons, and waterfalls with the members of the three major explorations of the region before it became the park.

I hope what I have written above will entice you all to pick up this marvelous book and read it, a book that one eminent Western historian has called “an engrossing chronicle of the vast sweep of Western American history” (Robert Utley) and another well-known historian referred to as “a...dynamically written study of the hidden history of greed and idealism, beauty and violence, which

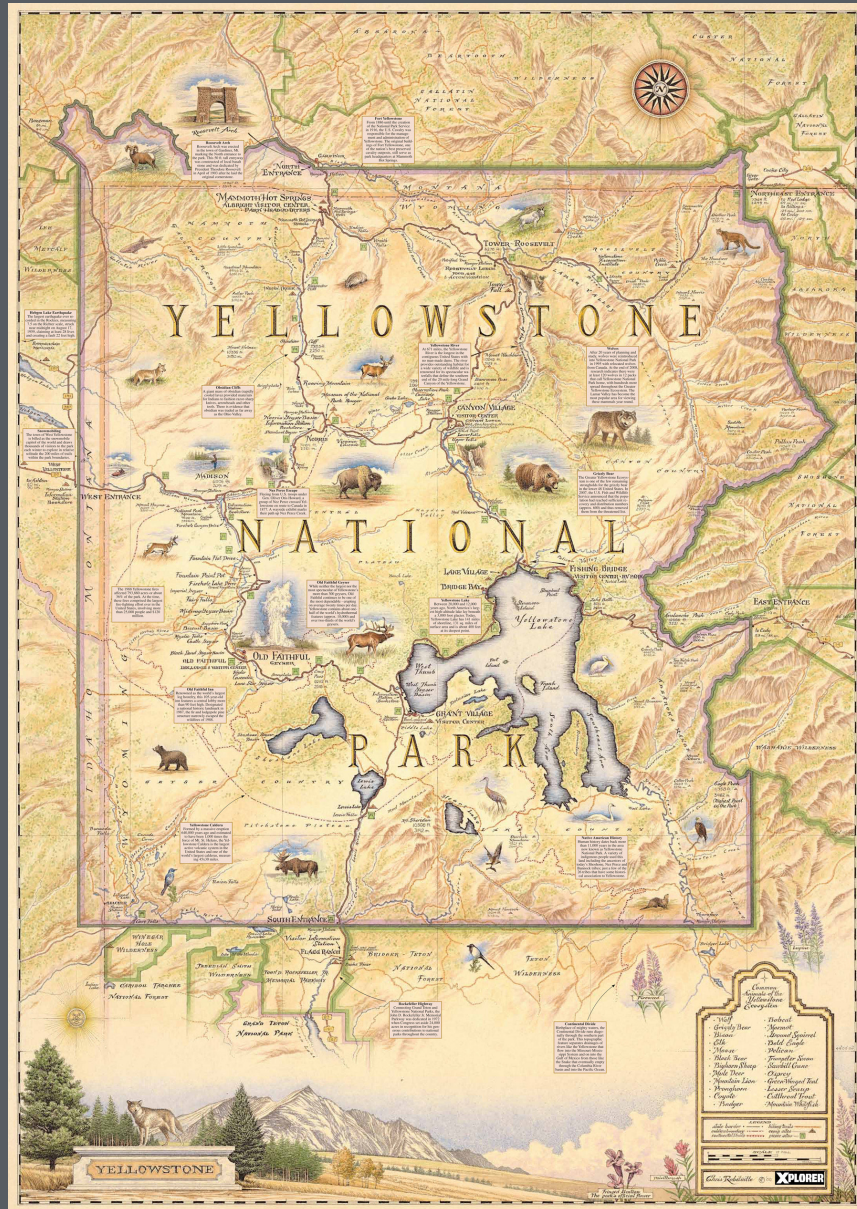
led to the creation of Yellowstone National Park (Richard Slotkin). There you have it from critics and reviewers far more eminent in this context than me. But read it and I’ll bet you’ll agree with me that it’s great history; it provides a great and exciting look into our (Montana’s and our region’s) complex and not always pretty past, a past the shadows and legacy of which are still with us, all around us; and it is a compilation of exceptionally well-written, interconnected, and important stories. In short: it’s a great read, and I recommend it enthusiastically to you all.

Jerry Fetz

*Jerry Fetz is a UM professor and emeritus dean of the College of Arts and sciences and co-director of The University of Montana’s Crown of the Continent and Greater Yellowstone Initiative.*

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