Lost Legacy: Jackson's Little Hole

A Survey of the Place Name Jackson's Little Hole

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Introduction

The goal of this project is to comprehensively examine the place name "Jackson's Little Hole" as well as other variants of this name (i.e. Little Jackson Hole), and provide authoritative documentation of the usage of "Jackson's Little Hole" within the geographical area known today as Bondurant, Wyoming. To date there has not been an exhaustive study and analysis of the landscape and place name historically identified as "Jackson's Little Hole."

Research includes in-depth examinations of fur trapper journals and biographies, United States Government Geographical Surveys, chronicles of Mormon and Christian missionaries, letters and narratives of travelers, Post Office records, newspapers, Archives and Map Collections of the Museum of the Mountain Man, Brigham Young University, Wyoming State Archives, University of Wyoming, and other relevant primary and secondary sources.

Themes of this study include historical background and context, which involves an examination of people and events associated with the landscape, a historic geographical analysis, and a chronology of use of the landscape and the place name Jackson's Little Hole through multiple periods of significance from the early 1800s to the 1940s.

Jackson's Little Hole
Chronology of Landscape & Place Name Use

Date(s)		Reference/Comment
October, 1811	**Wilson Price Hunt's party of westbound Overland Astorians led by John Hoback traveled through the area what would later be named Hoback River, Hoback Canyon, and Jackson's Little Hole[1]**	***Astoria, or Enerprise beyond the Rocky Mountains* by Washington Irving, 1836**
October, 1812	**Robert Stuart's returning party of Overland Astorians (eastbound) retraced Hunt's 1811 westerly route**	***The Discovery of the Oregon Trail: Robert Stuart's Narratives of His Overland Trip Eastward from Astoria, 1812-1813* edited by Phillip Aston Rollins, 1935 reprinted 1995**
Fall, 1824	**Jedediah Smith and trappers passed through Green River Valley and a smaller valley about 20 miles west which would later be named Jackson's Little Hole as well as Hoback River and Hoback Canyon (also named later)**	***The Ashley-Smith Explorations and the Discovery of a Central Route to the Pacific, 1822-1829*, ed. Harrison Clifford Dale, 1918**
1824 – 1840	**Green River Valley evolves into one of the most productive beaver trapping areas of the West**	**Numerous sources See References**

[1] With the exception of author Washington Irving's 1836 book *Astoria*, there are no records of explorers, fur trappers, traders, mountain men, or missionaries who used the name Hoback River or Hoback Canyon from 1811 through 1871. The name Hoback River first appears on a map in 1872 and was officially accepted by the Board of Geographic Names in 1915. The name Hoback Canyon was also officially determined in 1915. Likewise, the name Jackson's Little Hole, which almost certainly was used verbally, did not appear as written documentation until 1832. However for the ease of readability, the author of this survey has opted to use the names Hoback River, Hoback Canyon, and Jackson's Little Hole throughout.

1825	**Rendezvous Supply System began**	**Numerous sources See References**
1825	**Davey Jackson recorded as being in the Rocky Mountains with written documentation. It is believed that Jackson was in the "mountains" as early as 1822, but there is no written documentable evidence to support that date**	**"David E. Jackson" by Carl D. W Hays in *The Mountain Man and the Fur Trade of the Far West* Vol. IX edited by Leroy Hafen, 1972** ***Obstinate Hope: the Western Expedition of Nathanial J. Wyeth* by Jim Hardee, 2013**
July, 1832	**William Sublette, Robert Campbell, Nathanial J. Wyeth traversed South Pass, Green River, Jackson's Little Hole, and Hoback Canyon enroute to Rendezvous in Pierre's Hole**	**"The Correspondence and Journals of Captain Nathanial J. Wyeth, 1831-6." *Sources of the History of Oregon*, Vol. 1 edited by Frederick G. Young, Oregon Historical Society, 1899 (pgs 157-58)**
August 6, 1832	**Warren Ferris traveled from Snake River through Hoback Canyon to Jackson's Little Hole** **First written use of Jackson's Little Hole**	***Life in the Rocky Mountains*, W.A. Ferris, 1940**
August 12, 1832	**Warren Ferris traveled back through Jackson's Little Hole. He refers to Hoback Canyon as the "Narrows"**	***Life in the Rocky Mountains*, W.A. Ferris, 1940**
August, 1832	**Benjamin Bonneville traveled from the Green River Valley passing through Jackson's Little Hole and Hoback Canyon** **(see Bonneville 1837map entry)**	***Adventures of Benjamin Bonneville*, Washington Irving, 1837. Edited by Edgerley Todd and reprinted 1961** ***Benjamin Bonneville: Soldier of the American Frontier* by Edith Haroldsen Lovell, 1992**

July, 1833	**Warren Ferris traveled through Jackson's Little Hole and the "Narrows" (Hoback Canyon)**	***Life in the Rocky Mountains*, W.A. Ferris, 1940**
July, 1833	**Benjamin Bonneville traveled via Hoback Canyon and Jackson's Little Hole to Rendezvous being held on the Green River at his fort**	***Adventures of Benjamin Bonneville*, Washington Irving, 1837** ***Benjamin Bonneville: Soldier of the American Frontier* by Edith Haroldsen Lovell, 1992**
May, 1834	**Warren Ferris traveled through Jackson's Little Hole and the "Narrows" (Hoback Canyon)**	***Life in the Rocky Mountains*, W.A. Ferris, 1940**
August, 1835	**Reverend Samuel Parker, Joe Meek, Jim Bridger camped in Jackson's Little Hole on the eastern side of Hoback Canyon following Rendezvous**	***Journey of an Exploring Tour Beyond the Rocky Mountains in 1835* by Samuel Parker, 1840 reprinted 1967.** **(Note: Later sources have corrected Parker's location to be that of Jackson's Little Hole rather than Jackson's Hole as he stated in his 1840 book.)** ***Jim Bridger – Mountain Man* by Stanley Vestal.** **1946 reprinted 1970** ***The River of the West* by Frances Fuller Victor, 1870**
1836	**Warren Ferris completed a manuscript map, which showed Yellowstone, Jackson's Hole, Jackson's Little Hole, Pierre's Hole and many other landmark place names.** **First use of Jackson's Little Hole on a map.** **However, his map is not published until 1940**	**Original map at Brigham Young University, Provo, UT** **Copy of map (in poster format) at Museum of the Mountain Man, Pinedale, WY**

1836	**First published use of the name *Hoback's River* in *Astoria* by Washington Irving**	***Astoria, or Enterprise beyond the Rocky Mountains* by Washington Irving. 1836**
1837	**Osbourne Russell traveled through Jackson's Little Hole**	**Journal of a Trapper: Or Nine Years in the Rocky Mountains, 1834-1843. 1921 reprinted 1965**
1839	**Washington Hood published a manuscript map based on data from William Sublette and others entitled "Map of the Rocky Mountains." He identified Jackson Hole and Jackson's Little Hole. The Hoback River is labeled Jacksons' Fork**	**Crop of original map located at the National Archives. Online copy available from National Park Service**
1840	**Father de Smet camped at Jackson's Little Hole**	**Life, Letters, and Travels of Pierre-Jean de Smet, S.J., 1801-1873, edited by Hiram M. Chittenden, 1905**
1857	**Frederick Lander drew "Sketch Map of the Country between South Pass and City of Rocks" with Jackson's Little Hole labeled**	**Original map located at the National Archives**
1858	**Frederick Lander created a map entitled "Fort Kearney South Pass Honey Lake Wagon Road" with Jackson's Little Hole labeled**	**Map from David Rumsey Collection**
1858	**The United States War Department produced a composite map from government explorations from 1840-1857 entitled "Fort Laramie and the Great Salt Lake" with Jackson Little Hole labeled**	**Original map located at the National Archives**

1859-60	**Captain William F. Raynolds, Topographical Engineer Expedition explored the Grand Teton and Yellowstone regions with geologist Ferdinand V. Hayden. Jim Bridger served as guide.** **Jackson's Little Hole labeled, but in the wrong location – nearer today's Hoback Junction. Hoback River is not labeled.**	***Up The Winds and Over the Tetons* by Marlene Merrill, 2012**
1872	**United States Geological Survey of the Territories embracing portions of Montana, Idaho, Wyoming, and Utah conducted by Ferdinand V. Hayden** **Jackson's Little Hole appears in the text of the Hayden's report but does not appear on the map. Hoback River is labeled on survey map.**	**Sixth Annual Report of United States Geological Survey of the Territories embracing portions of Montana, Idaho, Wyoming, and Utah by Ferdinand V. Hayden, 1873**
1878	**United States Geological Survey of the Territories embracing portions of Montana, Idaho, Wyoming, and Utah conducted by Ferdinand V. Hayden** **Jackson's Little Hole does not appear in the text or on the survey map. Hoback River is labeled.** **Mushbach is the only Survey party member to record the name Little Jackson's Hole in his diary, but in the wrong**	**Twelfth Annual Report of United States Geological Survey of the Territories: A Report of Progress of the Exploration in Wyoming and Idaho by Ferdinand V. Hayden, 1883** **"Pioneer Diary Tells of Yellowstone Park Trip in 1878," by J. E. Mushbach in The Billings Gazette August 16, 1936** **A.C. Peale Diary 1878 in F.M. Fryxell Collection #1638, University of Wyoming, American Heritage Center**

	location. (Most likely he heard the name from Hayden). Mushback also recorded the name Hoback's Canyon in his diary.	
1893-1907-1915	**General Land Office Surveys of Wyoming** **Hoback River is labeled.**	**Surveys available online** **https://www.wy.blm.gov/cadastral/countyplats/sublette.htm**
1900	**Benjamin Franklin Bondurant became one of the first settlers in Hoback Basin once known as Jacksons' Little Hole. His ranch served as the first Post Office, which began operation in 1903. Mrs. Bondurant worked as postmistress until 1926. Bondurant was the Post Office name from 1903 until 1935. From 1935 until 1938, the Post Office was named Triangle F Ranch. In 1938, the name Bondurant was reinstated.**	***Tales of the Seeds-Ke-Dee*** **Published by the Sublette County Artists' Guild, 1963**
1915	**Board on Geographic Names decision on Hoback River and Hoback Canyon becomes official.** **Hoback's River (possessive) cited as a variant in 1907.**	**https://geonames.usgs.gov**
1946	**Merrill Mattes, NPS historian published a map entitled "Orientation Map of the Rocky Mountains" in the Pacific Northwest Quarterly, April, 1946 to accompany his article "Jackson Hole, Crossroads of the Western Fur Trade, 1807-**	**Map in *Pacific Northwest Quarterly*** **April, 1932**

	1929." On that map he applied the name "Little Jackson Hole." To this author's knowledge that map was only published in Matte's article.	
1962	**Merrill Mattes, NPS historian published a conjectural map of John Colter's travels in his book Colter's Hell and Jacksons' Hole** **Jackson's Little Hole is labeled as well as identifying (Jackson's Fork) as a variant of the Hoback River.**	**Colter's Hell and Jackson's Hole by Merrill Mattes, 1962, reprint 1971**
1966	**Jackson's Little Hole was included as a place name and significant landmark in *Bonney's Guide to Grand Teton National Park and Jackson's Hole***	***Bonney's Guide to Grand Teton National Park and Jackson's Hole* by Orrin and Lorraine Bonney, 1966**

Jackson's Little Hole

Historic Context

Location

The nine-mile long and four-mile wide valley in Sublette County, Wyoming between the head of Hoback Canyon and The Rim, recognized today as Bondurant, was once known as *Jackson's Little Hole* by hundreds of fur trappers and traders, a few missionaries, and assorted other Euro-American travelers and explorers in the area between the early 1830s and 1878. During that time *Jackson's Little Hole* seemed to be a common place name, which was passed on through oral tradition as few maps of the area were produced. With the vanishing presence of fur trappers and traders by the 1840s as well as government exploring expeditions by the 1880s, the name *Jackson's Little Hole* fell into obscurity.

"Holes" – Today's Valleys or Basins

According to the United States Geological Survey's (USGS) Geographic Names Information System (GNIS) any "natural depression or relatively low area enclosed by higher land (amphitheater, cirque, pit, sink)" is classified as a basin. In the era of fur trappers and early western explorers, valleys or basins surrounded by mountains or rugged terrain were identified as "holes." While searching for the best beaver hunting grounds in the areas that would later become the states of Montana, Idaho, Utah, Colorado, and Wyoming, the roaming fur trappers named numerous "holes." Big Hole, Burnt Hole, Pierre's Hole, Brown's Hole, Gardiner's Hole, Jackson's [Big] Hole, and Jackson's Little Hole are just a few of the place names that these men of the mountains attached to the landscape. Most of these names have been changed such as

Pierre's Hole is now Teton Basin and Jackson's Little Hole is now Hoback Basin or Bondurant. Jackson Hole is one of the few "holes" that survived into the 21st century.

Euro-American's First Knowledge of Present-Day Western Wyoming

In 1809-10, fur trade entrepreneur Andrew Henry established a post for his trappers on the Bighorn River and the Three Forks of the Missouri. After being run out by the hostile Blackfeet Indians, he moved farther southwest and built some cabins on Henry's Fork of the Snake, near today's St Anthony. John Hoback, Jacob Reznor, and Edward Robinson were in the employ of Henry at that time and apparently explored the area around present-day Jackson Hole. Under supplied with equipment and food, Henry's fur trapping excursion broke up in the spring of 1811. Hoback, Robinson, and Reznor stayed in the mountains to trap and eventually headed east landing in today's northeast Nebraska.

It was there that these three men encountered Wilson Price Hunt who was in command of a party of about sixty men heading to the coast of Oregon. Hunt was in charge of the overland expedition of John Jacob Astor's Pacific Fur Company. In 1810, the year before Hunt's departure, Robert Stuart, a partner in the Pacific Fur Company, headed another party bound for Oregon via ship around Cape Horn. These two groups of men were the foundation of what Astor hoped would be a lucrative enterprise. Astor founded the Pacific Fur Company in 1809 with the goal of establishing a trading post at the mouth of the Columbia River in Oregon. His lofty plan was to gather furs at this strategically positioned coastal post that could be traded with China for tea, silks, spices, and other Asian commodities. Astor anticipated large profits from the sale of these coveted goods in United States and European markets. Upon learning of the wilderness

experience of Hoback, Robinson, and Reznor, Hunt engaged the three men to guide his party to the Columbia River.

Rather than travel via the Missouri River where they could encounter hostile Indians, Hoback, Robinson, and Renzor chose to travel overland across the area that would later become Wyoming. Their westward trek took them beyond the Wind and Green rivers to a then unnamed river and canyon, which would connect the overland excursionists with the Snake River. Presumably in 1810, Hoback and his two companions explored the river and canyon that would later bear his name and felt comfortable traveling though it even though the canyon was somewhat treacherous. After experiencing the tumultuous nature of the surging watercourse of the Snake River also known as the Lewis Fork, Hunt's party[2], gave the river yet one more name, the Mad River. After making use of Henry's old cabins at Henry's Fork of the Snake River, Hunt and his entourage continued westward arriving in Oregon in February, 1812.

On June 29, 1812, Robert Stuart and five others set out from Astoria to report the status of Fort Astoria to John Jacob Astor Initially, Stuart wanted to avoid the route taken by Hunt, but skirmishes with Crow Indians forced his party to cross over Teton Pass to Jackson Hole and travel down through Hoback Canyon in October, 1812. Stuart then followed the advice of a friendly Shoshone Indian who told them about a low lying passage through the Wind River Mountains. This easy route was either forgotten or overlooked for several years after Stuart's return until fur trappers and traders rediscovered it in the 1820s. By the late 1830s, this easy route, then known as South Pass, became heavily utilized by thousands of emigrants on the Oregon Trail.

[2] Hunt's party were later called The Astorians.

Jackson's Little Hole: A Thoroughfare of Travel

In the 1820s, William Ashley and his partner Andrew Henry embarked into the Rocky Mountain fur trade. Hundreds of men answered Ashley's 1822 call for "enterprising young men," to become fur trappers in the West including Jim Bridger, Thomas Fitzpatrick, Jedediah Smith, William Sublette, and David E. Jackson, namesake of Jackson's Hole and Jackson's Little Hole. Over the next two years, Ashley launched several expeditions that resulted in varying degrees of success. In 1824, Smith and his men rediscovered South Pass and landed in the Green River Valley, which they found to be teaming with beaver. Smith's men fanned out in the region of the Green River and capitalized on the rich hunting ground. Most likely, this is when the trappers first encountered the verdant valley with rolling hills and extensive meadows that extended from the head of the Hoback Canyon to the Rim or "Low Divide"[3], which would become known as Jackson's Little Hole.

Exactly when David Jackson's name was attached to this valley as well as the large valley to the northwest called Jackson's Hole, is unknown. When David Jackson actually saw the two "holes" that would bear his name is also unknown. Many stories of the naming of Jackson's Hole and Jackson's Little Hole abound, but modern day fur trade historians have found a lack of evidence that documents any specific date. At some point even the Hoback River was called Jackson's Fork on a few 19th century maps. However, most historians agree that the two valleys or "holes" were probably David Jackson's favorite places and the name attribution evolved from his personal fondness for those locales.

[3] Frederick Lander's 1857-58 maps identified the Rim area as a Low Divide.

In 1825, Ashley brought supplies to his trappers overland and thus began the famous Rendezvous. This resupply system would operate annually at a pre-determined location for the next fifteen years.[4] Between 1825 and 1840, the Rendezvous as well as the bountiful supply of beaver kept the fur trappers and traders crossing and re-crossing the Hoback River and Jackson's Little Hole on a regular basis. Fur trappers, traders, missionaries, and other explorers such as Warren Ferris, Osborne Russell, Joe Meek, Nathanial Wyeth, Father Pierre-Jean de Smet, Reverend Samuel Parker, and Captain Benjamin Bonneville all kept journals and recorded their pleasant respites at Jackson's Little Hole as well as their arduous journeys through Hoback Canyon.

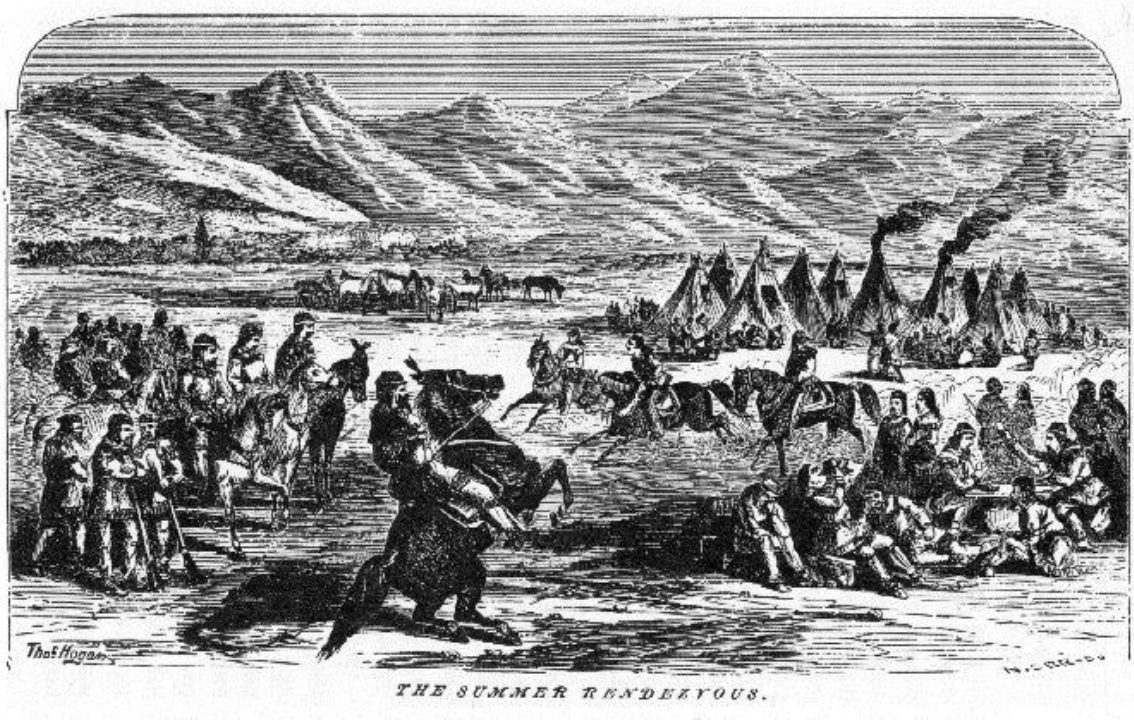


Illustration from *The River of the West*, 1870.

Warren Ferris may have written the first usage of the place name Jackson's Little Hole in early August 1832. He notated, "*We crossed Lewis River* [Snake River in Jackson's Hole] *at a*

[4] The Rendezvous was held on the upper Green River in 1833, 1835, 1836, 1837, 1839, and 1840.

well-known ford, where its waters are separated by several Islands, and are expanded to the distance of several hundred yards; but are fordable at this season for pack horses, if led carefully over, following the bars or shallow places. In the evening we halted on a spring, four miles east of Lewis River, after marching twenty-two miles. On the 5th we passed six or eight miles southeast, and halted on the margin of the stream, flowing from that direction. During our march, some of the hunters saw the bones of two men, supposed to be those killed from a party of seven, in the latter part of July. On the sixth we entered a dark defile [Hoback Canyon]*, and followed a zig-zag trail along the almost perpendicular side of the mountain, scarcely leaving space in many places for the feet of our horses; we all dismounted, and led our animals over the most dangerous places, but notwithstanding this precaution, three of them lost their footing, and were precipitated sixty or seventy feet into the river below; two were but slightly injured, having fortunately fallen upon their loads, which preserved them from death; but the other was instantly killed. At length we came out into an open valley after a march of fifteen miles, and halted in its eastern extremity. This small valley is called* ***Jackson's Little Hole****, in contradistinction to its neighbor, which we left yesterday. It was covered with herds of buffalo, numbers of which fell before our rifles, and supplied us with fresh meat, an article we had not possessed since we came into Pierre's Hole."*[5]

About a week later, Ferris made another entry in his journal stating, "*On the 12th all arrangements, for the journey being completed, Mr. Fontenelle departed with thirty men, and the furs we had collected during the past year, for Fort Union at the Yellow Stone; at the same time Messrs. Vanderburgh and Dripps, who were now jointly acting for the American Fur Co., departed at the head of about ten men, intending to hunt on the source of the Missouri. We*

[5] Warren A. Ferris, *Life in the Rocky Mountains*, ed. Paul Phillips (Denver, CO: The Old West Publishing Company, 1940), 156-158.

reached a spring, on the summit of the hill, east of ***Jackson's Little Hole****, in the evening; and halted for the night. On the 14th we passed through the Narrows* [Hoback Canyon], *between Jackson's Holes; and avoided some of the difficulties we met with on our previous passage, by crossing the river, several times. In the evening we halted for the night near the remains of two men, who were killed in July last. These we collected, and deposited in a small stream, that discharged itself into a fork of Lewis river; that flows from* ***Jackson's Little Hole****.*"[6]

The following summer in July 1833, Ferris passed through the area on his way to trade with the Flathead Indians. In his journal Ferris recorded that, "*On the 20th of July a young man by the name of Newell and myself, departed at the head of an equipment destined for the Flathead trade. Our little party consisted of six "engages" with pack horses, and five armed Indians, amounting in all to thirteen armed men. It was late before we separated from the company, yet, notwithstanding, we marched fifteen miles, killed a fine bull, and halted on the margin of a small spring, in the highlands, near* ***Jackson's Little Hole****. We passed through the hole on the succeeding day, and encamped in the narrows below. We fortified our little encampment with a breastwork of logs, or in other words, we enclosed it in a timber pen. Leaving this, we passed the narrows, a corner of Jackson's Big Hole, crossed Lewis river, ascended the mountains, and on the 30th came into a region where the weather was fair, the sky cloudless above us, and the sun shining pleasantly, quite reverse to the appearance a short distance below.*"[7]

In May 1834, Ferris once again traversed the Hoback Canyon into Jackson's Little Hole. He logged in his journal, "*On the twenty-fifth we passed, with our usual hazzards [sic] and difficulty, though fortunately without accident, through the tortuous windings, abrupt elevations, and percipitous [sic] descents, of the Narrows, out of which we were glad to emerge; and*

[6] Ferris, *Life in the Rocky Mountains*, 159-161.
[7] Ferris, *Life in the Rocky Mountains*, 212-214.

*entering **Jackson's Little Hole**, encamped on a small branch of this fork, at the East side of the valley. Antelopes and buffalos were found here; and an encampment made by the company whose traces we observed the day previous. On the twenty-seventh we ascended the steep, rough, aspen covered hill, forming the east boundary of this hole, and passing down on the opposite side, came into the plains of Green river. We now directed our course towards "Bonnyville's Folly," or "Fort Nonsense," as it was more frequently called; but had proceeded a few miles only, when we discovered two Indians so near us that they could not hope to escape though they betrayed considerable anxiety at our approach.*"[8]

The Rendezvous of 1835 attracted a number of noted personalities including Jim Bridger and Joe Meek as well as missionaries Marcus Whitman and Samuel Parker. Upon leaving the gathering near the end of August in the company of Bridger, Meek, and others, Parker insisted that the party not travel on the Sabbath. He also insisted that the mountain men attend his religious service. Parker recorded the event thusly: "*On the 22d* [August], *I parted with Doct. Whitman…. Today we traveled twenty miles through somewhat barren country, and down several steep descents, and arrived at what is called Jackson's Hole* [Jackson's Little Hole], *and encamped up on a small stream of water….. Sabbath, 23d. Had an opportunity for rest and devotion services. In the afternoon we had public worship with those who understood English. The men conducted with great propriety, and listened with attention."* Parker felt a sense of reverence for the landscape of Jackson's Little Hole and remarked that, *"the place of encampment was such as would naturally fill the mind with solemnity.*"[9]

Fur trapper Joe Meek observed the Sabbath event a little bit differently. His chronicle reported, "*Shortly after the arrival of Messrs Parker and Whitman, rendezvous broke up. A*

[8] Ferris, *Life in the Rocky Mountains*, 262-264.
[9] Samuel Parker, *Journal of an Exploring Tour Beyond the Rocky Mountains* (Ithaca, NY: by author, 1840), 85-86.

party, to which Meek was attached, moved in the direction of the Snake River head-waters, the missionaries accompanying them, and after making two camps, came on Saturday eve to Jackson's Little Hole, a small mountain valley near the larger one commonly known as Jackson's Hole. On the following day religious services were held in the Rocky Mountain Camp. A scene more unusual could hardly have transpired than that of a company of trappers listening to the preaching of the Word of God. Very little pious reverence marked the countenances of that wild and motley congregation. Curiosity, incredulity, sarcasm, or a mocking levity, were more plainly perceptible in the expression of the men's faces, than either devotion or the longing expectancy of men habitually deprived of what they once highly valued. The Indians alone showed by their eager listening that they desired to become acquainted with the mystery of the "Unknown God." The Rev. Samuel Parker preached, and the men were as politely attentive as it was in their reckless natures to be, until, in the midst of the discourse, a band of buffalo appeared in the valley, when the congregation incontinently broke up, without staying for a benediction, and every man made haste after his horse, gun, and rope, leaving Mr. Parker to discourse to vacant ground. The run was both exciting and successful. About twenty fine buffaloes were killed, and the choice pieces brought to camp, cooked and eaten, amidst the merriment, mixed with something coarser, of the hunters. On this noisy rejoicing Mr. Parker looked with a sober aspect: and following the dictates of his religious feeling, he rebuked the sabbath-breakers quite severely. Better for his influence among the men, if he had not done so, or had not eaten so heartily of the tender-loin afterwards, a circumstance which his irreverent critics did not fail to remark, to his prejudice; and upon the principle that the "partaker is as bad as the thief," they set down his lecture on sabbath-breaking as nothing better than pious humbug."[10]

[10] Frances Fuller Victor, *The River of the West: Life and Adventure in the Rocky Mountains and Oregon* (Hartford: Columbian Book Company, 1870), 186-187.

Fur trapper Osbourne Russell, who left historians one of the best records of Yellowstone National Park before it was established as a park with his detailed journals, wrote upon leaving the Green River Rendezvous in July 1837 that, "*The parties started and all traveled with Mr. Fontanelle's party up Green River ten miles, intending to keep in their company five or six days and then branch off to our first intended route. 26th—We traveled twenty miles northwest across a low range of hills and encamped in a valley lying on a branch of Lewis Fork called "**Jackson's Little Hole**." 27th—We traveled down this stream 18 miles northwest. This stream ran through a tremendous mountain in a deep, narrow can yon of rocks. The trail ran along the cliffs from 50 to 200 feet above its bed and was so narrow in many places that only one horse could pass at a time for several hundred yards, and one false step would precipitate one into the chasm below. After leaving the canyon we encamped at a small spring in "Jackson's Big Hole," near the south ern extremity. 28th—Traveled up the valley north fifteen miles and encamped.*"[11]

Father Pierre-Jean de Smet attended the 1840 Rendezvous and documented his departure heading west. He wrote, "*Three days we ascended Green river, and on the 8th we crossed it, heading for an elevated plain which separates the waters of the Colorado from those of the Columbia. In this plain, as in all mountain valleys that I have traversed, flax grows in the greatest abundance; it is just the same as the flax that is cultivated in Belgium, except that it is an annual; the same stalk, calix, seed and blue flower, closing by day and opening in the evening. On leaving this plain, we descended several thousand feet by a trail and arrived in **Jackson's Hole**. The slope of the surrounding mountains abounds in the rarest plants, and offers the amateur botanist a superb collection. The valley is seventeen miles long by five or six wide.*

[11] Osbourne Russell, *Journal of a Trapper* (Boise, ID: Syms-York Company, Inc., 1921), 65.

{Editor's note: This was not Jackson's Hole, but a much smaller valley near the head of Hoback River, called ***Jackson's Little Hole****.}"*[12]

He also included a vivid description of his experience traveling through Hoback's Canyon. De Smet noted, "*Thence we passed into a narrow and extremely dangerous defile, which was at the same time picturesque and sublime. Mountains of almost perpendicular cliffs rise to the region of perpetual snow, and often overhang a rugged and narrow path, where every step threatens a fall. We followed it for seventeen miles, upon a mountain side inclined at an angle of 45° over a torrent which rushed uproariously in cascades, hundreds of feet below our route. The defile was so narrow, and the mountains on either hand so high, that the sun could scarcely penetrate it for an hour or two of the day. Pine forests like those of Norway, balsam firs, ordinary poplars, cedars, mulberry trees and many other varieties cover the sides of these mountains.*[13]

The last Rendezvous was held on the Green River in 1840. By then the beaver populations in the West had become seriously diminished, the hat fashions of the day deemed that consumers preferred silk to beaver, and the financial panic of 1837 had exacted a toll on all American industry. Within a few years most of the trappers had left the mountains in search of other endeavors to make a living. Having spent many years in the mountains, some trappers turned their wilderness knowledge into a useful and sought after commodity – guiding government expeditions and the innumerable wagon trains westbound on the Oregon Trail.

[12] Jean Pierre de Smet, *Life, Letters, and Travels of Father Pierre-Jean de Smet, S.J., 1801-1873,* Vol. 1, ed. Hiram Chittenden (New York, NY:Francis P. Harper,1905), 221.
[13] de Smet, *Life, Letters, and Travels of Father Pierre-Jean de Smet,* 222.

Losing the Trail of Jackson's Little Hole

The mass migration of emigrants through South Pass along the Oregon Trail began around 1840, but the hazardous route through Hoback Canyon was not suited for travel by large wagons, so the Oregon Trail veered southwest to the Bear River and then resumed a north-westerly course toward the Snake and Columbia Rivers. With the mountain men no longer plying the streams and no other voyagers traversing the area in and around Jackson's Little Hole, the landscape was rarely visited and the once common name began to vanish from the historical record.

Frederick Lander, engineer of the Lander Cut-Off for the Oregon Trail from South Pass to Fort Hall, included Jackson's Little Hole on his sketch map of western Wyoming in 1857 and on his Wagon Road map in 1858. Jackson's Little Hole also appeared on a 1858 government composite map produced by War Department map makers who consolidated information from several exploring expeditions from the 1840s to 1857. Lander was guided by Isaac Fraeb, son of mountain man Henry Fraeb and could have heard the name Jackson's Little Hole from him.[14]

In 1859-60, USGS geologist Ferdinand V. Hayden shined one of the last glimmers of light on Jackson's Little Hole. In 1859-60, Captain William Raynolds conducted a government sponsored expedition to explore the Missouri and Yellowstone rivers and hired mountain man Jim Bridger as a guide. Hayden served the expedition as geologist, and thus was the major compiler and composer of the survey's maps for the official government reports.

Apparently Jim Bridger told Hayden about Jackson's Little Hole because the place name *does* appear on his 1859-60 map. But because the expedition did not travel to Jackson's Little

[14] "Records of the Office of the Secretary of the Interior relating to Wagon Roads, 1857-1887," Microfilm Publication M-95, Roll 6, page 454. National Archives.

Hole or through Hoback Canyon, Hayden misplaced Jackson's Little Hole in a location nearer to present-day Hoback Junction. However, the fact that Hayden even applied the name to his map, although in the wrong spot, is significant for keeping Jackson's Little Hole place name in the historical record. Hayden returned to Wyoming for two more USGS expeditions in 1872 and 1878. In Hayden's 1872 report, Jackson's Little Hole appeared in the text (again wrongly located) but the place name does not appear on the map. The 1878 Hayden expedition consisted of several different surveys in Idaho and Wyoming. The Wyoming Wind River division conducted an extensive examination of the Wind River region. The place name Jackson's Little Hole does not appear in the thirty-two page report penned by Orestes St. John. Moreover, Hoback Basin was used to identify the area once known as Jackson's Little Hole. USGS topographer J.E. Mushbach, attached to the Yellowstone Park division, traveled with A. C. Peale from the Union Pacific station at Granger to the Green River, to the Hoback River, and through Hoback Canyon enroute to Yellowstone. Nonetheless, Mushbach perhaps recorded the last known historic usage of the name Little Jackson Hole in his diary. His diary remained unseen, except probably by family members, until it was printed in *The Billings Gazette* in 1936. While the maps for both the 1872 and the 1878 expeditions do not show Jackson's Little Hole, they do include the Hoback River.

Rediscovery of Jackson's Little Hole place name in the mid-1900s

In the 1940s, National Park Service historian, Merrill Mattes researched the fur trade in and around the Jackson Hole area. His research led to the publication of two journal articles in the *Pacific Northwest Quarterly.* The first article entitled "Jackson Hole, Crossroads of the Western Fur Trade, 1807-1829" published in the April 1946 issue contained several references to "Little Jackson Hole." Mattes obviously modified this name from the original sources that used

the historic designation Jackson's Little Hole. In addition, a composite map accompanied the article in which "Little Jackson Hole" was clearly labeled. Mattes second article, "Jackson Hole, Crossroads of the Western Fur Trade, 1830-1840" published in January, 1948 contained references to Jackson's Little Hole. The accompanying map for the 1948 issue only illustrated the routes of the trappers and traders.

Mattes also wrote a small book entitled *Colter's Hell and Jackson's Hole* in 1962. On one of the first pages of the book is Mattes' conjectural map of Colter's route and trapper's trails, which depicted Jackson's Little Hole as well as the Jackson's Fork, a little known variant name for the Hoback River.

In 1966, Orrin and Lorraine Bonney wrote and published a road guide to Grand Teton National Park and Jackson's Hole, which they proposed was "the most historical valley in the Rocky Mountains."[15] The book was set up as various driving tours with the Hoback Entrance (southeast) listed as Trip 1. Their entry for mile 28.7 from the Daniel Junction or mile 39.3 from the Hoback Junction stated, "This upper valley was Jackson's Little Hole to the early trappers, is now Hoback Basin."

[15] Orrin and Lorraine Bonney, *Bonney's Guide: Grand Teton National Park and Jackson's Hole* (Houston, TX: by author, 1966, 1.

References

Books

Alter, J. Cecil. *Jim Bridger*. Norman, OK: University of Oklahoma Press, 1973.

Bonney, Orrin H., and Lorraine J. *Bonney's Guide to Grand Teton National Park and Jackson's Hole.* Houston, TX: By the authors, 1966.

Chittenden, Hiram Martin. *The American Fur Trade of the Far West: A History of the Pioneer Trading Posts*, Vol. II. New York, NY: Francis P. Parker, 1902.

Coutant, Charles Griffin. *The History of Wyoming from the Earliest Known Discoveries*. Vol. 1. Chaplin, Spafford & Mathison, 1899

Dale, Harrison Clifford. *The Ashley-Smith Explorations and the Discovery of a Central Route to the Pacific, 1822-1829.* Cleveland, OH: The Arthur H. Clark Company, 1918.

Daugherty, John. *A Place Called Jackson Hole: A Historic Resource Study of Grand Teton National Park*. Moose, WY: Grand Teton Natural History Association, 1999.

De Smet, Jean-Pierre. *Life, Letters and Travels of Father Pierre-Jean de Smet, S.J., 1801-1873*, Vol. 1. Edited by Hiram Chittenden. New York, NY: Francis P. Harper, 1905.

Ferris, Warren A. *Life in the Rocky Mountains*. Edited by Paul C. Phillips. Denver, CO: The Old West Publishing Company, 1940.

Hafen, LeRoy R., ed. *The Mountain Men and the Fur Trade of the Far West.* Ten volumes. Glendale, CA: The Arthur H. Clark Company, 1965-1972.

Hardee, Jim. *Pierre's Hole: The Fur Trade History of Teton Valley, Idaho*. Pinedale, WY: Sublette County Historical Society, 2010.

Hardee, Jim. *Obstinate Hope: the Western Expedition of Nathanial J. Wyeth*. Pinedale, WY: Sublette County Historical Society, 2013.

Hayden, Elizabeth Wied. *From Trapper to Tourist in Jackson Hole.* Fourth edition, revised. Moose, WY: Grand Teton Natural History Association, 1957, 1981.

Irving, Washington. *Astoria.* Two volumes. Philadelphia, PA: Lea and Blanchard, 1836.

Irving, Washington. *Astoria.* Edited by Edgeley W. Todd. Norman, OK: University of Oklahoma Press, 1964.

Irving, Washington. *Adventures of Captain Bonneville,* Vol. I. New York: G. P. Putnam's Sons, 1837.

Irving, Washington. *Adventures of Captain Bonneville.* Edited by Edgeley W. Todd. Norman, OK: University of Oklahoma Press, 1961.

Lovell, Edith Haroldsen. *Benjamin Bonneville: Soldier of the American Frontier*. Bountiful, UT: Horizon Publishers, 1992.

Mattes, Merrill J. *Jackson Hole: Crossroads of the Western Fur Trade, 1807-1840*. Jackson, WY: Jackson Hole Museum and Teton County Historical Society, 1994.

Mattes, Merrill J. *Colter's Hell & Jackson Hole*. Moose, WY: Yellowstone Library and Museum Association and Grand Teton Natural History Association, 1962, reprint 1971.

Merrill, Marlene Deahl and Daniel D, eds. *Up The Winds and Over The Tetons: Journal Entries and Images from the 1860 Raynolds Expedition*. Albuquerque, NM: University of New Mexico Press, 2012.

Parker, Reverend Samuel. *Journal of an Exploring Tour Beyond the Rocky Mountains.* Second edition. Ithaca, NY: By author, Mack, Andrus, and Woodruff, printers, 1840.

Phillips, Paul Chrisler. *The Fur Trade.* With concluding chapters by J. W. Smurr. Two volumes. Norman: University of Oklahoma Press, 1961.

Rollins, Philip Ashton, ed. *The Discovery of the Oregon Trail; Robert Stuart's Narratives.* New York: Charles Scribner's Sons, 1935.

Russell, Osborne. *Journal of a Trapper.* Original manuscript. Boise, ID: Syms-York Company, Inc., 1921.

Russell, Osborne. *Journal of a Trapper*. Edited by Aubrey L. Haines. Lincoln, NE: University of Nebraska Press, 1965.

Sunder, John E. *Bill Sublette: Mountain Man*. Norman, OK: University of Oklahoma, 1959.

Talbot, Vivian Linford. *David E. Jackson: Field Captain Of the Rocky Mountain Fur Trade.* Jackson, WY: Jackson Hole Historical Society and Museum, 1996.

Utley, Robert M. *A Life Wild and Perilous: Mountain Men and the Paths to the Pacific*. New York, NY: Henry Holt & Company

Victor, Frances Fuller. *The River of the West; Life and Adventure in the Rocky Mountains and Oregon.* Hartford: Columbian Book Company, 1870.

Vestal, Stanley**.** *Jim Bridger: Mountain Man*. New York, NY: William Morrow & Co, 1946.

Young, Frederick G. ed. “The Correspondence and Journals of Captain Nathanial J. Wyeth, 1831-6.” *Sources of the History of Oregon*, Vol. 1: Eugene, OR: Oregon Historical Society, 1899.

Magazines & Journals

Barry, J. Neilson. “Captain Bonneville.” *Annals of Wyoming* 8, no. 4 (April, 1932): 603,609-633,644.

Evetts, Michael J. “The Bones of More and Foy.” *The Rocky Mountain Fur Trade Journal* 12 (2018): 1-17.

Mattes, Merrill J. "Jackson Hole, Crossroads of the Western Fur Trade, 1807-1829." *Pacific Northwest Quarterly* 37 (1946).

Mattes, Merrill J. "Jackson Hole, Crossroads of the Western Fur Trade 1830-1840." *Pacific Northwest Quarterly* 39 (1948).

Roundy, Charles G. “The Origins and Early Development of Dude Ranching in Wyoming.” *Annals of Wyoming* 45, no.1 (Spring 1973): 5-25.

Talbot, Vivian L. “A Look at the Life of David E. Jackson, Field Captain of the Rocky Mountain Fur Trade.” *Annals of Wyoming* 68, no. 3 (Summer 1996), 24-37.

Newspapers

Draper, Charles. “Pioneer’s Diary Tells of Yellowstone Park Trip in 1878.” *The Billings Gazette*, August 16, 1936.

Published Government Reports

Hayden, F V. *Sixth Annual Report of the U.S. Geological Survey of the Territories . . . for 1872.* Washington, D.C.: Government Printing Office, 1873.

Hayden, F. V. *Twelfth Annual Report of the United States Geological and Geographical Survey . . . for the Year 1878.* Washington, D.C.: Government Printing Office, 1883.

Archival Collections

Bonney (Orrin and Lorraine) Collection, 00827. University of Wyoming-American Heritage Center

Hebard (Grace Raymond) Collection, 400008. University of Wyoming-American Heritage Center

Fryxell (Fritiof) Collection, 1638. University of Wyoming-American Heritage Center.

Mattes (Merril J.) Collection, 120. University of Wyoming-American Heritage Center.

Wyoming State Archives Map Collection

Maps

Ferris, Warren A. “Map of the Northwest Fur Country.” 1836. Brigham Young University

Bonneville, Benjamin. “Map of the Sources of the Colorado & Big Salt Lake.” 1837. Barry Lawrence Rudderman Antique Maps.

Haines, Aubrey L. “Osborne Russell’s Travels 1837-1837.” 1952. University of Nebraska Press, 1965.

Hood, Washington. “Map of the Rocky Mountains.” Manuscript map based on data from William Sublette and others. Records of the War Dept. National Archives. NPS copy online.

Lander, Frederick. “Sketch Map of the Country between South Pass and City of Rocks.” 1857. National Archives.

Lander, Frederick. “Fort Kearney South Pass Honey Lake Wagon Road.” 1858. David Rumsey Collection.

U.S. Geological Survey. “Map of the Yellowstone and the Missouri Rivers and their Tributaries.” 1869 printing of 1859-60 Raynolds Expedition. Library of Congress.

U.S. Geological Survey. “Map of the Sources of the Snake River.” 1872. Library of Congress.

U.S. Geological Survey. “Map of the Yellowstone and Missouri Rivers and their Tributaries.” 1877 revised reprint. Library of Congress.

War Department. “Fort Laramie and the Great Salt Lake.” 1858. National Archives.

National Park Service Map. “Orientation Map of the Rocky Mountains.” 1946. Pacific Northwest Quarterly, April, 1946.

Maps (listed in order of appearance)

Ferris, Warren A. “Map of the Northwest Fur Country.” 1836. Brigham Young University

Bonneville, Benjamin. “Map of the Sources of the Colorado & Big Salt Lake.” 1837. Barry Lawrence Rudderman Antique Maps.

Haines, Aubrey L. “Osborne Russell’s Travels 1837-1837.” 1952. University of Nebraska Press, 1965.

Hood, Washington. “Map of the Rocky Mountains.” Manuscript map based on data from William Sublette and others. Records of the War Dept. National Archives. NPS copy online.

Lander, Frederick. “Sketch Map of the Country between South Pass and City of Rocks.” 1857. National Archives.

Lander, Frederick. “Fort Kearney South Pass Honey Lake Wagon Road.” 1858. David Rumsey Collection.

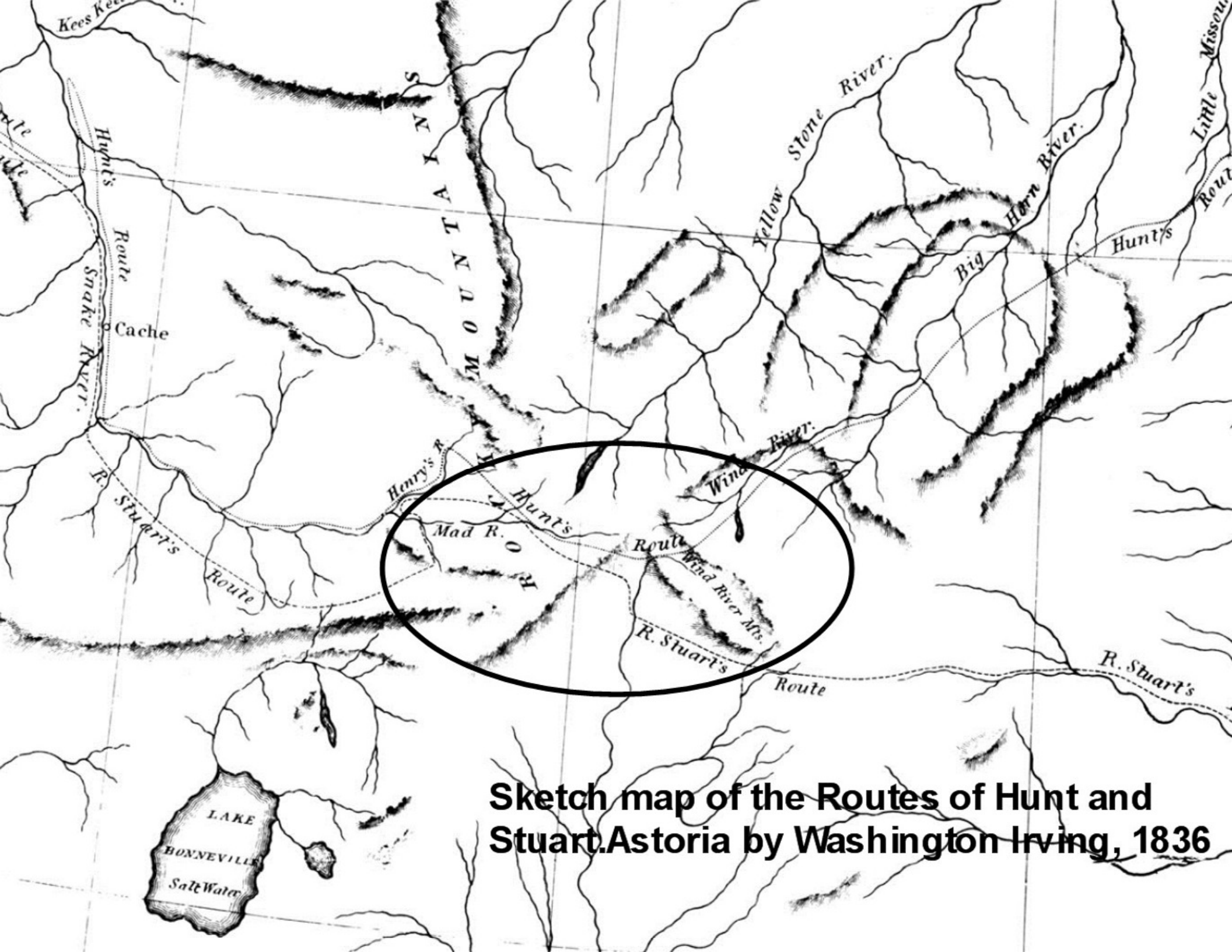
War Department. “Fort Laramie and the Great Salt Lake.” 1858. National Archives.

U.S. Geological Survey. “Map of the Yellowstone and the Missouri Rivers and their Tributaries.” 1869 printing of 1859-60 Raynolds Expedition. Library of Congress.

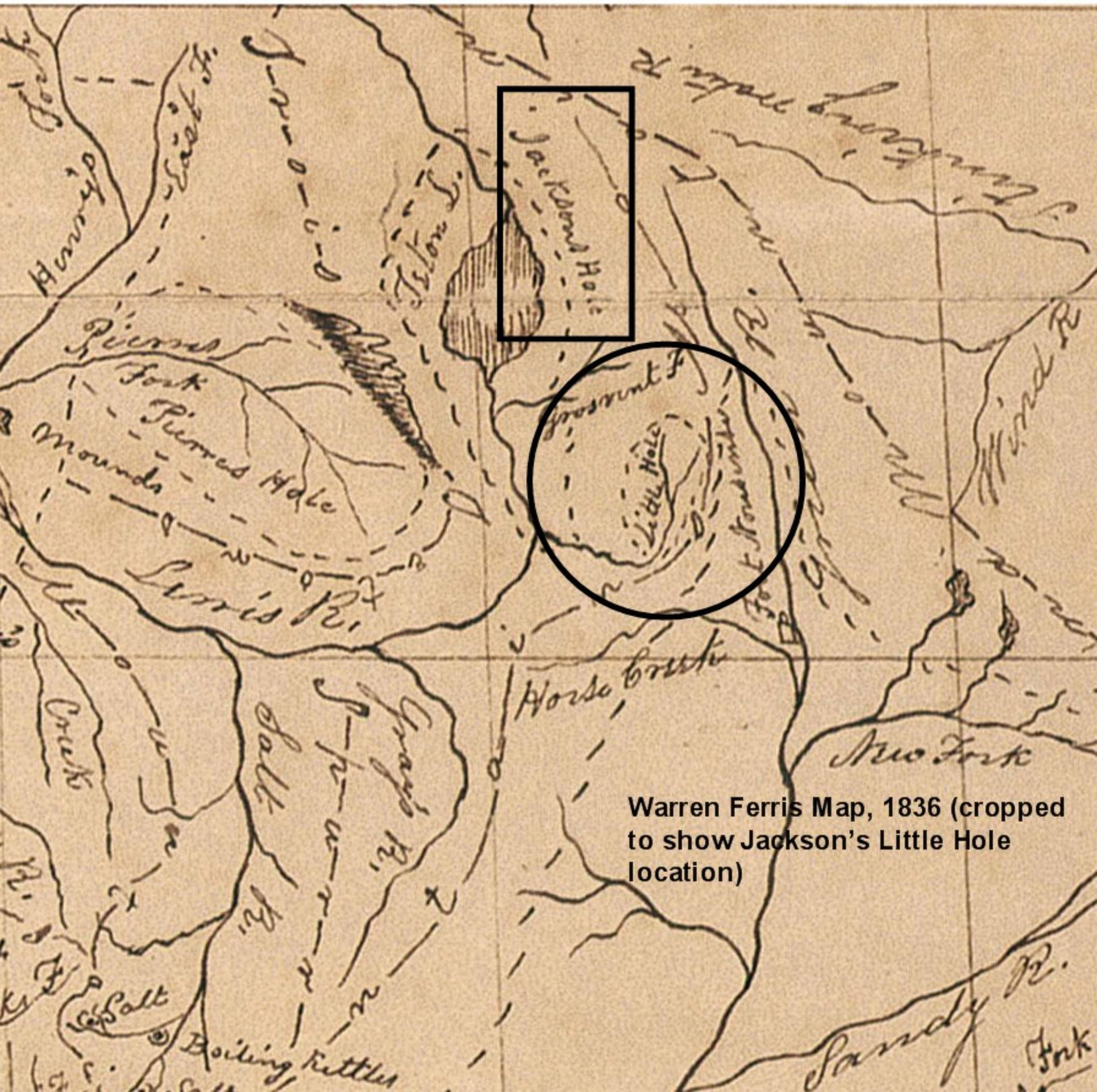
U.S. Geological Survey. “Map of the Sources of the Snake River.” 1872. Library of Congress.

U.S. Geological Survey. “Map of the Yellowstone and Missouri Rivers and their Tributaries.” 1877 revised reprint. Library of Congress.

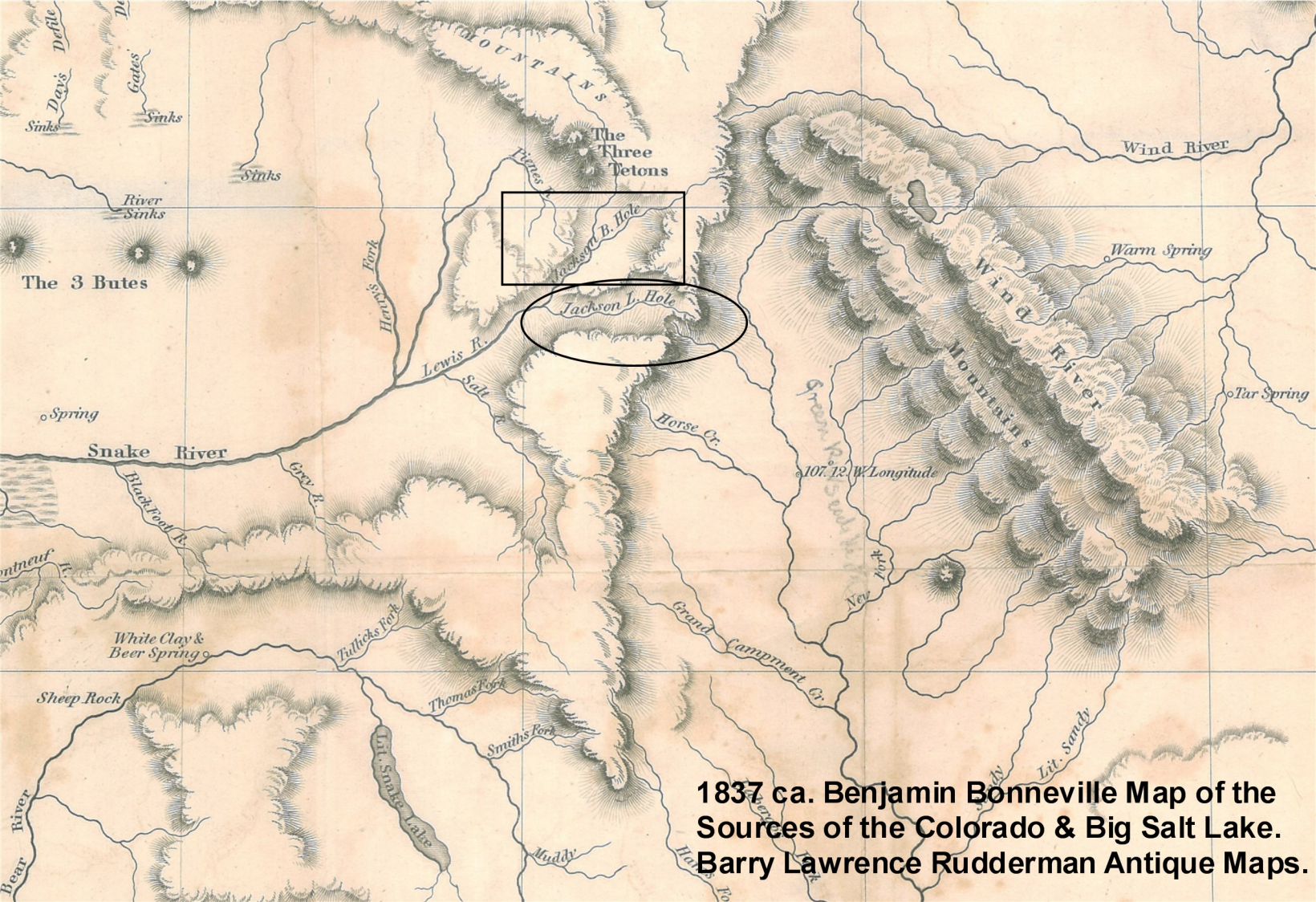
National Park Service Map. “Orientation Map of the Rocky Mountains.” 1946. Pacific Northwest Quarterly, April, 1946.



Sketch map of the Routes of Hunt and Stuart.Astoria by Washington Irving, 1836



Warren Ferris Map, 1836 (cropped to show Jackson's Little Hole location)



1837 ca. Benjamin Bonneville Map of the Sources of the Colorado & Big Salt Lake. Barry Lawrence Rudderman Antique Maps.

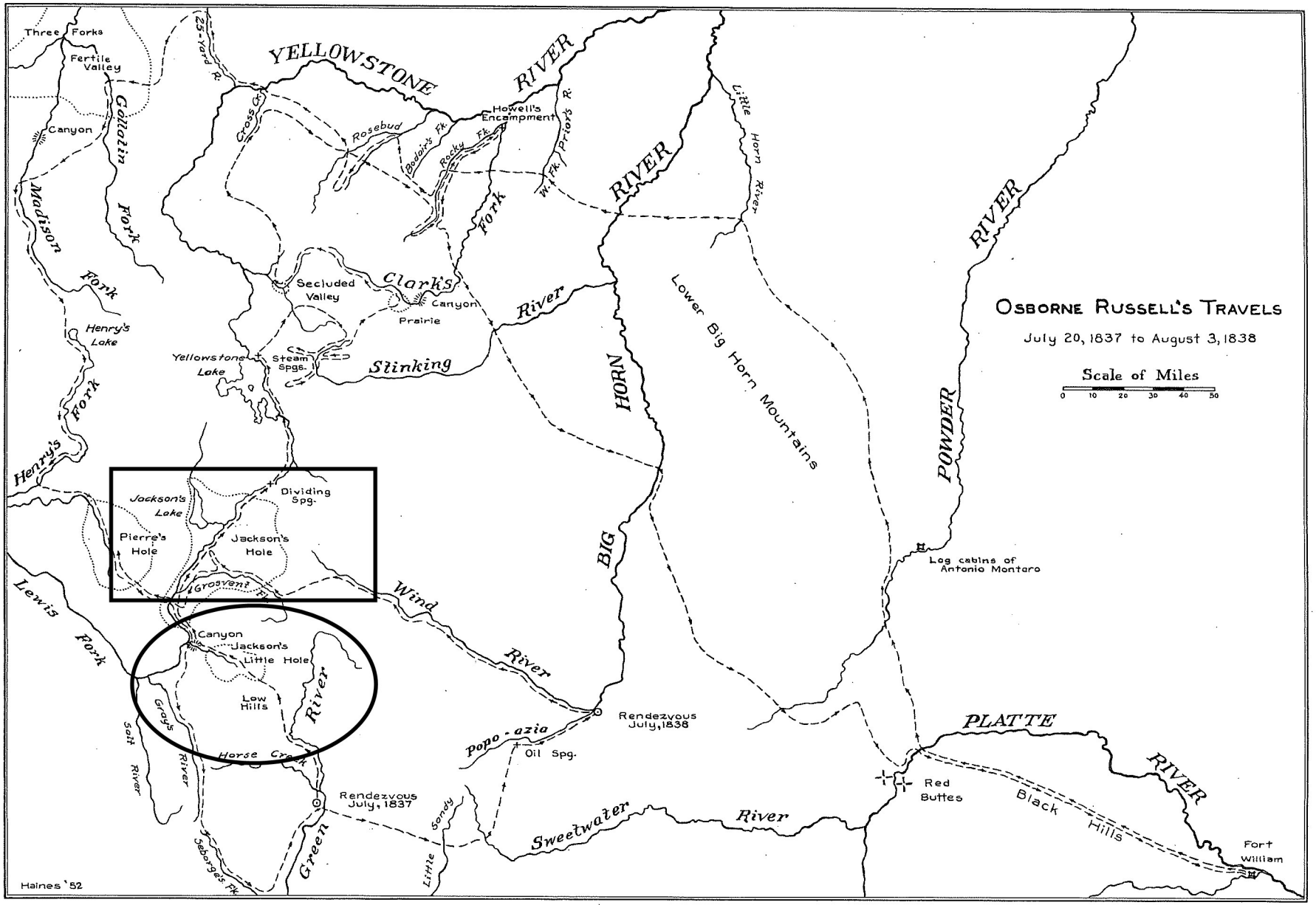
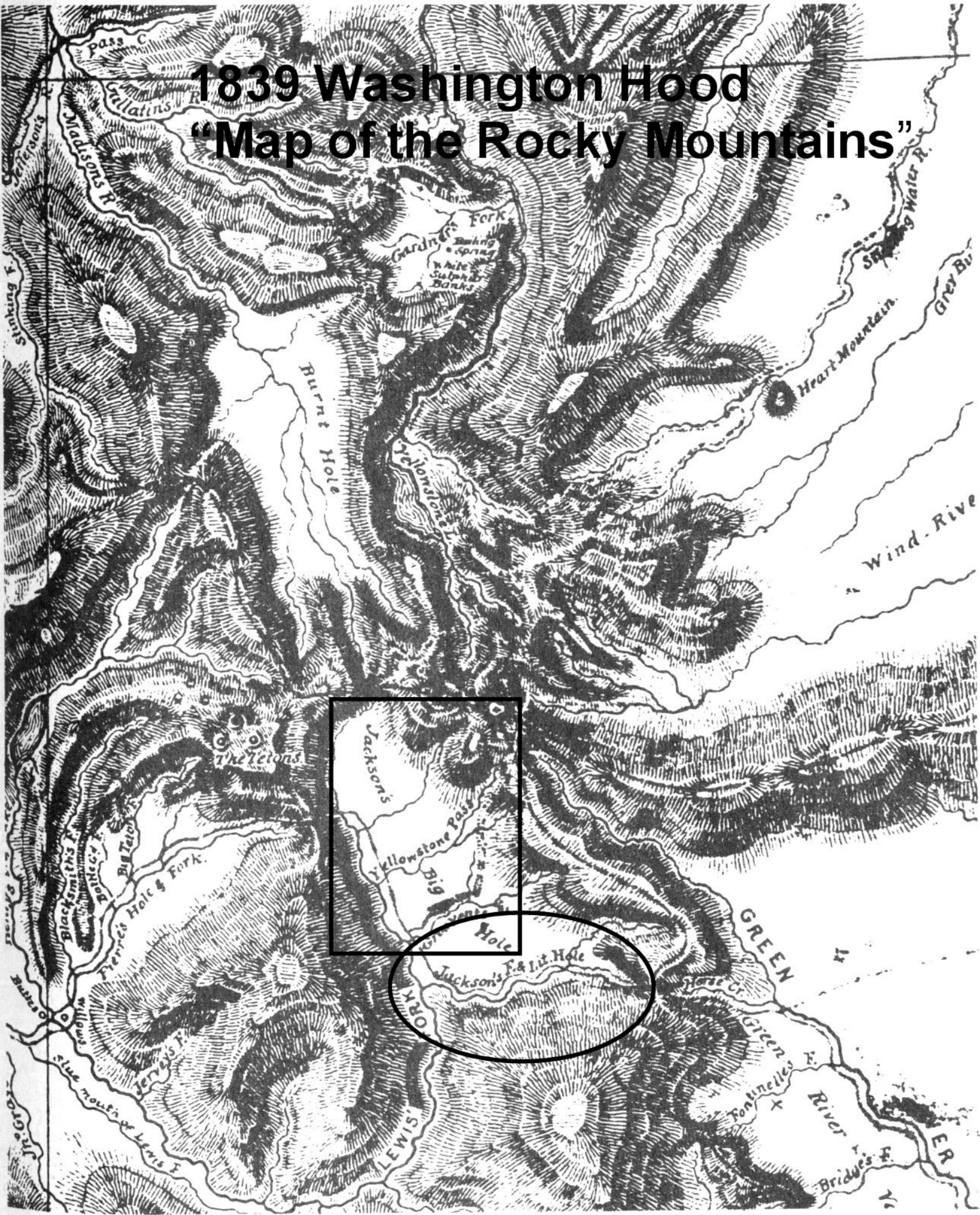

Three Forks
Fertile Valley
Gallatin Fork
Canyon
Madison Fork
Henry's Lake
Henry's Fork
Yellowstone Lake
Steam Spgs.
Secluded Valley
Clark's Canyon Prairie
Slinking
Cross Cr.
25-Yard R.
YELLOWSTONE RIVER
Rosebud
Howell's Encampment
Godwin's Fk.
Rocky Fk.
W. Fk. Prior's R.
Fork
RIVER
Little Horn River
Lower Big Horn Mountains
BIG HORN
POWDER RIVER
Log cabins of Antonio Montaro
Jackson's Lake
Dividing Spg.
Pierre's Hole
Jackson's Hole
Grosvent R.
Lewis Fork
Wind River
Canyon
Jackson's Little Hole
Low Hills
Gray's
Soft River
Horse Cr.
Rendezvous July, 1837
Rendezvous July, 1838
Popo-azia
Oil Spg.
Green
Sandy
Little
Sweetwater River
PLATTE RIVER
Red Buttes
Black Hills
Fort William
Haines '52
OSBORNE RUSSELL'S TRAVELS
July 20, 1837 to August 3, 1838
Scale of Miles
0 10 20 30 40 50

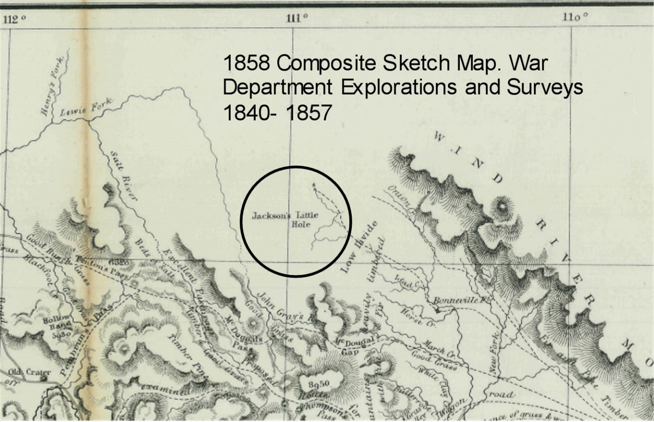
PLATE VII.

1839 Washington Hood "Map of the Rocky Mountains"



1857 Lander Sketch Map of Country between South Pass and City of Rocks


(Oregon) Important Line for
reconnoissance to avoid Mormo
Valley and broad Plains of the Snake R.
(California) Important Line for
Jackson's Little Hole
Low Divide
Hills with good Grass and Timber
Green River Lakes
Onion C.
Warm Sp.
Wind River Mountains
Fir and Pine Timber
R.R.L.
Lead Ck
Horse Ck
Marsh Creek
Good Grass
White Clay C.
New Fork
Bitterroot C.
Grass Valley
Pass
Abundance of grass & water north of
(6450)
(6800)
Fort T
(5500)
Iron ore
Little John Gray's Hole
Bunch Grass
Blackfoot
Good Bunch Grass
Fort Hall Road
Grand Nort
Beds of Salt
Excellent Salt R. Pasture
5650
(6320)
(5760)
John Gray's R.
Good Grass
McDougal's Gap
McDougal's Pass
(8480)
(8950)
(8050)
(8200)
(6250)
(6600)
(5950)
Hollow
heavily timbered
with pine and fir

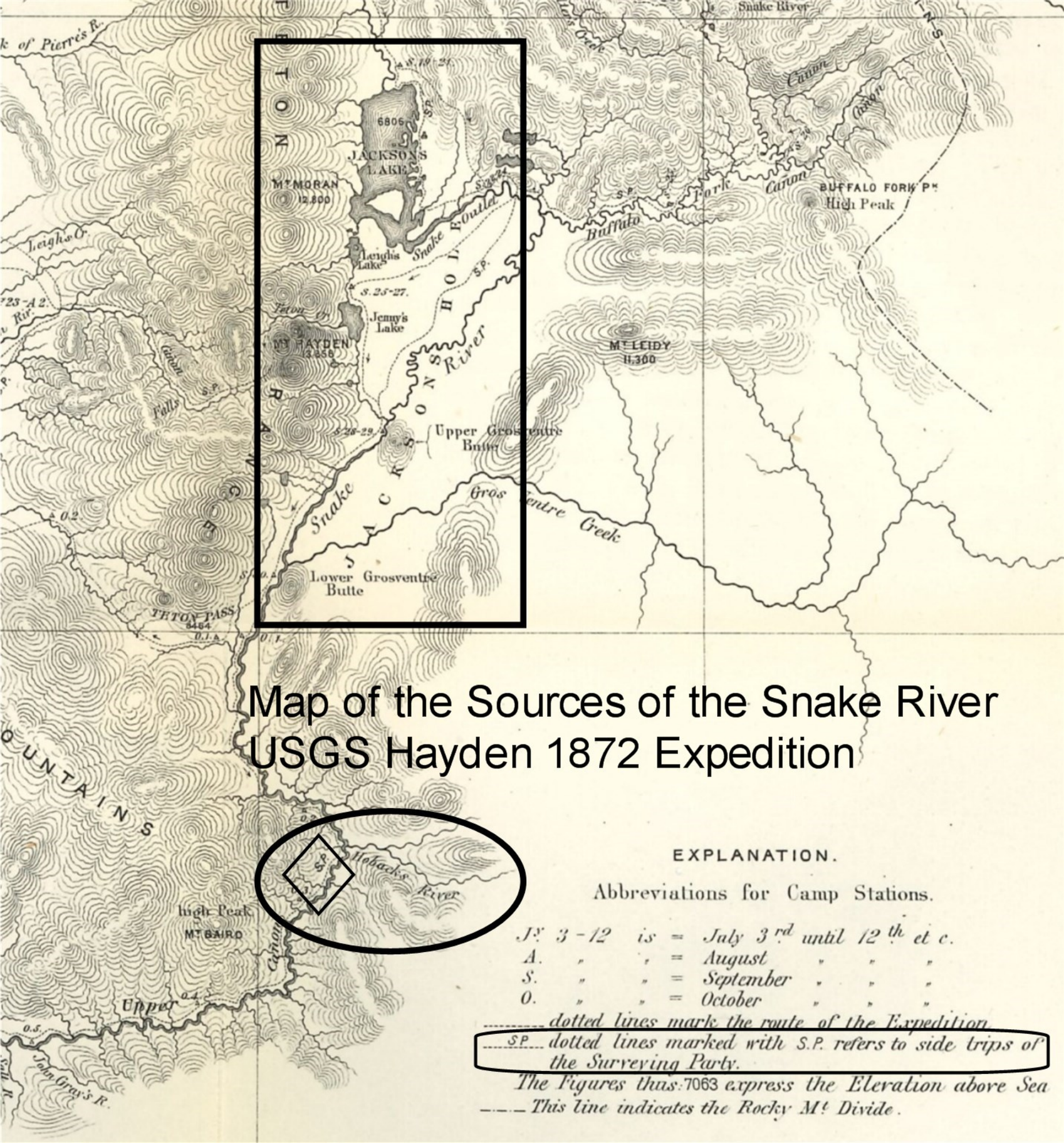

112°
111°
110°
Henry's Fork
Lewis Fork
Salt River
Jackson's Little Hole
W I N D R I V E R M O
Low Divide
timbered
Bonneville Ft.
Horse Cr.
March Cr.
Good Grass
New Fork
road
Wagon
Timber
Beds of Salt
Good Bunch Grass
Blackfoot Cr.
6320
5950
Old Crater
examined
McDougal's Pass
McDougal Gap
John Gray's R.
8950
Thompson's Pass
Proposed
for
1858 Composite Sketch Map. War Department Explorations and Surveys 1840- 1857

Onion Cr.
Green R. Lake
Cargo Spr.
Jackson's Little Hole
W.F. Wagner 1857
Lead Cr.
WIND RIVER MOUNTAINS
Green River
John Grey's River
Salt River
Horse Cr.
Big Popo Agie
Ft. Thompson
Little Popo Agie
Strawberry Cr.
Rock Creek
Mc Dougal's Pass
Mc Dougal's Gap
Smoking Cr.
6563
6255
Marsh Cr.
J.F. Mullowney
F.W. Lander 1857
F.W. Lander 1857
F.W. Lander 1857
New York
Bitterroot Cr.
7260
7080
7070
7220
7513
7360
6920
7230
8250
8300
Emigrant Road
worked
New Piney Cr.
Thompson's Pass
7380
Ft. Piney
7760
8190
F.W. Lander 1857
Ft. Aspen hut
7630
Sweet Water
B.F. Ficklin
Spr.
Big Sandy
Little Sandy
South Pass
Pacific Spr.
Dry Sandy Road
Muddy Cr.
Gilbert's Trading Post
Pacific Cr.
F.W. Lander 1858
Labarge Cr.
Sublette's Road
COLORADO DESERT
Old Emigrant
Smith's Fork
Fontenelle Cr.
6608
Baker & Davis Rd.
Kinney Rd.
J.F. Mullowney
Dempsey & Hockaday's Road
State Cr.
Crow Cr.
Green River
Mormon Rd.
8080
Route
practicable
Ham's Fork

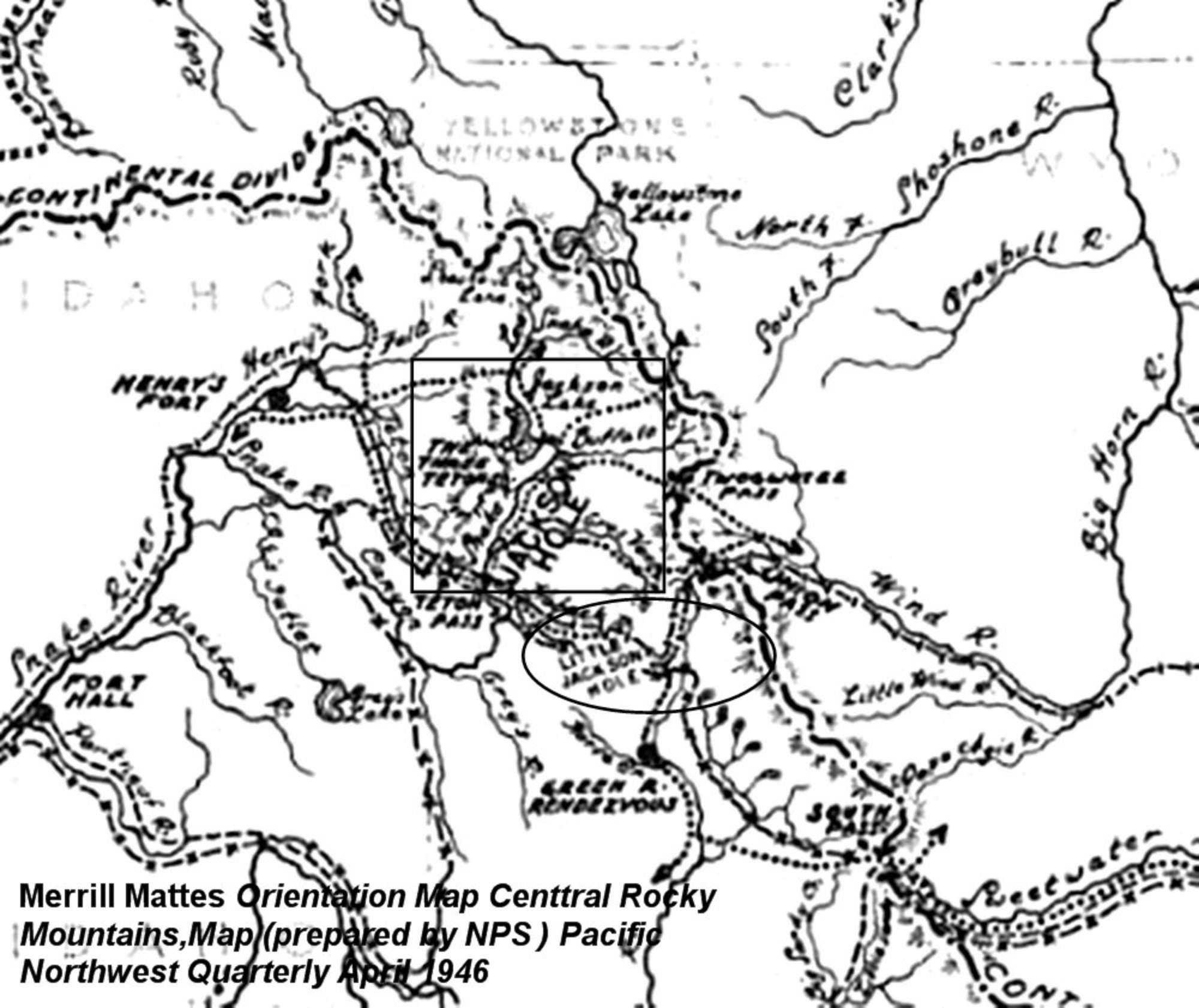
1857-58 Frederick Lander
Fort Kearney South Pass
Honey Lake Wagon Road

John Days Cr.
Camas Prairie Cr.
Market Lake
Pierres Cr.
Capt. Raynolds
June 1860
Great
Pierre's Hole
Teton Cr.
TETONS
Sink
Three Buttes
SNAKE RIVER
Blackfoot Cr.
JACKSONS LAKE
Pass Cr.
Ocean Water
Gros Ventre Creek
Union Pass
Jackson's Hole
Jackson's Little Hole
PEAK
WIND RIVER RANGE OF ROCKY MTS.
Capt. Raynolds
WIND RIVER
Popo-agie
FORT HALL
(CAMP LANDER)
Ross Fork
SNAKE RIVER
LEWIS
Pannack R.
Port Neuf R.
John Gray's Lake
Salt R.
John Gray's R.
Green R.
New Forks
New Emigrant Road
BEAR RIVER
Thomas Fork
Smiths Fork
Bear River Lake
GREEN RIVER
Old Emigrant Road
Big Sandy Fork
Lit. Sandy F.
Dry Sandy F.
Pacific Cr.
South Pass
SOUTH PASS STA.

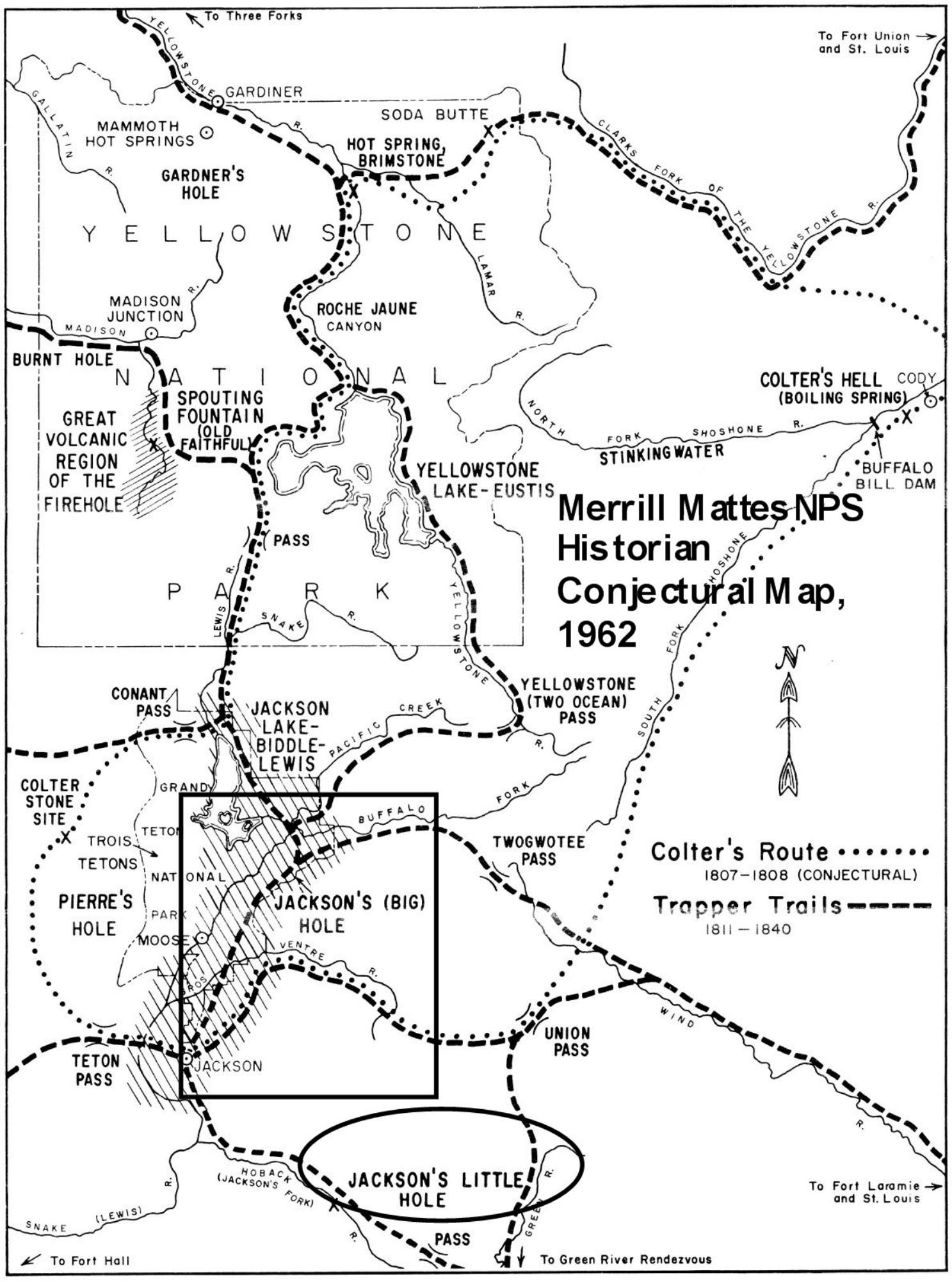
1869 F.V. Hayden Map of the Sources of the Colorado & Big Salt Lake. Raynolds Expedition 1859-1860.


Snake River
Canon
Buffalo Fork
BUFFALO FORK Pk
High Peak
JACKSONS LAKE
6806
Mt MORAN
12,800
Leighs Lake
Leighs Cr
Snake R. Outlet
Jenny's Lake
Mt HAYDEN
13,858
Mt LEIDY
11,300
Falls
Upper Grosventre Butte
Snake
Gros Ventre Creek
Lower Grosventre Butte
TETON PASS
8464
Hoback's River
high Peak
Mt BAIRD
Upper
John Gray's R.
Map of the Sources of the Snake River
USGS Hayden 1872 Expedition
EXPLANATION.
Abbreviations for Camp Stations.
Jy. 3-12 is = July 3rd until 12th etc.
A. " " = August " " "
S. " " = September " " "
O. " " = October " " "
dotted lines mark the route of the Expedition
SP dotted lines marked with S.P. refers to side trips of the Surveying Party.
The Figures thus: 7063 express the Elevation above Sea
This line indicates the Rocky Mt Divide.

Raynolds 1877 Revised Map of 1859-60 Expedition with Hoback River Jackson's Little Hole not shown



Merrill Mattes ***Orientation Map Centtral Rocky Mountains,Map (prepared by NPS) Pacific Northwest Quarterly April 1946***


To Three Forks
YELLOWSTONE R.
GARDINER
To Fort Union and St. Louis
GALLATIN R.
MAMMOTH HOT SPRINGS
SODA BUTTE
HOT SPRING, BRIMSTONE
GARDNER'S HOLE
CLARKS FORK OF THE YELLOWSTONE R.
YELLOWSTONE
LAMAR R.
MADISON JUNCTION
MADISON R.
ROCHE JAUNE CANYON
BURNT HOLE
NATIONAL
COLTER'S HELL (BOILING SPRING)
CODY
NORTH FORK SHOSHONE R.
STINKINGWATER
SPOUTING FOUNTAIN (OLD FAITHFUL)
GREAT VOLCANIC REGION OF THE FIREHOLE
YELLOWSTONE LAKE-EUSTIS
BUFFALO BILL DAM
PASS
PARK
LEWIS R.
SNAKE R.
YELLOWSTONE R.
Merrill Mattes NPS Historian Conjectural Map, 1962
SOUTH FORK SHOSHONE R.
CONANT PASS
JACKSON LAKE-BIDDLE-LEWIS
PACIFIC CREEK
YELLOWSTONE (TWO OCEAN) PASS
COLTER STONE SITE
GRAND
TETON
BUFFALO FORK R.
TROIS TETONS
NATIONAL
TWOGWOTEE PASS
PIERRE'S HOLE
PARK
JACKSON'S (BIG) HOLE
MOOSE
VENTRE R.
BROS
WIND R.
UNION PASS
TETON PASS
JACKSON
HOBACK (JACKSON'S FORK)
JACKSON'S LITTLE HOLE
SNAKE (LEWIS) R.
GREEN R.
To Fort Laramie and St. Louis
PASS
To Fort Hall
To Green River Rendezvous
Colter's Route ••••••
1807–1808 (CONJECTURAL)
Trapper Trails ——
1811–1840

Extracted Document Pages (listed in order of appearance)

Irving, Washington. *Astoria.* Philadelphia, PA: Lea and Blanchard, 1836.

Rollins, Philip Ashton, ed. *The Discovery of the Oregon Trail; Robert Stuart's Narratives.* New York: Charles Scribner's Sons, 1935.

Ferris, Warren A. *Life in the Rocky Mountains*. Edited by Paul C. Phillips. Denver, CO: The Old West Publishing Company, 1940.

Parker, Reverend Samuel. *Journal of an Exploring Tour Beyond the Rocky Mountains.* Second edition. Ithaca, NY: By author, Mack, Andrus, and Woodruff, printers, 1840.

Victor, Frances Fuller. *The River of the West; Life and Adventure in the Rocky Mountains and Oregon.* Hartford: Columbian Book Company, 1870.

Russell, Osborne. *Journal of a Trapper*. Original manuscript. Boise, ID: Syms-York Company, Inc., 1921.

Dale, Harrison Clifford. *The Ashley-Smith Explorations and the Discovery of a Central Route to the Pacific, 1822-1829.* Cleveland, OH: The Arthur H. Clark Company, 1918.

De Smet, Jean-Pierre. *Life, Letters and Travels of Father Pierre-Jean de Smet, S.J., 1801-1873,* Vol. 1. Edited by Hiram Chittenden. New York, NY: Francis P. Harper, 1905.

Hayden, F V. *Sixth Annual Report of the U.S. Geological Survey of the Territories . . . for 1872.* Washington, D.C.: Government Printing Office, 1873.

Hayden, F. V. *Twelfth Annual Report of the United States Geological and Geographical Survey . . . for the Year 1878.* Washington, D.C.: Government Printing Office, 1883.

Draper, Charles. "Pioneer's Diary Tells of Yellowstone Park Trip in 1878." *The Billings Gazette,* August 16, 1936.

Fryxell (Fritiof) Collection, 1638. [A.C. Peale Diary, 1878] University of Wyoming-American Heritage Center

Chittenden, Hiram Martin. *The American Fur Trade of the Far West: A History of the Pioneer Trading Posts,* Vol. II. New York, NY: Francis P. Parker, 1902.

Bonney, Orrin H., and Lorraine J. *Bonney's Guide to Grand Teton National Park and Jackson's Hole.* Houston, TX: By the authors, 1966.

Roundy, Charles G. "The Origins and Early Development of Dude Ranching in Wyoming." *Annals of Wyoming* 45, no.1 (Spring 1973): 5-25.

Astoria, or, Enterprise beyond the Rocky Mountains by Washington Irving.

Irving, Washington, 1783-1859.
London : R. Bentley, 1836.

ASTORIA;

OR,

ENTERPRISE BEYOND

THE ROCKY MOUNTAINS.

BY WASHINGTON IRVING.

AUTHOR OF "THE SKETCH BOOK," "THE ALHAMBRA," &c.

IN THREE VOLUMES.

VOL. II.

LONDON:

RICHARD BENTLEY,

NEW BURLINGTON STREET.

1836.

1811

CHAPTER XII.

A PLENTIFUL HUNTING CAMP—SHOSHONIE HUNTERS—HOBACK'S RIVER—MAD RIVER—ENCAMPMENT NEAR THE PILOT KNOBS—A CONSULTATION—PREPARATIONS FOR A PERILOUS VOYAGE.

FIVE days were passed by Mr. Hunt and his companions in the fresh meadows watered by the bright little mountain stream. The hunters made great havoc among the buffaloes, and brought in quantities of meat; the voyageurs busied themselves about the fires, roasting and stewing for present purposes, or drying provisions for the journey; the packhorses eased of their burdens, rolled in the grass, or grazed at large about the ample pastures; those of the party who had no call upon their services, indulged in the luxury of perfect relaxation,

and the camp presented a picture of rude feasting and revelry, of mingled bustle and repose, characteristic of a halt in a fine hunting country. In the course of one of their excursions, some of the men came in sight of a small party of Indians, who instantly fled in great apparent consternation. They immediately returned to camp with the intelligence: upon which Mr. Hunt and four others flung themselves upon their horses and sallied forth to reconnoitre. After riding for about eight miles, they came upon a wild mountain scene. A lonely green valley stretched before them, surrounded by rugged heights. A herd of buffalo were careering madly through it, with a troop of savage horsemen in full chase, plying them with their bows and arrows. The appearance of Mr. Hunt and his companions put an abrupt end to the hunt; the buffalo scuttled off in one direction, while the Indians plied their lashes and galloped off in another, as fast as their steeds could carry them. Mr. Hunt gave chase; there was a sharp scamper, though of short continuance. Two young Indians, who were

indifferently mounted, were soon overtaken. They were terribly frightened, and evidently gave themselves up for lost. By degrees their fears were allayed by kind treatment; but they continued to regard the strangers with a mixture of awe and wonder; for it was the first time in their lives they had ever seen a white man.

They belonged to a party of Snakes who had come across the mountains on their autumnal hunting excursion to provide buffalo meat for the winter. Being persuaded of the peaceable intentions of Mr. Hunt and his companions, they willingly conducted them to their camp. It was pitched in a narrow valley on the margin of a stream. The tents were of dressed skins; some of them fantastically painted; with horses grazing about them. The approach of the party caused a transient alarm in the camp, for these poor Indians were ever on the look out for cruel foes. No sooner, however, did they recognise the garb and complexion of their visiters, than their apprehensions were changed into joy; for some of them had dealt with white men, and

knew them to be friendly, and to abound with articles of singular value. They welcomed them, therefore, to their tents, set food before them, and entertained them to the best of their power.

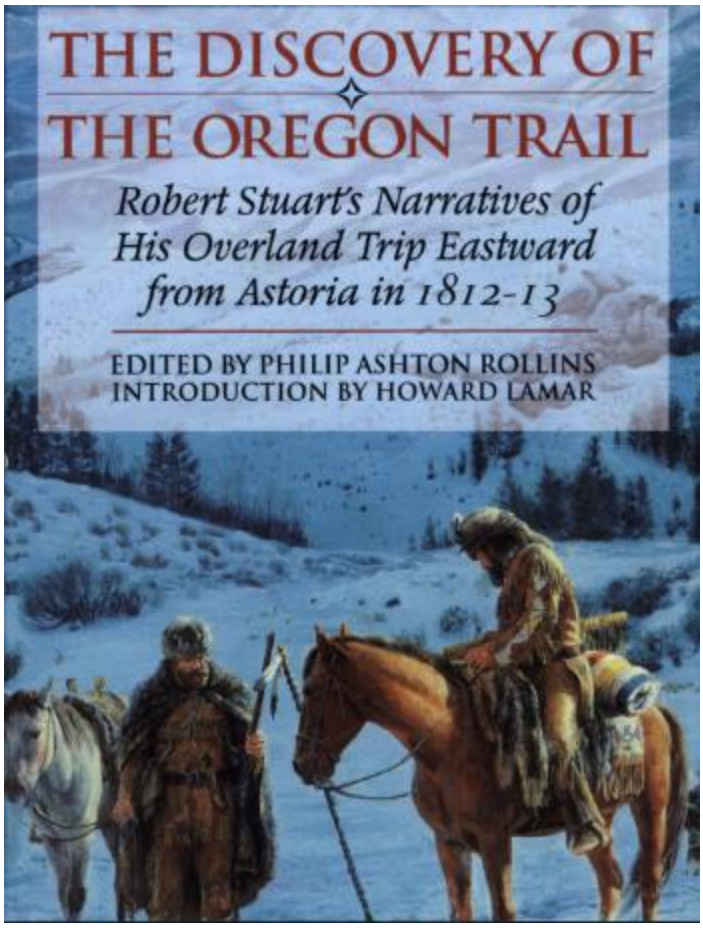
They had been successful in their hunt, and their camp was full of jerked buffalo meat; all of the choicest kind, and extremely fat. Mr. Hunt purchased enough of them, in addition to what had been killed and cured by his own hunters, to load all the horses excepting those reserved for the partners and the wife of Pierre Dorion. He found also a few beaver skins in their camp, for which he paid liberally, as an inducement for them to hunt for more; informing them that some of his party intended to live among the mountains, and trade with the native hunters for their peltries. The poor Snakes soon comprehended the advantages thus held out to them, and promised to exert themselves to procure a quantity of beaver skins for future traffic.

Being now well supplied with provisions, Mr. Hunt broke up his encampment on the

24th of September, and continued on to the west. A march of fifteen miles, over a mountain ridge, brought them to a stream about fifty feet in width, which Hoback, one of their guides, who had trapped about the neighbourhood when in the service of Mr. Henry, recognised for one of the head waters of the Columbia. The travellers hailed it with delight, as the first stream they had encountered tending toward their point of destination. They kept along it for two days, during which, from the contribution of many rills and brooks, it gradually swelled into a small river. As it meandered among rocks and precipices, they were frequently obliged to ford it, and such was its rapidity, that the men were often in danger of being swept away. Sometimes the banks advanced so close upon the river, that they were obliged to scramble up and down their rugged promontories, or to skirt along their bases where there was scarce a foothold. Their horses had dangerous falls in some of these passes. One of them rolled, with his load, nearly two hundred feet down hill into the river, but without

receiving any injury. At length they emerged from these stupendous defiles, and continued for several miles along the bank of Hoback's river, through one of the stern mountain valleys. Here it was joined by a river of greater magnitude and swifter current, and their united waters swept off through the valley in one impetuous stream, which, from its rapidity and turbulence, had received the name of Mad river. At the confluence of these streams the travellers encamped. An important point in their arduous journey had been obtained, a few miles from their camp rose the three vast snowy peaks called the Tetons, or the Pilot Knobs, the great landmarks of the Columbia, by which they had shaped their course through this mountain wilderness. By their feet flowed the rapid current of Mad river, a stream ample enough to admit of the navigation of canoes, and down which they might possibly be able to steer their course to the main body of the Columbia. The Canadian voyageurs rejoiced at the idea of once more launching themselves upon their favourite element; of exchanging their horses for canoes,

and of gliding down the bosoms of rivers, instead of scrambling over the backs of mountains. Others of the party, also, inexperienced in this kind of travelling, considered their toils and troubles as drawing to a close. They had conquered the chief difficulties of this great rocky barrier, and now flattered themselves with the hope of an easy downward course for the rest of their journey. Little did they dream of the hardships and perils by land and water, which were yet to be encountered in the frightful wilderness that intervened between them and the shores of the Pacific!


THE DISCOVERY OF
THE OREGON TRAIL
Robert Stuart's Narratives of
His Overland Trip Eastward
from Astoria in 1812-13
EDITED BY PHILIP ASHTON ROLLINS
INTRODUCTION BY HOWARD LAMAR

The Discovery of the Oregon Trail

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CHAPTER VII

SEPT. 30 · OCT. 28, 1812

On Foot from Moody Creek to Sweetwater River

[SEE MAP FACING PAGE 127]

McClellan Leaves Party · Ascend Teton River · Cross Teton Pass · Ascend Hoback River · Begin Descent of Green River · Near Starvation · Cannibalism Proposed · Rescue McClellan · A Deserted Indian Camp · Acquire Pack Horse · Big Sandy Creek · South Pass · Take Eastward Course South of Green Mts. · Through Muddy Gap · Sweetwater River.

[73] Wednesday 30th We yesterday fell in with a large trace made by Horses apparently about a month[1] ago, but of what nation cannot as yet tell, we are however inclined to believe they were Absarokas come here probably to see whether an Establishment had been made in this neighbourhood, which from what Mr Hunt[2] told them last year they had every reason to suppose was the case— They had encamped a little higher on this Branch,[3] which their road crofsed and lay in our course for 2 miles when it seperated in every direction and we lost it— Our course was the same as yesterday and 19 miles more brought us to our nights lodgings in a deep gulley near a boiling spring[4] Mr. Crooks is a good deal indisposed[5] and [*this evening*] has a considerable[6] fever— [*A little to one side of our camp one of the Canadians /in searching for good water/ discovered several very astonishing springs of various qualities and temperatures, some of them are cold, others hot: one of the cold we found to be acidulated and impregnated*

in a small degree with iron; but the principal one in the group is very hot & sulphuric, the water is oily to the touch, and foams like soap suds; its margin is covered with a yellow efflorescence of sulphur, which affects the sense of smelling at some distance, and the volume of smoke[7] that issues immediately from this spring may be distinguished at least two miles off.—]

Thursday 1st. October 1812

At an early hour we ascended the Hill[8] where Mr. McClellan to whose lot it had fallen to carry the Trap, refused to be its bearer any farther, neither would he pack an equivalent in dried meat but leaving us said he could kill enough for his daily subsistence and when informed that we would crofs the mountain[9] to the right the better to avoid the Blackfeet in whose walks we now were, his answer was, that he must consult the ease of his sore feet and went on, round the mountain[10]— We reached the other side by the middle of the afternoon and found the paſsage of the mountain somewhat difficult on account [*of*] the snow which in many places was of considerable depth— Mr McClellan was seen ahead of us in the Plain[11] below as we were decending— 6 miles from its base we reached a river[12] 50 yds wide and about knee deep with abundance of Willow & Beaver— The Plain from the mountain we traversed today to that of the Pilot Knobs[13] is about 16 miles[14] in width, and the River[15] running through it falls into Henrys River halfway between his Fort and the [74] mouth of Mad River—[16] the whole of this days march was 18 miles E.S.E.—[17]

[*Mr. Crooks' indisposition increased so much this afternoon that I insisted on his taking a dose of Castor oil, which fortunately had the desired effect, but he has such a violent fever, and is withal so weak as to preclude all idea of continuing our journey untill his recovery— notwithstanding the urgent solicitations of my men, to proceed without him; very justly representing the imminent dangers we exposed ourselves to by any delay in this unknown and barren tract, among most inveterate enemies to whites, and in the midst of impervious mountains of snow, at such an advanced season, without one days provision, and no very favourable appearances of procuring an addition here,*

did we even venture to hunt— such a prospect I must confeſs made an impreſsion on my mind that cannot easily be described, but the thoughts of leaving a fellow creature in such a forlorn situation were too repugnant to my feelings to require long deliberation, particularly as it was probable he might get well in a few days; this hope I suggested and at length prevailed on them, tho' very reluctantly to abide the event—

The sensations excited on this occasion, and by the view of an unknown & untravelled wilderneſs, are not such as arise in the artificial solitude of parks and gardens, for there one is apt to indulge a flattering notion of self sufficiency, as well as a placid indulgence of voluntary delusions; whereas the phantoms which haunt a desert, are want, misery, and danger, the evils of dereliction rush upon the mind; man is made unwillingly acquainted with his own weakneſs, and meditation shews him only how little he can sustain, and how little he can perform—]

Friday 2nd Jones on searching for a place to set the Trap met a White Bear,[18] which contrary to our determination he was obliged to shoot in his own defence, but only wounding him he made his escape— Mr Crooks's indisposition increased so much yesterday that he last evening took a dose of Castor Oil, which had the intended effect, [*is rather easier*] but has such a fever and [*unable to move or take any food*] is withal so weak as to preclude the idea of continuing our route untill he gets better— [*therefore*] Not knowing how long we might be compelled to remain here, however disagreeable and dangerous on account of the advanced state of the season, and the excursions of the Blackfeet Indians I sent Jones out early in quest of Game, who in about an hour[19] returned having killed five Elk— We immediately moved forward [(*supporting Mr. Crooks*) *for*] 6 miles south up the Fork to where the dead animals lay and encamped[20] in the vicinity [—*the weather for some days past has been piercingly cold*—]

Sunday 4th Mr. Crooks continued both yesterday and today too weak and feverish to proceed, we had no more medicine, but had

recourse to an Indian Sweat,[21] which had a good effect and we are in great hopes of moving on again tomorrow—

Monday[22] 5th By carrying Mr Crooks's things we were enabled to go on 8 miles for the most part through swamps[23] in a southerly direction, when finding some good firewood and an excellent Camp we stopped for the night—[24] Several Branches[25] iſsue from the Pilot Knob Mountain on the East, which on reaching the low grounds are dammed up by Beaver and occasion the Swamps through which we paſsed today— On our way here we Killed a White Bear which [*had 3½ Inches fat on the rump, and*] proves an agreeable addition to our stock of [*Elk*] meat

[75] Tuesday 6th We set out early and leaving the swamps[26] on our right[27] proceeded along the mountain[28] through the Plain 13 miles S S.E, where the main body of the River,[29] iſsuing from the Pilot Mountain[30] we ascended it 4 miles S E and encamped[31] where it divides into nearly equal Branches Mr [*C*][32] mends slowly and was able to carry a part of his things[33] [*for the most part of*] today—

Wednesday 7th We continued on up the right hand Fork[34] for 13 Miles S E by E to the summit[35] of the Pilot Knob Mountain on which we found little or no snow—[36] 9 Miles same course brought us to Mad River[37] and in 2 more reached the opposite bank[38] having croſsed Five channels of from 30 to 60 yards wide each and from 1½ to 3 feet[39] water a very rapid current, and in every other respect of the same character as the part where we decended on the Rafts, with the exception that the valley is here several miles wide, and some of the Bottom upwards of a mile in breadth and thickly timbered with bitter Cottonwood[40] and Pines—

Thursday 8th 6 Miles E.S.E.[41] brought us to a considerable path along the Hills[42] 6 S.S.W. was our next course down to where

Mad River enters the mountains,[43] when ascending a high Hill[44] we went 11 more S S E[45] and encamped on a small Branch[46] [*there being good sign of Beaver*—] saw a great many Antelopes very wild— Killed none[47] [*although we had not a mouthful to eat*]—

Friday 9th In 6 Miles S.E. we reached Hobacks Fork[48] a stream about 50 yds wide with a good body of water which runs to the West and joins Mad River some distance below We next proceeded up the Fork[49] 6 miles East, when killing an Antelope we encamped[50] immediately although early in the day— It was a Buck and very poor but with a Beaver which Vallé caught last night[51] it made tolerable eating— [*at least we found it so, having ate nothing since we breakfasted on a few poor Trout and a small Duck yesterday morning*—]

[76] Saturday 10th Our route was today 6 miles up the Fork[52] to Crofs Creek[53] 20 yds wide—3 to Henrys Hill[54] 2 up the small Branch,[55] where the side of a mountain having been precipitated from the main body has partly stopped the channel of the Run and made a Pond[56] upwards of an hundred yards in circumference very deep and the residence of some Beaver 3½ miles over a mountain[57] brought us again to Hobacks Fork which following for 4½ more we reached Hunters Fork[58] & encamped[59] between that and the main stream,[60] having come 19 miles nearly due East— the greater part along an abominable road occasioned by the proximity of the mountains where the track is often in places so nearly perpendicular, that mifsing a single step you would go several hundred feet into the rocky bed of the stream below—

Sunday 11th We eat the remainder of our goat meat[61] and went on at a smart pace 10 miles S.E.[62] when taking up a small Branch[63] in 9 more East found where Mr McClellan had encamped [*and supped upon the carcase of a poor wolf*] the night before, which being as near the Spanish River Mountain[64] as we could find water, and

Notes to Chapter VII

Discovery of the Oregon Trail

58 Present-day Jack Creek, which, immediately after receiving the waters of present-day Dell Creek, emptied through Hoback River's right bank. *Teton; Wyoming Forest; Quad. Gros Ventre; Geol. Wyoming.*

59 Camped approximately at site of town of Bondurant.

60 Hoback River.

61 "our old Buck meat" in trav. mem. Doubtless meat of the antelope killed October 9.

62 Ascending Hoback River to mouth of present-day Fish (*alias* Fisherman) Creek. *Teton; Wyoming Forest; Quad. Gros Ventre; Geol. Wyoming.*

63 Fish Creek.

64 Not a mountain, but a long ridge forming the local portion of the wall which enclosed the Green River's basin. An abrupt ascent over rough ground took Stuart to the summit of this ridge where, at his place of crossing it (approximately latitude 43° 9′, longitude 110° 11′ 30″), he found himself atop the so-called rim-rock which, extending the length of the ridge, consisted of a more or less horizontal cap of lava. A descent of the gnarled quasi-vertical face of this rim-rock was followed by a scramble down the steeply sloping talus which led from the rock's foot to the floor of the Green River's valley.

65 Camp was on headwaters of Fish Creek and approximately two and one-eighth miles due west from where Stuart crossed the ridge mentioned in note 64.

66 Three most northerly forks of present-day North Beaver Creek. *Teton; Wyoming Forest; Quad. Gros Ventre; Geol. Wyoming.*

67 This stream, present-day Green River (which by confluence with Grand River forms the Colorado River), was the "Rio Verde" of the Spaniards, the "Spanish River" of other early voyageurs, and the "Colorado of the West" of Bonneville in 1837. The Snake indians who frequented it termed it, so Granville Stuart states, *Can-na-ra o-gwa*, meaning "Poor River"; this because the soil adjacent to much of its course was such as not to support either trees or grass. Nevertheless, *Gebow*, p. 10, has these same indians term it *Pe-ah-o-goie*. Fremont avers that its Absarokan name was *Seeds-ke-dee-agie*, meaning "Prairie Hen River" and applied because of the prevalence of that bird, *Tetrao urophasianus*, in the river's valley (*Railroad Survey*, XI, map facing p. 34; *Stuart, Granville* [*A*], pp. 30, 68; *Fremont*, p. 129). For variant names and their history see *Dale*, p. 156, f.n., as also ed. note in *Sawyer*, pp. 50, 51.

68 Stuart's point of initial contact with Green River was approximately at the mouth of present-day Little Twin Creek (latitude 43° 8′ 15″, longitude 110° 3′ 50″), and thus in the immediate vicinity of the site of present-day town of Kendall. *Teton; Wyoming Forest; Quad. Gros Ventre; Geol. Wyoming.*

69 Incorrectly "160 yards" in trav. mem.

70 See note 68.

71 Incorrectly "11 more" in trav. mem. Camped on left bank of Green River at a spot approximately three and one-half miles below the mouth of

LIFE IN THE

ROCKY MOUNTAINS

A Diary of Wanderings on the sources of

the Rivers Missouri, Columbia, and Colorado

from February, 1830, to November, 1835

By W. A. FERRIS

then in the employ of the

American Fur Company

Author: Ferris, Warren Angus, 1810-1873.
Title: Life in the Rocky Mountains; a diary of wanderings on the sources of the rivers Missouri, Columbia, and Colorado from February, 1830, to November, 1835 by W. A. Ferris, then in the employ of the American Fur Company, and supplementary writings by Ferris, with a detailed map of the fur country, drawn by Ferris in 1836. Edited, and with a life of Ferris, and a history of explorations and fur trade, by Paul C. Phillips.
Published: Denver, Col., F. A. Rosenstock, Old West Pub. Co., 1940.

CHAPTER XXVII

On the 17th a party of trappers, of the Rocky Mountain Fur Company, having received supplies for the fall hunt, left the company, and passed ten miles up the valley, intending to cross on to Lewis River, near the mouth of Salt River. The following morning they discovered a party of strange Indians near the margin of the stream, some distance above them, and several of the men immediately departed to ascertain who they were. As they approached, the chief advanced to meet them, armed with nothing but the calumet of peace; but he was recognized to be a Grosventre and in a twinkling was sent to eternity. At the same time the Indians, who perhaps numbered fifty men, besides women and children, entered a grove of cottonwood trees, and without loss of time proceeded to make a breastwork, or pen of trees impenetrable to balls. In the mean time an express was despatched to inform us, and in a few minutes the plains were covered with whites, and friendly Indians, rushing to the field of battle. On their arrival, however, the enemy had completed an impenetrable fort, fifty feet square, within which they had fastened their horses. A general fire was immediately opened upon the fort, and was warmly kept up on both sides until dark. In the mean time a plan was formed by the whites to burn them up in their fort, and quantities of dry wood and brush were collected for that purpose; but the Indians on our side objected to this project, on the ground that all the plunder would be lost, which they thought to appropriate to their own use. At length night came on, and the whites, who were provoked at the Indians, for not consenting to annihilate the enemy at once, departed for their respective camps; the Indians soon followed, and left such of the enemy as survived, at liberty to depart and recount their misfortunes to their friends. We lost in this engagement, two men killed, one mortally wounded, and many others either severely or slightly. The Indians on our side, lost five killed, and many wounded, some supposed to be mortally. The following morning, a large party of both whites and Indians returned to the fort. In it were the dead bodies of three Grosventre Indians, a child, twenty-four horses, and several dogs. Our Indians followed the route of the fugitives several miles, and found their baggage, which they had concealed in divers places, as well as the bodies of five more Indians, and two young women, who were yet unhurt, though their heartless captures sent them to the shades, in pursuit of their relations without remorse. Amongst the dead horses were those lost by Mr. Fitzpatrick some days since; but those stolen from Sublett about the same time, were not among the number; hence we supposed that a larger party of Indians were yet behind.

August 1832

After this period we enjoyed fine weather, and nothing occurred worthy of remembrance, until the 27th. This evening five of seven men who departed for St. Louis, three days since, returned, and informed us that they were attacked yesterday, by a party of Indians in Jackson's Hole, and that two of their number, Moore and Foy, killed. The survivors saved themselves by flight, but one of them was wounded in his thigh.

On the 30th William Sublett departed on his return to St. Louis. He had been detained here much longer than he intended, owing to a wound he had received on the 18th. During the first day's march, Stevens, the person who was wounded in his thigh, several days since, died, and was interred in the southeastern extremity of Pierre's Hole. On the first of August we had a hail storm of one hour's duration. Until this period we had anxiously

awaited the appearance of Provenu and Fontenelle; but they came not, and we became apprehensive that they had lost their horses on the way, and were thus prevented from reaching us, according to promise however, Dripps and Vanderburgh resolved to move over to Green River, and learn if possible something definite. We set out on the 2d and reached the head of Pierre's Hole on the 3d. On the 4th we crossed the mountain, and descended into a large prairie valley, called Jackson's Big Hole. It lies due east of the Trois Tetons, and is watered by Lewis River, which leaves the valley through a deep cut in the mountains, impassable for pack horses; hence trappers have to cross the mountains to Pierre's Hole, in order to avoid greater obstacles, which present themselves at any other pass. The waters of this river, in the head of the Hole, expand into a lake of considerable magnitude, which I believe is identical with one attached to the Big Horn River, on the maps of the United States, for I have never heard of any lake on the sources of that river, although our trappers have explored every spring source of it. This lake is called the Teton Lake, from the mountain that overlooks it. The river flows through the valley in a southwest direction, and near the lower end of the hole, a large branch from the southeast falls into it. Those streams are bordered by aspen and cottonwood trees, and groves of cedars, in some parts of the valley. The Hole is surrounded by lofty mountains, and receives its name from one of the firm of Smith, Sublett and Jackson.

August 1832

We crossed Lewis River at a well known ford, where its waters are separated by several Islands, and are expanded to the distance of several hundred yards; but are fordable at this season for pack horses, if led carefully over, following the bars or shallow places. In the evening we halted on a spring, four miles east of Lewis River, after marching twenty-two miles. On the 5th we passed six or eight miles southeast, and halted on the margin of the stream, flowing from that direction. During our march, some of the hunters saw the bones of two men, supposed to be those killed from a party of seven, in the latter part of July. On the sixth we entered a dark defile, and followed a zig-zag trail along the almost perpendicular side of the mountain, scarcely leaving space in many places for the feet of our horses; we all dismounted, and led our animals over the most dangerous places, but notwithstanding this precaution, three of them lost their footing, and were precipitated sixty or seventy feet into the river below; two were but slightly injured, having fortunately fallen upon their loads, which preserved them from death; but the other was instantly killed. At length we came out into an open valley after a march of fifteen miles, and halted in its eastern extremity. This small valley is called Jackson's Little Hole, in contradistinction to its neighbor, which we left yesterday. It was covered with herds of buffalo, numbers of which fell before our rifles, and supplied us with fresh meat, an article we had not possessed since we came into Pierre's Hole. We saw several encampments of a large village of Indians, who had been in the valley five or six days since. They were doubtless Grosventres of the prairie, and were prevented from passing by way of Pierre's Hole, most likely, by the reception met with by a small party, who reached that Hole in advance of the main village.

On the 7th we ascended a high abrupt hill, covered with dense groves of aspen trees, and came in view of a vast plain, gently descending eastward to Green River, which flows through it southeastward. The plain was literally covered with buffalo, numbers of which we killed, and halted at a spring on the summit of the hill. On the 8th we descended the

CHAPTER XXVIII

August 1832

On the 12th all arrangements, for the journey being completed, Mr. Fontenelle departed with thirty men, and the furs we had collected during the past year, for Fort Union at the Yellow Stone; at the same time Messrs. Vanderburgh and Dripps, who were now jointly acting for the American Fur Co., departed at the head of about ten men, intending to hunt on the source of the Missouri. We reached a spring, on the summit of the hill, east of Jackson's Little Hole, in the evening; and halted for the night. On the 14th we passed through the Narrows, between Jackson's Holes; and avoided some of the difficulties we met with on our previous passage, by crossing the river, several times. In the evening we halted for the night near the remains of two men, who were killed in July last. These we collected, and deposited in a small stream, that discharged itself into a fork of Lewis river; that flows from Jackson's Little Hole.

On the 16th we reached the head of Pierre's Hole, and found the bones of several Indians, who were supposed to have been killed during the battle in July last; and were transported here by their relations, though several miles from the battle field. Three days after we reached Henrie's Fork amid clouds of dust which rose from our horses' feet, and filled our eyes. The plains were covered with buffalo, in all directions, far as we could discern them.

On the 20th I departed with two others, with orders to seek the Flatheads, and induce them to meet the company in Horse prairie, if possible, in eight days from this time. Our leaders intended to cache their goods at that place, and wished to meet the Indians, for the purpose of trading with them. Our company continued onward a north course, whilst we passed north of the sand mountain, and bore a trifle south of west, in the direction of Cota's defile. We reached Kamas creek at sunset, after a march of forty-five miles, during which we suffered extremely, owing to want of water, on the route; but allayed our parching thirst when we arrived; ate a hearty supper of dry meat, hobbled our fatigued horses, and slept in a thicket until sunrise. Next day proceeded on thirty-five miles, to Cota's creek, and halted until dark. During our march we saw traces of horsemen, who had passed by recently. At dusk we passed two miles up the defile, and halted in the logs, near the margin of the creek. On the 22nd we mounted our horses, at day break, and passed the narrows into a rolling plain, where we found several encampments made by the Flat heads twenty days since. At noon, we halted to bait our horses, and demolished a few pounds of dried meat, ourselves. At the expiration of two hours, we again departed; and proceeded down the plain, until near midnight, halting at length near the margin of a small stream. During the night our slumbers were disturbed by the bellowing of a herd of bulls, near us; and by the howling of a multitude of wolves, prowling about the buffalo. We were approached, by a formidable grizzly bear, who slowly walked off, however, after we had made some bustle about our beds. We made during the day and night, about fifty miles.

On the 23d we arose in the morning, and found ourselves in the valley of the east fork of Salmon river. There were large herds of buffalo slowly moving up the valley, which led us to believe, that the Indians were not far below us. One of their encampments appeared to have been evacuated, but five or six days since; and was at this time a rendezvous for wolves, ravens, and magpies. We likewise saw numbers of salmon, forcing their way up

CHAPTER XLI

On the 20th of July a young man by the name of Newell and myself, departed at the head of an equipment destined for the Flathead trade. Our little party consisted of six "engages" with pack horses, and five armed Indians, amounting in all to thirteen armed men. It was late before we separated from the company, yet, notwithstanding, we marched fifteen miles, killed a fine bull, and halted on the margin of a small spring, in the highlands, near Jackson's Little Hole. We passed through the hole on the succeeding day, and encamped in the narrows below. We fortified our little encampment with a breastwork of logs, or in other words, we enclosed it in a timber pen. July 1833

Leaving this, we passed the narrows, a corner of Jackson's Big Hole, crossed Lewis river, ascended the mountains, and on the 30th came into a region where the weather was fair, the sky cloudless above us, and the sun shining pleasantly, quite reverse to the appearance a short distance below. Gazing down, in the direction of Jackson's Hole, from our elevated position one of the most beautiful scenes imaginable, was presented to our view. It seemed quite filled with large bright clouds, resembling immense banks of snow, piled on each other in massy numbers, of the purest white; wreathing their ample folds in various forms and devious convolutions, and mingling in one vast embrace their shadowy substance. - Sublime creations! emblems apt of the first glittering imaginings of human life! like them redolent of happiness, and smiling in the fancied tranquil security of repose; like them, liable to contamination by intercourse with baser things, and like them, dissipated by the blasts of adversity, which sooner or later are sure to arrest and annihilate them. Alike evanescent are the dreamy anticipations of youth, and the aerial collections of vapor. Such the reflections suggested by this lovely scene, which, though often on the mountains, I have never before seen below me. Clouds of this pure snow-white appearance, are, however, by no means uncommon; but those usually observed beneath us, when on the mountains, have a dark and lowering aspect.

Turning with reluctance to things of a more terrestrial nature we pursued our way down to Pierre's Hole, where we fortunately discovered and killed a solitary bull; being the only animal of the kind we had seen since leaving Jackson's little hole.

We passed in our route a well known hot spring, which bursts out from the prairie, on the east side of a valley, near a small willow skirted creek, and flows several hundred yards into Wisdom river. It boils up, at its head, in a quantity sufficient to form a stream of several paces in breadth, and is so hot at its source, that one cannot bear a finger in it for a moment; it gradually becomes cooler as it recedes from the fount and at its lower extremity is cold. The Indians have made a succession of little dams, from the upper end to the river; and one finds baths of every temperature, from boiling hot, to that of the river, which is too cold for bathing, at any season. Our Indians were almost constantly in one or other of these baths during our stay near the springs.

It may be proper to remark here, that we have been drenched with rain, more or less, every day since we left rendezvous. The mornings are generally cloudless and the rocks, mountains, and valleys, are gilded by the dazzling brightness of the sun; but the scene

CHAPTER LI

Resuming our journey early on the morning of the twenty-first, we crossed Henry's Fork, and continued on till we arrived in the vicinity of Pierre's Hole; where the country assumes a rolling appearance, and is dotted with an occasional grove of aspen trees. Entering this valley, we passed over to Pierre's fork, near which we discovered the trail of our company, and following it about three miles, at our rapid pace, overtook them as they were on the very point of encamping. Mutual congratulations over, I retired much fatigued to rest. From Mr. Montour, I learned that the hunters had killed several bulls, a bald eagle and a goose. They were greatly annoyed by suffocating clouds of dust, which arose from their horses' feet, filled their lungs and eyes, and the air around them, for some distance.

On the twenty-second, we remained to dry meat, which was prepared and packed, ready for transportation, by evening. Next morning we pursued our journey, passed South-Eastward to Pierre's Hole, and halted in the mountain, on a trail leading over it. We killed, during our march, five buffalos and an antelope. One of our Indians found in Pierre's Hole, a pair of boots, and some articles of clothing, that had evidently been there a long time, on the prairie; probably lost by some white man during last year. On the twenty-fourth we ascended the mountain, crossed an immense snow bank with extreme difficulty, descended the plain, passed through Lewis's rim, though so high that our horses were obliged to swim, and halted on a small stream several miles east of the river. Leaving the river on the twenty-fifth, we passed along this valley to the South-East point or extremity, when we reached a fork of this stream, and travelled up its narrow bottom, flanked on either side, at the distance of less than half a mile, by lofty mountains; climbing occasional hills or bluffs, which project in some instances quite to the river's margin; and halted at the commencement of the narrows, formed by the mountains closing upon the stream, until barely sufficient space remains for its compressed channel. We here found an encampment, made by a large party of whites, some ten days since, on their way from Salt river to Green river; I supposed it to have been made by Dripps, who wintered on Snake river.

May 1834

On the twenty-fifth we passed, with our usual hazzards and difficulty, though fortunately without accident, through the tortuous windings, abrupt elevations, and percipitous descents, of the Narrows, out of which we were glad to emerge; and entering Jackson's Little Hole, encamped on a small branch of this fork, at the East side of the valley. Antelopes and buffalos were found here; and an encampment made by the company whose traces we observed the day previous. On the twenty-seventh we ascended the steep, rough, aspen covered hill, forming the east boundary of this hole, and passing down on the opposite side, came into the plains of Green river. We now directed our course towards "*Bonnyville's Folly*," or "*Fort Nonsense*," as it was more frequently called; but had proceeded a few miles only, when we discovered two Indians so near us that they could not hope to escape though they betrayed considerable anxiety at our approach. When we reached them, however, their fears were quelled, we learned that they belonged to the party of Dripps, who were encamped on a small stream in the Wind mountain, east of Green river. On hearing this information, we turned our course to that stream, which we crossed without accident; and halted after sundown in the willows, on the border of a small

JOURNAL

OF AN

EXPLORING TOUR

BEYOND THE ROCKY MOUNTAINS,

UNDER THE DIRECTION OF THE

AMERICAN BOARD OF COMMISSIONS FOR FOREIGN MISSIONS,

IN THE YEARS 1835, '36, AND '37;

CONTAINING

A DESCRIPTION OF THE GEOGRAPHY, GEOLOGY, CLIMATE, PRODUCTIONS OF THE COUNTRY, AND THE NUMBER, MANNERS, AND CUSTOMS OF THE NATIVES:

WITH A

MAP OF OREGON TERRITORY.

BY REV. SAMUEL PARKER, A. M.

SECOND EDITION.

ITHACA, N. Y.
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1840.

CHAPTER VI.

Part with my associate—arrive at head waters of the Columbia—kindness of the Indians—narrow defile—geology—Jackson's Hole—wild flax—trappers go out on a hunt—mountain prospect—Trois Tetons—danger from affrighted buffalo—Pierre's Hole—Volcanic chasm—children on horseback—interesting worship with the Indians—burial of a child—scarcity of food—a timely supply—Salmon river—expected battle—geological observations—scene of mourning.

August 21st, commenced our journey in company with Capt. Bridger, who goes with about fifty men, six or eight days' journey on our route. Instead of going down on the south-west side of Lewis' river, we concluded to take our course northerly for the Trois Tetons, which are three very high mountains, covered with perpetual snow, separated from the main chain of the Rocky Mountains, and are seen at a very great distance; and from thence to Salmon river. Went only about three miles from the place of rendezvous, and encamped.

On the 22d, I parted with Doct. Whitman, who returned with the caravan to the United States. My anxious desire was, that the Lord would go with him and make his way prosperous, and make him steadfast to the object of his return, until it should be accomplished; and that, with next year's caravan, he might come with associates into this promising field, and they together reap a plentiful harvest. To-day we traveled twenty miles, through a somewhat barren country, and down several steep descents, and arrived at what is called Jackson's Hole, and encamped up-

August 1835

Parker error in location: This was Jackson's Little Hole. See page 89 for reference to Jackson's large hole.

on a small stream of water, one of the upper branches of the Columbia river. It was interesting to find myself, for the first time, upon the waters of this noble river. The Indians were very attentive to all my wants—took the entire care of my packed animals, cooking, &c. They preserve particular order in their movements. The first chief leads the way, the next chiefs follow, then the common men, and after these the women and children. The place assigned me was with the first chief. August 1835

Found some buffalo to-day, of which our men killed a small number. These were a timely supply, as our provisions were becoming scarce. The principal chief of the Flatheads kindly furnished me with a horse to relieve mine.

Sabbath, 23d. Had an opportunity for rest and devotional exercises. In the afternoon we had public worship with those of the company who understood English. The men conducted with great propriety, and listened with attention. I did not feel any disposition to upbraid them for their sins, but endeavored affectionately to show them, that they are unfit for heaven, and that they could not be happy in the employments of that holy place, unless they should first experience a great moral change of heart by the grace of God, since the only source of happiness in heaven consists in serving and glorifying God forever and ever. The place of our encampment was such as would naturally fill the mind with solemnity—just above a very deep and narrow defile which we had to pass, called by the hunters Kenyan. So high were the mountains, that some of them were tipped with perpetual snow, and so narrow the passage, that twilight shades obscured the view. The distance through must occupy more than half a day's journey.

Arose very early on the 24th, and commenced our way

through the narrow defile, frequently crossing and re-crossing a large stream of water which flows into the Snake river. The scenery was wild and in many parts sublime—mountains of rock, almost perpendicular, shooting their heads up into the regions of perpetual snow, and in one place projecting over our path, if a zigzag trail can be called a path. Often we had to pass over the sides of mountains, which inclined at an angle of 45° toward the stream of water below, and down which packed mules have fallen, and were dashed upon the rocks. I endeavored to guide my Indian horse so cautiously that he became unmanageable, being resolved to have his own method of choosing the way. I was under the necessity of dismounting and making the best of my way. But on farther acquaintance with Indian horses, I learned that their dashing mode of going ahead, even in dangerous places, was preferable to the most cautious management of the American.

August 1835

For some miles there was graywacke in ridges or dykes, at equal distances of six or eight rods apart, and from six to ten feet wide, rising a little above the surface of the earth, running from south-east to the north-west; laying in strata dipping to the west at an angle of 60°. At some distance I observed a mountain of red earth of similar character, excepting that the strata dipped to the east at an angle of 40°. In one place where the strata of rocks and earth were in waves nearly horizontal, a section a few rods wide, of a wedge form, had its waving strata in a perpendicular position, as though the mountain had been rent asunder, and the chasm filled with the perpendicular wedge. A great diversity of the strata of rocks and earth prevailed in every part. Towards the last of the way through this narrow defile, we came to what appeared to be magnesian limestone, stratified,

of a brown color, and very hard. As we passed on we saw dark brown gypsum, like that found in the western part of the state of New York. Here for some distance I was much annoyed with the strong scent of sulphureted hydrogen, and soon saw at the foot of the mountain under the bed of gypsum a large sulphur spring, which sent up as much as thirty gallons of water per minute. Around this spring were large quantities of incrusted sulphur, and so strongly is the water saturated, that it colors the water of the river, on the side next to the spring, a greenish color, for more than a mile below.

August 1835

We passed more forest to-day, than all before since we left Rock Independence; among which is Norway pine, balsam fir, double spruce, and common poplar—some low cedar and mulberry shrubs, and various species of shrubbery which are not found in the United States. The Indians were very kind, and seemed to vie with each other to see which could do the most for my comfort, so that they more than anticipated my wants. Two little girls brought me a quart of strawberries, a rare dish for this season of the year. And an Indian brought me some service berries, which are large, purple and oblong, of a pleasantly sweet taste, similar to whortleberries. We encamped upon a fertile plain, surrounded by mountains, where three years before three men were killed by a small war party of Blackfeet Indians. There were seven of the white men, and when they saw the Blackfeet, they all fled in different directions, and by so doing emboldened the Indians to the pursuit. Had they stood firm and combined, it is probable they would have escaped unhurt.

We traveled four hours on the 25th, to another branch of Lewis' or Snake river, and encamped in a large pleasant val.

ley, commonly called Jackson's large hole. It is fertile and well watered with a branch of Lewis' river coming from the south-east, and another of some magnitude, coming from the east north-east, which is the outlet of Jackson's lake, a very considerable body of water laying back of the Trois Tetons. There are also many very large springs of water of uncommon clearness, which issue from the base of the surrounding mountains. This vale is well supplied with grass of excellent quality, which was very grateful to our horses, and mules, and the avidity with which they helped themselves seemed to say, they would be remunerated for past deprivations. August 1835

Flax is a spontaneous production of this country. In every thing, except that it is perennial, it resembles the flax which is cultivated in the United States—the stalk, the bowl, the seed, the blue flower, closed in the day time and open in the evening and morning. The Indians use it for making fishing nets. Fields of this flax might be managed by the husbandman in the same manner as meadows for hay. It would need to be mowed like grass; for the roots are too large and run too deep into the earth, to be pulled as ours is, and an advantage, which this would have, is, that there would be a saving of ploughing and sowing. Is it not worthy of the experiment of our agricultural societies?

Kentuc, my Indian, brought me to-day some very good currants, which were very grateful in this land. There are several species, yellow, pale red, and black. The yellow and pale red were the best flavored.

We continued in this encampment three days, to give our animals an opportunity to recruit, and for Captain Bridger to fit and send out several of his men into the mountains to hunt and trap. When I reflected upon the prob-

Introduction to *The River of the West*

Joe Meek's Years in the Rocky Mountains

Preface

This is the story of Joe Meek and his years as a mountainman. Meek came west in 1828 as an employee of the Rocky Mountain Fur Company, and spent the next twelve years engaged in the fur trade. He worked for the various fur companies and later became a free trapper. He often traveled with Bridger's brigade, and participated many of the important events of the period.

In the later years of his life, he told his story to Oregon historian Frances Fuller Victor, who recorded the narrative we see here. Meek had a vivid memory of his years in the mountains, and he enlivened the account with many entertaining anecdotes of mountainman life.

This on-line book consists of the first twenty-one chapters of the original edition as published in 1870 by Mrs. Victor. The remaining chapters of the original edition deal with Meek's second career as an Oregon settler, after retiring from his life as a mountainman. While this material is a useful source for the history of settlement in Oregon, it is beyond the scope of this electronic fur-trade library, and is not included here.

Bibliographical Information

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The River of the West

Chapter XIII

1835. The rendezvous of the Rocky Mountain Company seldom took place without combining with its many wild elements, some other more civilized and refined. Artists, botanists, travelers, and hunters, from the busy world outside the wilderness, frequently claimed the companionship, if not the hospitality of the fur companies, in their wanderings over prairies and among mountains. Up to the year 1835, these visitors had been of the classes just named; men traveling either for the love of adventure, to prosecute discoveries in science, or to add to art the treasure of new scenes and subjects.

But in this year there appeared at rendezvous two gentlemen, who had accompanied the St. Louis Company in its outward trip to the mountains, whose object was not the procurement of pleasure, or the improvement of science. They had come to found missions among the Indians; the Rev. Samuel Parker and Rev. Dr. Marcus Whitman; the first a scholarly and fastidious man, and the other possessing all the boldness, energy, and contempt of fastidiousness, which would have made him as good a mountain leader, as he was an energetic servant of the American Board of Foreign Missions.

The cause which had brought these gentlemen to the wilderness was a little incident connected with the fur trade. Four Flathead Indians, in the year 1832, having heard enough of the Christian religion, from the few devout men connected with the fur companies, to desire to know more, performed a winter journey to St. Louis, and there made inquiry about the white man's religion. This incident, which to any one acquainted with Indian character, would appear a very natural one, when it became known to Christian churches in the United States, excited a very lively interest, and seemed to call upon them like a voice out of heaven, to fly to the rescue of perishing heathen souls. The Methodist Church was the first to respond. When Wyeth returned to the mountains in 1834, four missionaries accompanied him, destined for the valley of the Wallamet River in Oregon. In the following year, the Presbyterian Church sent out its agents, the two gentlemen above mentioned; one of whom, Dr. Whitman, subsequently located near Fort Walla-Walla.

The account given by Capt. Bonneville of the Flatheads and Nez Perces, as he found them in 1832, before missionary labor had been among them, throws some light on the incident of the journey to St. Louis, which so touched the Christian heart in the United States. After relating his surprise at finding that the Nez Perces observed certain sacred days, he continues: " A few days afterwards, four of them signified that they were about to hunt. ' What!' exclaimed the captain, 'without guns or arrows; and with only one old spear ? What do you expect to kill ?' They smiled among themselves, but made no answer. Preparatory to the chase, they performed some religious rights, and offered up to the Great Spirit a few short prayers for safety and success; then having received the blessing of their wives, they leaped upon their horses and departed, leaving the whole party of Christian spectators amazed and rebuked by this lesson of faith and dependence on a supreme and benevolent Being. Accustomed as I had heretofore been to find the wretched Indian reveling in blood, and stained by every vice which can degrade human nature, I could scarcely realize the scene which I had witnessed. Wonder at such unaffected tenderness and piety, where it was least to have been sought, contended in all our bosoms with shame and confusion, at receiving such pure and wholesome instructions from creatures so far below us in all the arts and comforts of life.

"Simply to call these people religious," continued Bonneville, "would convey but a faint idea of the deep hue of piety and devotion which pervades their whole conduct. Their honesty is immaculate, and their purity of purpose, and their observance of the rites of their religion, are most uniform and remarkable. They are certainly more like a nation of saints than a horde of savages."

This was a very enthusiastic view to take of the Nez Perce character, which appeared all the brighter to the Captain, by contrast with the savage life which he had witnessed in other places, and even by contrast with the conduct of the white trappers. But the Nez Perces and Flatheads were, intellectually and morally, an exception to all the Indian tribes west of the Missouri River. Lewis and Clarke found them different from any others; the fur traders and the missionaries found them different; and they remain at this day an honorable example, for probity and piety, to both savage and civilized peoples.

To account for this superiority is indeed difficult. The only clue to the cause is in the following statement of Bonneville's. "It would appear," he says, " that they had imbibed some notions of the Christian faith from Catholic missionaries and traders who had been among them. They even had a rude calender of the fasts and festivals of the Romish Church, and some traces of its ceremonials. These have become blended

with their own wild rites, and present a strange medley, civilized and barbarous."

Finding that these people among whom he was thrown exhibited such remarkable traits of character, Captain Bonneville exerted himself to make them acquainted with the history and spirit of Christianity. To these explanations they listened with great eagerness. "Many a time," he says, "was my little lodge thronged, or rather piled with hearers, for they lay on the ground, one leaning over the other, until there was no further room, all listening with greedy ears to the wonders which the Great Spirit had revealed to the white man. No other subject gave them half the satisfaction, or commanded half the attention; and but few scenes of my life remain so freshly on my memory, or are so pleasurably recalled to my contemplation, as these hours of intercourse with a distant and benighted race in the midst of the desert."

It was the interest awakened by these discourses of Captain Bonneville, and possibly by Smith, and other traders who happened to fall in with the Nez Perces and Flatheads, that stimulated those four Flatheads to undertake the journey to St. Louis in search of information; and this it was which resulted in the establishment of missions, both in western Oregon, and among the tribes inhabiting the country between the two great branches of the Columbia.

The trait of Indian character which Bonneville, in his pleased surprise at the apparent piety of the Nez Perces and Flatheads, failed to observe, and which the missionaries themselves for a long time remained oblivious to, was the material nature of their religious views. The Indian judges of all things by the material results. If he is possessed of a good natural intelligence and powers of observation, he soon discovers that the God of the Indian is but a feeble deity; for does he not permit the Indian to be defeated in war; to starve, and to freeze ? Do not the Indian medicine men often fail to save life, to win battles, to curse their enemies? The Indian's God, he argues, must be a good deal of a humbug. He sees the white men faring much better. They have guns, ammunition, blankets, knives, everything in plenty; and they are successful in war; are skillful in a thousand things the Indian knows nothing of. To be so blest implies a very wise and powerful Deity. To gain all these things they are eager to learn about the white man's God; are willing to do whatever is necessary to please and propitiate Him. Hence the attentiveness to the white man's discourse about his religion. Naturally enough they were struck with wonder at the doctrine of peace and good will; a doctrine so different from the law of blood by which the Indian, in his natural state, lives. Yet if it is good for the white men, it must be good for him; at all events he is anxious to try it.

That is the course of reasoning by which an Indian is led to inquire into Christianity. It is a desire to better his physical, rather than his spiritual condition; for of the latter he has but a very faint conception. He was accustomed to desire a material Heaven, such a world beyond the grave, as he could only imagine from his earthly experience. Heaven was happiness, and happiness was plenty; therefore the most a good Indian could desire was to go where there should forevermore be plenty.

Such was the Indian's view of religion, and it could be no other. Until the wants of the body have been supplied by civilization, the wants of the soul do not develop themselves: and until then the savage is not prepared to understand Christianity. This is the law of Nature and of God. Primeval man was a savage; and it was little by little, through thousands of years, that Christ was revealed. Every child born, even now, is a savage, and has to be taught civilization year after year, until he arrives at the possibility of comprehending spiritual religion. So every full grown barbarian is a child in moral development; and to expect him to comprehend those mysteries over which the world has agonized for centuries, is to commit the gravest error. Into this error fell all the missionaries who came to the wilds that lay beyond the Rocky Mountains. They undertook to teach religion first, and more simple matters afterward--building their edifice like the Irishman's chimney, by holding up the top brick, and putting the others under it. Failure was the result of such a process, as the record of the Oregon Missions sufficiently proves.

The reader will pardon this digression--made necessary by the part which one of the gentlemen present at this years rendezvous, was destined to take in the history which we are writing. Shortly after the arrival of Messrs Parker and Whitman, rendezvous broke up. A party, to which Meek was attached, moved in the direction of the Snake River head-waters, the missionaries accompanying them, and after making two camps, came on Saturday eve to Jackson's Little Hole, a small mountain valley near the larger one commonly known as Jackson's Hole.

On the following day religious services were held in the Rocky Mountain Camp. A scene more unusual could hardly have transpired than that of a company of trappers listening to the preaching of the Word of God. Very little pious reverence marked the countenances of that wild and motley congregation. Curiosity, incredulity, sarcasm, or a mocking levity, were more plainly perceptible in the expression of the men's faces, than either devotion or the longing expectancy of men habitually deprived of what they once highly valued. The Indians alone showed by their eager listening that they desired to become acquainted with the mystery of the " Unknown God."

The Rev. Samuel Parker preached, and the men were as politely attentive as it was in their reckless natures to be, until, in the midst of the discourse, a band of buffalo appeared in the valley, when the congregation incontinently broke up, without staying for a benediction, and every man made haste after his horse, gun, and rope, leaving Mr. Parker to discourse to vacant ground.

The run was both exciting and successful. About twenty fine buffaloes were killed, and the choice pieces brought to camp, cooked and eaten, amidst the merriment, mixed with something coarser, of the hunters. On this noisy rejoicing Mr. Parker looked with a sober aspect: and following the dictates of his religious feeling, he rebuked the sabbath-breakers quite severely. Better for his influence among the men, if he had not done so, or had not eaten so heartily of the tender-loin afterwards, a circumstance which his irreverent critics did not fail to remark, to his prejudice; and upon the principle that the "partaker is as bad as the thief," they set down his lecture on sabbath-breaking as nothing better than pious humbug.

Dr. Marcus Whitman was another style of man. Whatever he thought of the wild ways of the mountain-men he discreetly kept to himself, preferring to teach by example rather than precept; and showing no fastidious contempt for any sort of rough duty he might be called upon to perform. So aptly indeed had he turned his hand to all manner of camp service on the journey to the mountains, that this abrogation of clerical dignity had become a source of solicitude, not to say disapproval and displeasure on the part of his colleague; and it was agreed between them that the Doctor should return to the states with the St. Louis Company, to procure recruits for the promising field of labor which they saw before them, while Mr. Parker continued his journey to the Columbia to decide upon the location of the missionary stations. The difference of character of the two men was clearly illustrated by the results of this understanding. Parker went to Vancouver, where he was hospitably entertained, and where he could inquire into the workings of the missionary system as pursued by the Methodist missionaries. His investigations not proving the labor to his taste, he sailed the following summer for the Sandwich Islands, and thence to New York; leaving only a brief note for Doctor Whitman, when he, with indefatigable exertions, arrived that season among the Nez Perces with a missionary company, eager for the work which they hoped to make as great as they believed it to be good.

JOURNAL OF A TRAPPER

—Or—

Nine Years in the Rocky Mountains

1834-1843

Being a General Description of the Country, Climate, Rivers, Lakes, Mountains, Etc., and a View of the Life Led by a Hunter in those Regions

By OSBORNE RUSSELL

"I envy no man who knows more than myself and pity them that know less."—*Sir T. Brown*

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CHAPTER XV

Back Again to the Hunting Grounds—Solitary Reflections on a Peak of the Rockies

On the 20th of July we left the rendezvous and traveled up Green River about ten miles. 21st—We traveled up Green River until noon, when we discovered a trail of eight or ten Blackfeet and a buffalo fresh killed and butchered, with the meat tied up in small bundles on the ground, which they had left on seeing us approach, and ran into the bushes. We, supposing them to be a small scouting party, tied their bundles of meat on to our saddles and still kept on our route but had not gone far before we discovered them secreted among some willows growing along a branch which crossed our trail. I was ahead leading the party when I discovered them. We stopped and one of my comrades, whose name was Allen, began to arrange the load on his pack mule. In the meantime I reined my horse to the left and rode onto a small hillock nearby and casting a glance towards the bushes, which were about 150 yards distant, I saw two guns pointed at me. I instantly wheeled my horse, but to no purpose. The two balls struck him, one in the loins and the other in the shoulder, which dropped him under me. The Indians at the same time jumped out of the bushes, sixty or seventy in number, and ran toward us, shooting and yelling. I jumped on a horse behind one of my comrades and we scampered away toward the rendezvous, where we arrived at dark. 25th—The parties started and all traveled with Mr. Fontanelle's party up Green River ten miles, intending to keep in their company five or six days and then branch off to our first intended route. 26th—We traveled twenty miles northwest across a low range of hills and encamped in a valley lying on a branch of Lewis Fork called "Jackson's Little Hole." 27th—We traveled down this stream 18 miles northwest. This stream ran through a tremendous mountain in a deep, narrow canyon of rocks. The trail ran along the cliffs from 50 to 200 feet above its bed and was so narrow in many places that only one horse could pass at a time for several hundred yards, and one false step would precipitate one into the chasm below. After leaving the canyon we encamped at a small spring in "Jackson's Big Hole," near the southern extremity. 28th—Traveled up the valley north fifteen miles and encamped. Killed some buffalo and staid next day. 30th—Left the camp in company with two trappers and one camp keeper.

July 26, 1837

The Ashley-Smith Explorations and the Discovery of a Central Route to the Pacific 1822-1829

with the Original Journals edited by

Harrison Clifford Dale

Professor of Political Science in the University of Wyoming

The Arthur H. Clark Company
Cleveland: 1918

tains that season, pushed on to Green River and thence south and west to the waters of the Interior Basin, where he remained for the fall and spring hunts [1824-1825]. Until more positive evidence is brought forward in support of Provot's claims, the distinction of having discovered the South Pass may rest with Thomas Fitzpatrick, provided, of course, that the returning Astorians missed the actual pass itself.[176]

During the summer and fall of 1824, the Ashley men were divided into two groups and both despatched beyond the mountains to operate in that recently opened country. Jedediah Smith commanded the smaller division, comprising only six men and William L. Sublette probably headed the other which was somewhat larger. With the latter went also James Bridger, one, Williams, one, Marshall and a score of others. The two divisions seem to have set out together and to have met Thomas Fitzpatrick on the Sweetwater as he was returning.[177] Provot and LeClerc with their men may also have accompanied them a portion of the distance. Following the great primitive highway soon to be known the country over as the Oregon Trail, they emerged from the South Pass, striking the waters of the two Sandys, tributaries of Green River. Here they separated.

Smith with his men crossed from the head waters of Green River to the Lewis fork of the Columbia [Snake River], which they followed down for a hundred miles or so, and then struck across country to Clark's fork of the Columbia.[178] Their route was probably the re-

[176] See page 39.

[177] St. Louis *Reveille*, March 1, 1847.

[178] Compare page 45. Ross, Alexander. "Journal of the Snake River Expedition, 1824," in Oregon Historical Society, *Quarterly*, vol. xiv, 385. Ross, A. *Fur Hunters of the Far West*, vol. ii, 127.

verse of that of the returning Astorians.[179] In the course of their wanderings, they secured a large quantity of beaver on the streams tributary to Green and Snake Rivers, which they packed along with them.

Late in September or early in October, they fell in with a party of Iroquois under command of one, Pierre, who had been detached, June 16, from the main Snake River expedition of the Hudson's Bay Company, conducted this year by Alexander Ross.[180] These Indians were in a pitiful condition. In the course of their wanderings they had penetrated far to the south of Snake River, probably as far as the Interior Basin, where they had believed themselves secure. A war party of Snakes, however, discovering them shortly before the Americans appeared, had robbed them not only of a considerable portion of their furs but had stolen their traps and guns as well. Learning of their misfortune, Smith struck a shrewd bargain, by which he agreed to relieve them of their remaining furs, and, in return, to convey them, so the Iroquois themselves afterwards asserted, to

[179] The details of their course are given in Washington Hood's *Original Draft of a Report of a Practicable Route for Wheeled Vehicles across the Mountains*, written at Independence, August 12, 1839. He says, "After striking the Colorado, or Green river, make up the stream toward its headwaters, as far as Horse creek, one of its tributaries, follow out this last mentioned stream to its source by a westerly course, cross the main ridge in order to attain Jackson's Little Hole, at the headwaters of Jackson's fork [Hoback River?]. Follow down Jackson's fork to its mouth and decline to the northward along Lewis's fork, passing through Jackson's Big Hole to about twelve miles beyond the Yellowstone Pass (*sic*), crossing on the route a nameless beaver stream. Here the route passes due west over another prong of the ridge, a fraction worse than the former, followed until it has attained the headwaters of Pierre's fork. Proceed down this stream, keeping on its north bank through Pierre's Hole, crossing the Big Teton, the battle-ground of the Blacksmith's fork; ford Pierre's fork eastward of the butte at its mouth and Lewis fork also, thence pass to the mouth of Lewis fork." — Missouri Historical Society, *Hood Mss.*

[180] Ross, A. *Fur Hunters of the Far West*, vol. ii, 124. Ross ["Journal of the Snake River Expedition, 1824" in Oregon Historical Society, *Quarterly*, vol. xiv, 382] states that the Iroquois were despatched, June 7.

LIFE, LETTERS AND TRAVELS

OF

FATHER PIERRE-JEAN DE SMET, S. J.

1801-1873

Missionary Labors and Adventures among the Wild Tribes of the North American Indians, Embracing Minute Description of Their Manners, Customs, Games, Modes of Warfare and Torture, Legends, Tradition, etc., All from Personal Observations Made during Many Thousand Miles of Travel, with Sketches of the Country from St. Louis to Puget Sound and the Altrabasca

Edited from the original unpublished manuscript Journals and Letter Books and from his Printed Works with Historical, Geographical, Ethnological and other Notes; Also a Life of Father De Smet

MAP AND ILLUSTRATIONS

BY

HIRAM MARTIN CHITTENDEN

Major, Corps of Engineers, U. S. A.

AND

ALFRED TALBOT RICHARDSON

FOUR VOLUMES

VOL. I

NEW YORK

FRANCIS P. HARPER

1905

for a while; they went away weeping. Our brothers are burning with impatience to see you." We thanked the Lord together for having preserved us thus far in the midst of so many dangers, and implored his protection in the long journey that we had yet to make.

I had stayed four days on Green river to allow my horses time to recover from their fatigue, to give good, wholesome advice to the Canadian hunters, who seem to be in great need of it, and to talk with the Indians of various nations. On the 4th[4] of July, I resumed my travels, with my Flatheads; ten brave Canadians also chose to accompany me. A good Fleming from Ghent, Jean-Baptiste de Velder, an old grenadier of Napoleon, who had left his fatherland thirty years ago, and had passed the last fourteen in the mountains in the capacity of beaver-hunter, generously offered to serve and aid me in all my journeyings. He was resolved, he told me, to pass the rest of his days in the practice of his holy religion. He had almost forgotten the Flemish language, except his prayers and a hymn in Flemish verses in honor of Mary, which he had learned as a child on his mother's knees, and which he recited every day.

Three days we ascended Green river, and on the 8th we crossed it, heading for an elevated plain which separates the waters of the Colorado from those of the Columbia. In this plain, as in all mountain valleys that I have traversed, flax grows in the greatest abundance; it is just the same as the flax that is cultivated in Belgium, except that it is an annual; the same stalk, calix, seed and blue flower, closing by day and opening in the evening. On leaving this plain, we descended several thousand feet by a trail and arrived in Jackson's Hole.[5] The slope of the surrounding mountains abounds in the rarest plants, and offers the amateur botanist a superb collection. The val-

July 1840

[4] 6th in one of the English letters.

[5] This was not Jackson's Hole, but a much smaller valley near the head of Hoback river, called Jackson's Little Hole.

ley is seventeen miles long by five or six wide. Thence we passed into a narrow and extremely dangerous defile, which was at the same time picturesque and sublime. Mountains of almost perpendicular cliffs rise to the region of perpetual snow, and often overhang a rugged and narrow path, where every step threatens a fall. We followed it for seventeen miles, upon a mountain side inclined at an angle of 45° over a torrent which rushed uproariously in cascades, hundreds of feet below our route. The defile was so narrow, and the mountains on either hand so high, that the sun could scarcely penetrate it for an hour or two of the day. Pine forests like those of Norway, balsam firs, ordinary poplars, cedars, mulberry trees and many other varieties cover the sides of these mountains. July 1840

On the 10th, after crossing the lofty mountain, we arrived upon the banks of Henry's Fork, [Snake river] one of the principal tributaries of Snake [Columbia] river.[6] The mass of snow melted during the July heat had swollen this torrent to a prodigious height. Its roaring waters rushed furiously down and whitened with their foam the great blocks of granite which vainly disputed the passage with them. The sight intimidated neither our Indians nor our Canadians; accustomed to perils of this sort, they rushed into the torrent on horseback and swam it. I dared not venture to do likewise. To get me over, they made a kind of sack of my skin tent; then they put all my things in and set me on top of it. The three Flatheads who had jumped in to guide my frail bark by swimming, told me, laughing, not to be afraid, that I was on an excellent boat. And in fact this machine floated on the water like a majestic swan; and in less than ten minutes I found myself on the other bank, where we encamped for the night.

The next day we had another high mountain to climb through [Teton Pass] a thick pine forest, and at the top we found snow, which had fallen in the night to the depth

[6] Father De Smet is in error here and later on, page 228, in applying the name Henry to the main Snake river.

SIXTH ANNUAL REPORT

OF THE

UNITED STATES GEOLOGICAL SURVEY

OF

THE TERRITORIES,

EMBRACING

PORTIONS OF MONTANA, IDAHO, WYOMING, AND UTAH;
BEING A REPORT OF PROGRESS OF THE EXPLORATIONS FOR THE YEAR 1872.

BY

F. V. HAYDEN,
UNITED STATES GEOLOGIST.

CONDUCTED UNDER THE AUTHORITY OF THE SECRETARY OF THE INTERIOR.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1873.

present level of the included lake was found to be 249 feet above datum. The last of this series of lakes, which we have called Phelps's Lake, after a hunter of the region, who had seen and reported it, is hemmed in by three moraines, according to Mr. Taggart, the outer one 162 feet, the second 244 feet, and the third 287 feet above the lake itself, there being no special surface-feature near the moraines on their outer side to which to refer these levels, as to a recognizable base. In this last case, the cañon forks above, and the two arms extend in opposite directions along the line of separation between the granites and the flanking limestones. Each of the two glaciers, therefore, gathered, from the rocks overhanging it, granites on one side and limestones on the other, so that, after their junction, the central moraine of the united glacier consisted of limestone, and we find small fragments of limestone filling the low central portion of the terminal moraine, while its high flanks, which received the material of the lateral moraines, are composed of the granites, which are less easily disintegrated, and are therefore mostly in large bowlders. No remnants were anywhere seen of any lateral moraine deposits along the courses of the glaciers. It is possible that such may be found by more careful search, but the slopes are here so steep that most of their lower portions are buried in the tumbling rubbish, so that we can have little expectations of such a discovery being made.

A little south from the second large cañon south of Mount Hayden, the limestones come forward to the front of the mountain, above the granites, which shortly afterward disappear from sight altogether. The length of the exposure of the granitic nucleus of the range is about thirty miles.

About eight miles below Leigh's Lake, its outlet, which we have called East Téton River, enters the Snake. A hundred yards back from the opposite bank stands a high, rocky butte, known as North Gros Ventre Butte. Its northern end consists mainly of Carboniferous limestone, dipping about 70° N. 56° E., and containing many characteristic fossils. Along the west face of the butte, none of the lower rocks are visible, being buried under the Post-Tertiary whitish sandstones and marls, inclosing fragments of limestone and chert, but no fossils, of which all the southern part of the butte is composed; but, near the northeast corner, the lower part of the series of older limestones presents the conglomeratic texture so characteristic of the Quebec Group, on the west side of the Téton Range and elsewhere, and it is probable that they represent that group, though no fossils could be found. Beneath this we find gray quartzitic sandstones, which are probably of Potsdam age.

This butte stands near the middle of the broad basin which has long been known by the barbarous name of Jackson's Hole. This has a length of about twenty miles, and varies from five to ten miles in width. This includes portions of the different terraces, all of which are more or less covered with sage-brush. Near the butte, large areas of the sage had been burned off, and the grasses had grown up densely, forming fine pasturage; and on these we again encountered antelope, which had not before been seen by us since we entered the Upper Madison Cañon. It is said that, during the winter, when the grass is covered, they live upon the sage itself. This plant was now full of seeds, and the innumerable little chipmunks which burrow in the plains and hills were busy gathering them, biting off the long spikes and stripping them from end to end, passing them back and forth through the mouth, as one would an ear of corn.

The pebbles of the terrace-gravel have thus far been mainly quartzites,

and still continue such on the east side of the basin; but, nearer the western range, considerable proportions of granite and gneiss pebbles are now mingled with them. A considerable excitement was stirred up, a few years since, by reported discoveries of placer-gold in large quantities on the Upper Snake, and many prospectors visited this region. A small hydraulic operation was undertaken near this point; but the gold was too fine and in too small quantities to pay, and the whole region was entirely abandoned after a few months. The coarse gold, found on the lower part of the Snake, appears to have entered the river below the cañon, which is still to the southward of us.

The Gros Ventre Fork emerges from the eastern hills about opposite the North Butte, but runs off down the valley, some eight or ten miles, before joining the Snake. Passing up its cañon for a short distance, the following section was taken:

1. White, friable, false-bedded sandstones, 10 feet.
2. Covered space, about 100 feet.
3. Irregularly-bedded, pale-gray and buff, magnesian limestones, 50 to 60 feet.
4. Pale-red friable sandstones, darker and shaly below, 300 to 350 feet.
5. Compact, fine-grained, gray sandstone, 15 to 20 feet.
6. Brown, coarse, friable, false-bedded sandstone, 60 to 80 feet.
7. Coarse, friable, red sandstone, 40 to 50 feet.
8. Compact, dark-drab, fossiliferous limestones, 300 to 400 feet.

Near the mouth of the cañon, the Carboniferous limestones of No. 8 form the walls, capped, as we ascend, by Nos. 7 and 6. As these pass below the stream's level, No. 5, which forms the top of what I suppose to be Carboniferous, commences a new cliff, and is covered by the Triassic (?) beds of No. 4, which form prominent red bluffs along the stream for many miles. The compact to vesicular, variously-colored and partly bituminous limestones of No. 3 showed no fossils, and I am uncertain whether to refer them to the Triassic or to the Jurassic, but favor the latter reference. The covered space of No. 2 showed nothing from which one could even infer the character of the buried strata. The friable sandstones of No. 1, which cap the hills for some miles, are probably late Tertiary. The dips of their false bedding imply an open sea to the northward during their deposition, while those of No. 6 face eastward and southeastward. The lower beds, which should make their appearance along the face of the mountain to the south of the Gros Ventre, are so much covered with the partially-cemented Post-Tertiary sands and gravels as to be not readily recognized from the plain, and time did not permit a closer examination. Judging from the dips of the lowest beds seen, I should expect to find here the lowest Silurian, underlaid by metamorphic rocks, forming an axis which may connect the Tétons with the Wind River Range.

Just south of the mouth of the Gros Ventre, on the east side of the Snake, stands a cluster of buttes, known as the South Gros Ventre Buttes. The western one has a high, broad northern face of red, gray, black, brown, and variegated porphyritic breccias, including much jasper, but partly porous, loose-textured, and even ashy. The beds are much distorted, but have a general northwesterly dip. The lower end of the butte is tapering, long and low, and appears to consist mostly of Post-Tertiary sands and gravels. At its southern extremity it rises quickly into a sharp butte, composed of horizontal beds of gray limestone, unfossiliferous, but apparently of Carboniferous age. The same beds form the face of the mountain to the eastward. Three other

buttes lie east of the more northern part of this one, and evidently originally formed one with it.

These buttes greatly narrow the plain, which, immediately below them, expands into Jackson's Little Hole, whose flats are mainly upon the east side of the river and measure about four miles wide by perhaps ten miles long. Here, also, the sage has been burned off and replaced by grass. For several miles, from above the mouth of the Gros Ventre, the river has gravelly bottoms from half a mile to three-fourths of a mile wide, cut up by the several channels and partly occupied by beaver-dams. Of course, fords are numerous.

The only practicable pass across the Téton Range, so far as known, is about opposite to these South Buttes; and our main party left the river at this point. Mr. Taggart reports both slopes of the pass tolerably regular and gentle, except for a short distance just at the summit, but that the eastern is somewhat the steeper. The Carboniferous limestones, which were the only rocks noticed until the summit was passed, are nearly horizontal, have only a slight southerly or southeasterly dip; but, in descending the western slope, this dip increases to about 45°; and overlying, red, shaly sandstones, probably of Triassic age, appear at one point on the trail, while limestones, apparently those previously referred to the Upper Silurian, form considerable cliffs or spurs, a short distance to the northward. There would seem to be considerable displacement thereabout. The porphyries of Pierre's Hole appear at the mouth of the pass, at the elevation of about 7,000 feet, and form all the foot-hills of the mountains on the southwest side of that basin, until the actual bottoms of the Snake are approached, where the basalt appears. The track of the party lay so far out in the basin that there was little or no opportunity for examining the character of anything more than the foot-hills of the western mountains.

At the lower end of Jackson's Little Hole, the so-called Grand Cañon of the Snake commences. The river turns sharply to the eastward and cuts through the laminated sandstones which apparently overlie the Carboniferous limestones. Just at the mouth of the cañon, the upper terraces close in, and are capped by bastioned walls, 100 feet or more in height, of a pale-red sandstone, overlaid, as we see in looking back from lower down the cañon, after this turns south again, by heavy beds of dark-red, shaly sandstone, appearing like, and occupying nearly the relative position of, the Triassic (?) on the Gros Ventre, except that, below them, there come in several hundred feet of thick and thin bedded and shaly, gray and green sandstones, with interlaminated calcareous shales. These contain plant-remains, but so thoroughly comminuted that I was not able to find a single recognizable fragment. At the angle of the cañon, these dip strongly to about N. 78° E., and a long section of them is exposed on the east side of the stream; but in about a half mile they become horizontal, and, again, a mile lower, at the mouth of Hoback's River, dip 10° to about S. 63° W.

Hoback's, so named for a hunter of the Pacific Fur Company in 1812, by Mr. Wilson G. Hunt, as reported in Irving's Astoria, brings in a large volume of water from the eastward and plainly drains a large area upon the western slope of the Wind River Mountains. Its valley, though narrow near its mouth, was at one time the favorite route for the Indians in crossing to the Green River Valley; but, latterly, they have preferred the Gros Ventre route for some reason. The red beds hold a prominent place near the top of the high cliffs, for a half mile or more above the forks, but the valley is too winding to give much of a view. Just below here, a strong creek comes in from the west, appar-

ently draining a considerable area of the mountain. It approaches the river by a succession of cascades over successive layers of the sandstones. As we descend the river, these beds come up in two anticlinals, one low and flat and the second mountainous, with dips reaching 70°, and coming down steeply to the river on both sides. The axis of the second anticlinal is occupied by a narrow fold of limestone, through which escape several warm springs. A small cluster of these, escaping among the gravel in the edge of the river, on the south side, emit an abundance of sulphureted hydrogen. Though somewhat mixed with the river-water, they gave a temperature of 117°. About a hundred yards below this, a group of calcareous springs has built up a dam of tuff, so as to flood several acres about the vents, which are now inaccessible. The general flow from the pool gave a temperature of 94°. Just opposite these springs, in the lower part of the sandstones, as they re-appear on the west side of the anticlinal, there are exposures of two or three heavy beds of black, calcareous shale and friable clay, with some harder bituminous mud-stones, which appear, from short distances, precisely like coal outcrops. Fragments of teeth and bones, probably belonging to amphibians, occur in these layers. Above them there are some thick beds of chert.

Here the river turns south again, and runs for about two miles along the west side of the anticlinal, with sharp slopes on either banks. Turning west again, we cross three anticlinals, in the third of which considerable displacement has taken place, so that the Carboniferous comes boldly up, and, after this, forms the mass of the mountain clear through the cañon. The lower portion of these beds consists largely of sandstones and shales, though including heavy beds of limestone; higher up, the limestones form a heavy mass for several hundred feet, partly compact, partly fragmentary, overlaid finally by more shaly beds, making a total thickness of 2,000 feet or more. A few fossils of the genera *Spirifer*, *Macrocheilus*, and *Zaphrentis* were seen in the *débris*. The lower layers weather to nearly white, while the upper ones are strongly buff. All through this series, the cañon is narrow, with steep, often perpendicular, slopes and hardly any bottoms. The river mainly occupies a deep channel, with a broad shelf of rock on one or both sides, which is barely covered at this season. Crossing would be impossible without swimming the stock. Many of the steep slopes are covered with spruces, and their angular tops, lapping over each other, on the opposite side of the cañon, give the effect of diamond-slating on a roof, though with the angles reversed. Upon these limestones we begin to find again great numbers of the small maples seen farther south. These are said by the hunters to be somewhat on the increase in this region.

About ten miles through these limestones bring us to the mouth of the cañon. Through much of its upper course the stream is quite rapid, and almost deserves the name, Mad River, applied to this part of it by the early trappers; but there is little that would have proved troublesome to experienced *voyageurs*, and probably none that would prove really dangerous. (See Irving's Astoria, chapter xxxi.)

The terraces, though only fragmentary through the cañon, now spread out into broad sage-covered flats on either side of the river, and the higher slopes become much more rounded. Just at the mouth of the cañon, John Gray's River, which heads far to the south, on the divide toward Bear River, comes from the southeast, through the same mountain-mass, and with apparently just such a cañon as the one we have just left. At its mouth, a heavy mass of cemented bedded gravel shows

TWELFTH ANNUAL REPORT

OF THE

UNITED STATES

GEOLOGICAL AND GEOGRAPHICAL SURVEY

OF

THE TERRITORIES:

A REPORT OF PROGRESS OF THE EXPLORATION IN

WYOMING AND IDAHO

FOR THE YEAR 1878.

IN TWO PARTS.

PART II.

BY F. V. HAYDEN,
UNITED STATES GEOLOGIST.

CONDUCTED UNDER THE AUTHORITY OF THE SECRETARY OF THE INTERIOR.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1883.

GEOGRAPHICAL FIELDWORK OF THE YELLOWSTONE PARK DIVISION.

By Henry Gannett, E. M.

LETTER OF TRANSMITTAL.

Washington, D. C., *September* 26, 1881.

Sir: I have the honor to transmit herewith my report on the field-work of the Yellowstone Park Division, United States Geological Survey of the Territories, during the season of 1878.

Very respectfully yours,

HENRY GANNETT.

Dr. F. V. Hayden.

ITINERARY.

In accordance with instructions, the Yellowstone Park Division started for its field of labor on July 26, 1878, taking the field at Granger Station, Wyoming, on the Union Pacific Railroad.

At the outset the party comprised, besides myself, Dr. A. C. Peale, geologist; J. E. Mushbach and Russell West, assistant topographers; with two packers and a cook. After entering the field of work, Messrs. Peale and Mushbach were detached for special work in connection with the hot springs and geysers, while Mr. W. H. Holmes joined my party as geologist.

The route of the party to the field of work lay up the Green River Basin, following in a general way the course of Green River. At the mouth of Lead Creek we left the Green on our right and struck over in a northwesterly direction to the drainage basin of Hoback's River, a large left-hand branch of Snake River. This stream heads in the eastern slopes of the Wyoming Range, and in the southwestern slopes of the Gros Ventres Mountains, and, having accumulated its waters in a basin in the angle of these two ranges, it cuts a tremendous gorge through the former on its way to join the Snake. This cañon has been very much used by the Gros Ventres, Bannock, and Shoshone Indians as a

part of their route from the Snake River Plains to the Wind River Valley and the buffalo range, as the broad and deeply-cut trails testified. But for many years the route had been deserted, as we found large trees growing across the trails and completely obstructing them. The cañon is narrow, with precipitous walls, and in some places difficult and dangerous for pack-animals. I am inclined to believe that only war and hunting parties were in the habit of using it, as lodge-poles and the other bulky paraphernalia of an Indian village would find the passage through these defiles both difficult and dangerous in the extreme. It was through this cañon that Mr. Hunt and his companions made their way in 1811 to the banks of the Snake or "Mad" River, in their terrible journey to Astoria.

Hoback's River enters the Snake a few miles below the head of the cañon of the latter stream, but above its mouth the cañon is not at all difficult to traverse.

Turning northward, on reaching the Snake, my party followed up this stream through the broad valley known as Jackson's Hole, passed Jackson's Lake, at the head of the valley, and left the stream only at the point where the Lewis or Lake Fork joins it, at the southern boundary of the Yellowstone Park, where we arrived on August 9. Here the work began. At this point we turned westward, following up a small branch of Lewis Fork. This little stream, heading in springs at the base of Pitchstone Plateau, we left on our right, and, crossing a low divide, in a gap between the Teton Range and Pitchstone Plateau, we struck Falls River, here a good-sized stream. This river we followed down to the border of that great marshy valley known as Falls River Basin. We then skirted this valley to the point of debouchement of Bechler's Fork from the high plateau. Here we turned our backs upon Falls River Basin, climbed the plateau on the northwest side of Bechler's Fork, and followed its general course, keeping on the high plateau, near its cañon. Reaching its head, we struck over a low divide, and descended to the Shoshone Geyser Basin, on Shoshone Lake. This was on August 14. At this point I remained, detained by rainy weather, until the 21st, occupying myself in the intervals between the showers in surveying the Basin.

On the 20th I started, accompanied by a packer, on a trip to the Red Mountains for the prosecution of the topographical work in and about them, leaving the balance of the party at Shoshone Lake.

From the west end of Shoshone Lake I traveled on a direct course to the west end of the mountain group, then climbed the range at this end, and traveled along the crest to Mount Sheridan, being obliged to leave the top only once, and then for only a short distance.

On the 21st, while still in the mountains, I was joined by Mr. Holmes, and together we completed the trip, surveying the country in reach from the Red Mountains and Flat Mountain. Returning, we touched the northeast corner of Lewis Lake, crossed Lewis Fork at the outlet of Shoshone Lake, and thence skirted the latter around to camp.

Immediately after returning from this trip, on the 26th, my whole party went over to the Firehole River, and down it to the Upper Geyser Basin. Delaying there a day, we moved down to the Lower Basin, having left Messrs. Peale and Mushbach behind to carry on their work. While on this march we learned for the first time that the hostile Bannocks were in our vicinity. As the reports were very indefinite as to the extent of the danger, we decided to remain where we were until more information should reach us. Meanwhile we located our camp in

a defensible position, corraled our stock at night, and took other precautions customary under similar circumstances. As usual, definite information diminished the danger very much, and after two or three days' delay we went on. Crossing to the Yellowstone by Howard's road, we stopped two days at the Falls, then drove on down the river, and reached the Mammoth Springs, where our supplies were stored, on September 7. From that date to the 12th we were busied about that place, visiting, among other points, Sepulchre Mountain and Electric Peak.

On the 12th we started again, returning up the Yellowstone to Baronette's bridge, where we crossed it, and followed up the East Fork to a point above the mouth of Soda Butte Creek. Then leaving it, we crossed to Pelican Creek, by which and Turbid Creek we reached Yellowstone Lake. Then we followed the lake up to the head, and went several miles up the Upper Yellowstone. Returning, we followed the lake shore around to the head of the river, and thence followed the river trail down to the Mammoth Springs, reaching them on October 2.

Having refitted, we started again, this time up the Norris road, to survey the drainage areas of Gardiner's and Gibbon Rivers. We traveled up the wagon road nearly to the head of the cañon of the Gibbon, which enabled me to connect with the work done in that neighborhood earlier in the season. Then we skirted the east base of the Gallatin Range, making stations on the summits; and then, the season being far advanced, the weather being very bad, and the snow rapidly becoming deeper, I judged it best to close the work, although the whole plan had not been carried out.

We arrived finally at the Mammoth Springs on October 11, and at Bozeman, where the party disbanded, on the 16th. The whole distance traveled by my party is estimated at 830 miles. In the prosecution of my work I traveled an estimated distance of 1,250 miles.

GEOGRAPHICAL WORK.

The area assigned to me for survey during the field season of 1878 was the Yellowstone National Park, situated mainly in northwestern Wyoming, though embracing narrow strips of Idaho and Montana. The area is 3,312 square miles.

While a part of this region had been surveyed by the meander method, in 1871 and 1872, by this organization, still there were large gaps in the maps; while, in addition, the whole work required correction by the introduction of a system of triangulation. Many reconnoissances of the Park have been made, the War Department having sent no less than four distinct expeditions (of which more hereafter), but all have traversed very nearly the same routes, so that the map of any one of them is very like those of the others, differing only in matters of detail or of longitude. For this reason I have used only the earlier maps of this organization, in so far as I have used any other work than my own, in making up the general map; as I had found, experimentally, that the work of Schönborn and of Bechler was at least as good as any other which had been done in the region, and covered all the country which any of the others do.

Within the Park Mr. Wilson located three primary points—Electric Peak and Mounts Washburn and Sheridan. Starting from these, I established a large number of secondary points, distributed over the Park to as good advantage as the topographical conditions would ad-

Pioneer's Diary Tells of Yellowstone Park Trip in 1878

Mushbach Keeps Record Of Hayden Party Journey

Experiences With Survey Crew Are Culmination of Nearly 10 Years of Frontier Life With Exploration Crews and as Freighter, Prospector, Cowboy and Other Pioneer Roles.

By CHARLES DRAPER.

DAY by day account of explorations, camping and life in general of a survey crew in Yellowstone National park during the summer and fall of 1878 is furnished in the personal diary kept by J. E. Mushbach, assistant topographer with one of Dr. F. V. Hayden's parties in the field at that time. Mr. Mushbach is still living, an honored and beloved citizen of Red Lodge, Carbon county, Montana, and granted permission to the writer, an old friend and associate, to transcribe and make public the diary notes.

On Park Survey

J. E. Mushbach of Red Lodge was assistant topographer with one of Dr. F. V. Hayden's survey crews in the Yellowstone National park region in 1878.

Personnel of Party Given.

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August 6: Camp No. 11. Reached here at 5:30 after a nine-and-a-half-hour drive, traveling about 37 miles. Had a good route except for one beaver dam which delayed us some. Shot a fine big goose. Crossed Fighting Bear creek and the mouth of the Gros Ventre; passed Teton pass and camped opposite T. O. T. from where Bechler began his famous retreat last fall. Camp is on the Snake, about on a line between the north end of the Big Gros Ventre Buttes and the South Teton and in the neck between Jackson's Hole and Jackson's Little Hole, two round valleys or holes in the mountains. Gannett and I rode off from the line of march about a mile to find a camp and George did not see us and kept on ahead. We did not discover this until our mules were turned loose and in trying to catch them again they ran out and took the back trail. When we had brought the train back Tom and George started after them and caught them eight miles away. Swapping saddles they rode them back on the dead run, nearly using mine up, he being broken winded. Served him right. Minimum thermometer 37. Had such a misery from eating service berries that I caught one fine trout. Barometer 23.350.

August 7: Camp 12. On the Snake just about the mouth of Great Bend creek. Passed today along close to the foot of the Teton range and a rugged and steep one it is. Have changed my opinion about the Grand Teton and do not think the top can be reached, from this side at least. We had not seen a hoof of game since entering Hoback's canyon until today, when we sighted two black tail deer. The train stopped whilst I succeeded in putting a bullet through the loins of one and through the foreshoulder of the other. Had our goose for breakfast and again for dinner and it was greatly relished as it gave us a change. Passed through a large swarm of grasshoppers going southeast, apparently hatched in this valley. The ground has also been covered with Mormon locusts. Judging from the signs bear must be as thick here as rabbits at home. Had a hard trail today, loose gravel and sage brush and did not make more than 20 miles in eight hours travel. Minimum thermometer, 43. Our usual light shower struck us about 2 o'clock and afterward the sun came out blisteringly hot. Tom and West caught 10 trout. Beckler's map seems very unreliable. The terraces, from two to four deep in this hole, are quite equal to those in the Salt Lake basin. Barometer 23.728.

August 8: Camp 13. Travel most of the day has been very laborious, slow and tedious, being over a succession of ridges covered with standing or fallen timber, with swampy bottoms between. Several mules had their packs and rigging torn off. Left camp at 7:45 and reached here at 4:45, nine hours for about 20 miles. Had a feast of strawberries and gooseberries today. Camp is on the Snake, about five miles above the head of Jackson's lake. Tom and I caught eight trout this evening. Minimum thermometer, 36; barometer, 23.588.

Pioneer's Diary Tells of Yellowstone Park Trip in 1878

Mushbach Keeps Record Of Hayden Party Journey

Experiences With Survey Crew Are Culmination of Nearly 10 Years of Frontier Life With Exploration Crews and as Freighter, Prospector, Cowboy and Other Pioneer Roles.

By CHARLES DRAPER.

DAY by day account of explorations, camping and life in general of a survey crew in Yellowstone National park during the summer and fall of 1878 is furnished in the personal diary kept by J. E. Mushbach, assistant topographer with one of Dr. F. V. Hayden's parties in the field at that time. Mr. Mushbach is still living, an honored and beloved citizen of Red Lodge, Carbon county, Montana, and granted permission to the writer, an old friend and associate, to transcribe and make public the diary notes.

Thrills of threatening Indian attacks, sliding down a precipitous cliff face toward the rapids below the lower falls of the Yellowstone river, breaking through encrustations in geyser and hot springs fields, quicksand and bucking mules are recorded impersonally and unemotionally in the diary, and the entire document bears the stamp of humility which marks the man of broad and understanding sympathies.

Mr. Mushbach's experiences in Yellowstone park in 1878 were the culmination of nearly 10 years of frontier life, with exploration crews, as freighter and prospector, cowboy, and in other roles of the pioneer. In 1876 and again in 1877 he had been on government assignment in the Utah, Wyoming, Colorado and Idaho country.

After 1878 Mr. Mushbach returned east, married the sweetheart of his youth, returned to Montana where he engaged in mining explorations at Cooke City and then at Nye City, abandoning the uncertainties of mining to engage in farming and stock-raising, then accepting public life in the role of the first elected clerk of the court of Carbon county, Montana, in 1896. He maintained connections with farming, being interested at this time with the younger of his two sons, William G., in a ranch near Red Lodge. His older son, George E., is superintendent of the Bear River migratory bird preserve in Utah, having been promoted from deputy state game warden in Montana to federal game warden, then federal game protector, and then given charge of the great bird refuge plant on Bear river.

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That the trip of 1878 had been preceded by previous experience of the kind is reflected in the July 21 entry concerning distribution of the mules. "We got the old stock," Mr. Mushbach noted, and mentions some of the animals by name. Russell West, son of a senator from Louisiana who was one of the "carpet-bag" variety, was first given the assignment as Mr. Gannett's assistant, a place later assigned to Mr. Mushbach.

The call of romance is first noted on July 26, when an entry: "wrote letter to J." appears. Another letter mentioned was to George Mushbach, brother of the diary author, a Virginia legislator of later years. Discomforts of the mule mode of travel manifest themselves in the notation that West, son of the senator, complains of soreness. A 21-mile trip for the day is evidently quite as well as expected. The same distance made today would be irksome and would elicit some mention of motor trips reaching 600 to 800 miles, or to air travel of several times that total. Mosquitoes and gnats preceded, rather than followed, the white man.

Observe Eclipse.

Horseback, or, more accurately, mule riding, produced soreness and stiffness for other members of the party, even to the diary writer who was then just approaching 27 years of age. Hunting prowess was a matter of comment, shooting a goat on the run being duly recorded.

Interest in the eclipse of the sun is portrayed in the description of that spectacle on July 29, even given precedence over the catch of "30 fine trout." Caution as to Indians is also an element long since relegated to the past. "All fresh signs are looked upon with suspicion," Mr. Mushbach notes. The survey party had been told to regard all Indians outside of their duly designated reservations as hostile Indians.

Mountain temperatures were accepted without much comment. "Half an inch of ice formed last night," on July 30, when the minimum reading was 20 degrees. The diary contains interesting references to the mountain ranges which paralleled the route of travel. Up to August 1 it was all old territory to the young surveyor, then in new surroundings he began including descriptive passages. Indian trails afforded the routing, "built in the rubble by the squaws," as Mr. Mushbach states.

On Park Survey

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Prevalence of the grasshopper pest in those days, as in times since the development of agriculture in the mountain states, is noted in several entries by Mr. Mushbach. One entry which could be given a modern interpretation is: "Had a hard trail today, loose gravel and sage brush." Must have been a detour. But it was better than modern detours for they made 20 miles in eight hours.

"Wonderland" itself was entered on August 14, by way of Bechler's Fork headwaters and to the Shoshone geyser basin. The diary came near reaching an early terminus when Mr. Mushbach's mule stepped into quicksand while fording a stream which was only knee deep. The animal was almost immersed, according to the account, when rescue methods were brought into play. Unfortunately the rescue story was not recorded, although Mr. Mushbach recalls that lariat ropes were utilized and the struggling animal was pulled to safety after the rider had been given a rope lift.

Laundry Duties Simplified.

Laundry duties were simplified by the hot and cold water made so readily available by the hot springs and geysers of the park but the major attention went to the play of the geyser, "Union," with its 80 to 100-foot column of water. "Words can not describe the beauty and grandeur of this sight," he records, an expression since confirmed by hundreds of thousands of visitors to this great outdoor playground of America.

Approach of visitors to the survey camp was announced by rifle shots, the diary indicates, a procedure intended to warn the tenants and avoid coming on them by surprise. On August 20 Geologist Holmes and two companions joined the camp. "They took no chances on being shot at by a frightened sharpshooter," Mr. Mushbach recalls, "which might have occurred had they pulled into camp without warning." The next day Mr. Mushbach went out to shoot an elk and found he had killed a moose instead, adding 600 pounds of fresh meat to the camp larder.

Reaching the Upper Basin on August 27, the party found more geysers than at the Shoshone camp and admitted greater grandeur. Wilson and Youndt, the latter known as "Rocky Mountain Harry," rejoined the main camp on the twenty-eighth, reporting that Indians had taken all their stock, confiscated their camp and had shot twice at one of the white men. The Indians were part of the Bannocks who were later routed on the Clark Fork river near Bennett creek by General Miles and his command.

During the ensuing month much of the north central portion of the park area was visited, surveyed, meandered and mapped by the party members, along with geological studies and observations, then came the harrowing moment when the diary writer faced certain death in the plunging waters of the rapids below the lower falls of the Yellowstone. It was on September 25 when "Jackson asked me if I would help him with his apparatus down into the canyon below the falls," Mr. Mushbach says in his diary, "slipped off a 25-foot cliff but fortunately struck square on a ledge at the bottom, thereby saving myself from a cold bath, perhaps worse."

Checks Height o' Falls.

Pinned down to facts today Mr. Mushbach admits that the Yellowstone narrowly missed claiming another victim on that occasion. "After helping Jackson down with his cumbersome camera equipment of that day," he recalls, "I took aneroid and cistern barometer readings to help check the height of the falls. In trying to round the face of a dangerously steep ridge in plain sight of the other members of the party who were at the foot of the falls about 60 yards away, I stepped on a moss-covered rock and lost my footing in a flash. I flattened myself out as my body skidded downward toward the swirling waters 25 feet below, managed to keep my feet ahead and to bring my slide to a stop on a ledge not two feet from the water. The ledge was not wider than 10 or 12 inches but from it I was able to step to safety. Afterward I was told that Dr. Hayden, who was with Jackson, Peale and Hovey and several others, exclaimed as he saw me start the downward plunge, 'My God! He's gone!'" But the dramatic moment is recorded only as an incident in the diary.

Again on October 4 the caution of the time and surroundings is illustrated when Peale and Mushbach saw evidences of another party in their region. It proved to be another survey party, engaged on a different type of survey from that of the Hayden group, but until the identity was established the air was tense. Rarity of human visitation to the park region at that time is reflected in the attitude. Even when the strangers were found to be white men the constraint continued pending the establishment of definite friendly intent. With thousands of visitors in the park each day of the summer season now such precautions may appear strange, but the situation has changed greatly in 58 years.

Riding alone through the lower geyser basin on October 8 Mr. Mushbach's mount stepped in a hole and fell, catching the rider's right leg under him and slightly spraining his ankle. But that, also, was all in the day's work and received no further mention except to note that later developments showed his compass was broken in the fall. The ankle didn't mean much, but the broken compass was quite a loss.

Retreat for the season was begun on October 12, in the face of the characteristically early winter of that latitude and altitude, the pack train disbanded at Bozeman while the party took stage from there for an overland trip of 449 miles to the nearest railway point, requiring 79 hours and 30 minutes, a few hours' jaunt today by airplane.

Mr. Mushbach's diary follows:

July 11, 1878: Left Washington 1:30 p. m. train for Baltimore. Did not find Monroe but left word there for him. Took train for Chicago at 9:10 p. m., meeting Gannett, Peale, Holmes, West, Jackson and Richardson on board.

Had breakfast at Pittsburgh, met some lively girls who were going on Orange picnic. Nearly got left by train while talking to them.

July 13: Reached Chicago at 6 a. m., breakfast at Sherman house. Peale, West and I had pictures taken. Joined here by Perry and Clarke. Left Chicago at 10:30, suffered terribly with heat on trip to Omaha. Lotta Crabtree was a passenger in same coach. Saw Close at Nevada. Played draw poker all afternoon and came out $10 winner. Gilbert and several others of Powell's men on board, also Norris, superintendent of Yellowstone park.

July 14: Changed cars at Omaha for Cheyenne, renewed poker game and lost the $10. Weather more pleasant but sand disagreeable. Reached Cheyenne at 1:30 p. m., July 15.

July 15-21: Spent one day at Cheyenne outfitting. Hank Stewart not there. West bought rifles of Donaleman. Went out to Major Tolbert's and I made center shot at 100 yards, struck bottom of bull's-eye at 75. Came down to camp on the 16th, tent with West. Wrote to J. on the 17th to E. on the 19th. Jim B. and wife arrived on 19th and Dr. Hayden on 20th. Large rattlesnake killed just back of my tent.

July 21: Mules were distributed. We got (all) of the old stock: Fanny Bridger, Texas Jack, Broncho Dolly, and Kate. Have 10 packs and 10 saddles. West goes as Gannett's assistant. Had a hard rain last night.

July 22: Left the ranch this morning for Cheyenne. Shipped stock.

July 23: Left Cheyenne at 1:30 p. m.

July 24: Dropped Wilson's and Jackson's parties off at Point of Rocks at 5 a. m., we reached Granger at 9 and found the stock and men all right. Camped on the same spot as last year. Got a bulletin from Jones at Green River.

Hot and Dry Drive.

July 25: Spent the day making up the loads.

July 26: Camp No. 1 left Granger at 9:30. Peale and I waited for 8:30 train with eastern mail but got nothing. Wrote letter to J., also to George. Had a hot, dry, drive. No water between Harris Fork and the Green, 18 miles. Made camp at a point about midway between Robinson Perry and mouth of Big Sandy, after 21-mile drive. West complains greatly of soreness. Fine camp ground. Commence reading the barometer at this camp. Mosquitoes and gnats very troublesome. Barometer, 24.000; thermometer, 49.

July 27: Camp No. 2. Started this morning at 8, reached camp here at 3:30, about 25 miles. Knees got quite stiff today, riding. Killed an animal this evening, supposed to be a goat strayed from some Indians or ranch. Saw two blacktail bucks and made a very close running shot at one. Shot goat on the run. Camp on the Green about three miles above State creek; plenty of grass and wood. West, Perry and Wells complain bitterly of soreness and stiffness. Barometer, 23.884.

Bear Seem as Thick as Rabbits

"Judging from signs, bear must be as thick here as rabbits at home," J. E. Mushbach wrote in a diary he kept while with a survey party in Yellowstone National park in 1878. Above are two black bears in the park, fighting over food which man now provides for them daily in the national playground.

July 28: Camp No. 3. Temperature at 5:45 a. m., 40 degrees. Left camp with Peale and Gannett at 6 for Pomeroy's ranch, where we left letters. I sent one to J. and one to E. Mrs. Pomeroy and daughter both remembered me. We got butter, eggs and milk from them. Clarke started ahead from the ranch and tried to make the trail around the bluffs but found it washed out and had to drive back after trying to ford the river. We took the bluffs at first and gained about an hour on them, which they failed to make up and have camped on the LaBarge, about four miles back. Day has been hot and dusty and plenty of alkali. Am not well, digestion all out of order and have suffered considerably today, being weak and "achey." Pack train left camp this morning at 7 and made camp here on the Green at 3, about 27 miles. Crossed Fontenelle and LaBarge, lips chapped badly. Barometer, 23.760.

July 29: Camp No. 4. Peale, Gannett and I left camp this morning at 6, expecting to ride to the mouth of New Forke to witness the eclipse of the sun but stopped at this point on the Piney, about two miles from the Green, on account of Gannett's sickness. The train left camp at 7:30 and reached here shortly after noon, making about 20 miles. We were joined by Clarke's party about 2, making camp beside us. We were in the line of totality of the eclipse about three minutes and witnessed a grand and awe-inspiring sight. The light was about such as you would see through the darkest of smoked glass. One bright star was to be seen in the northwest, close to the sun. I caught 30 fine trout today and Cooper, West and George caught 33 between them. Sent a mess of them to Clarke's camp, they not being able to catch any. Shot a porcupine but he got into his hole. Saw first fresh Indian sign today—a moccasin made in the morning. All fresh signs are looked upon with suspicion as all the good Indians have been called in to their agencies. Am feeling all right again; all the party have been under the weather some on account of colds and the alkali water. Thermometer at sunrise, 34 degrees; barometer, 23.590. Slept out last night.

Temperature Is 20.

July 30: Camp No. 4. Minimum thermometer last night, 20 degrees. Laid over here today to allow Gannett to recuperate. Spent the day in reading, sleeping, mending. Clarke's party left us for the summer this morning and St. John celebrated their departure and gave himself a warm place in our hearts by leaving us a good-sized piece of fruit cake. Feasted on trout again today, Tom catching 30. Wind blew a gale. Did my first washing this evening. Ice formed an inch thick last night.

July 31: Camp No. 5. Reached here at noon after four hours on the trail making 15 miles. Camp on March creek, on the south side of the island. Gannett and I rode ahead fast so that he might avoid the heat of the day. Saw about 20 antelope but got only one. Shot a sage hen. Crossed Bitter Root and White Clay creeks. Caught seven fine trout but find them scarce and shy on account of water being so quiet and clear. George caught five and Tom Cooper seven. Minimum thermometer, 27; barometer, 23.350. Mosquitoes very bad.

August 1: Camp No. 6. Gannett and I left camp at 6 this morning expecting to ride as far as Horse creek and lay over there until sundown but when we got there it was cool and cloudy so we continued on to this point about noon. Camp is on the Green just under Station 12 and immediately opposite our north-

Hot Springs and Geysers Simplify Laundry Duties

Daily Account Written by Red Lodge Man Refers to Excellent Fishing in Playground Area; Itinerary Takes Him Close to Teton Range; Observes Antelope and Other Wild Game.

ern camp on the Green last year. Tomorrow we enter strange country. Have been traveling between two familiar ranges, the Wind river on the east and the Wyoming on the west. The lower portion of the basin has been very dry and brown, the ground bare excepting for a scant growth of sage. The immediate river bottom up to the first terrace has had plenty of grass for our animals. As we came up the stream the country has been growing more fertile, until now it is a fine stock range. Counted 88 antelope today; made two miserable shots at one and hit another but did not get him. While I was walking on my elbows for about a quarter of a mile after a band of antelope Gannett shot one which I had scared around to him where he was sitting holding the mules. The pack train traveled 25 miles today. Temperature at 6 a. m., 29 degrees. When we were on Station 12 today looking for a camp we spied an Indian a couple of miles off and were seen by him at about the same time. He rode rapidly over to us and proved to be a young, crippled Shoshoni. He told us that Clarke had passed yesterday and had left us a note where he turned off the road, giving some information about the trails over to the Snake river. After getting some tobacco and a portion of our lunch he left. Tom caught 35 trout this evening. Barometer, 23.002.

Sees 200 Antelope.

August 2: Camp No. 7. Left the Green at 7:45 this morning and made 22 miles. We are now on Hoback's river, Snake river drainage, having crossed the divide at noon. A magnificent view from the divide, which is a hog-back shaped ridge with the bluff edge toward the basin we were entering. We were delighted by the appearance of the basin formed by the Hoback and tributaries about 40 miles wide at the upper side and gradually narrowing until at the convergence of the Gros Ventre and Wyoming ranges, which formed the two rims, it became only a narrow canyon about 40 miles away. Our camp ground was occupied last night by the Clarke party and we found their fire still burning. They have gone north to make Wilson's Station 12 of last year, about 20 miles away. We traveled up Lead creek to its source in approaching the divide and I never saw such a valley for game. We saw over 200 antelope, five flocks of geese, and several hundred sage hens. The valley was strewn with buffalo bones and wallows. I killed a fine buck antelope. Our Indian friend of yesterday joined us for a short time today. Minimum temperature this morning 24; barometer 23.442. My mule bucked with me today.

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Reaches Snake River.

August 5: Camp No. 10. Reached Snake river this forenoon at the south end of Jackson's Little Hole. Followed on the east side for two hours, then crossed at a good ford to the west and ran into bad trail, hills and bluffs. Camped at 4 on one of the numerous cut-offs of the river. Sighted the Tetons for the first time today. Had to ride back half a mile for my barometer, which reads 24.192. Temperature 36.

August 6: Camp No. 11. Reached here at 5:30 after a nine-and-a-half-hour drive, traveling about 27 miles. Had a good route except for one beaver dam which delayed us some. Shot a fine big goose. Crossed Fighting Bear creek and the mouth of the Gros Ventre; passed Teton pass and camped opposite T. O. T. from where Bechler began his famous retreat last fall. Camp is on the Snake, about on a line between the north end of the Big Gros Ventre Buttes and the South Teton and in the neck between Jackson's Hole and Jackson's Little Hole, two round valleys or holes in the mountains. Gannett and I rode off from the line of march about a mile to find a camp and George did not see us and kept on ahead. We did not discover this until our mules were turned loose and in trying to catch them again they ran out and took the back trail. When we had brought the train back Tom and George started after them and caught them eight miles away. Swapping saddles they rode them back on the dead run, nearly using mine up, he being broken winded. Served him right. Minimum thermometer 37. Had such a misery from eating service berries that I caught one fine trout. Barometer 23.850.

August 7: Camp 12. On the Snake just about the mouth of Great Bend creek. Passed today along close to the foot of the Teton range and a rugged and steep one it is. Have changed my opinion about the Grand Teton and do not think the top can be reached, from this side at least. We had not seen a hoof of game since entering Hoback's canyon until today, when we sighted two black tail deer. The train stopped whilst I succeeded in putting a bullet through the loins of one and through the foreshoulder of the other. Had our goose for breakfast and again for dinner and it was greatly relished as it gave us a change. Passed through a large swarm of grasshoppers going southeast, apparently hatched in this valley. The ground has also been covered with Mormon locusts. Judging from the signs bear must be as thick here as rabbits at home. Had a hard trail today, loose gravel and sage brush and did not make more than 20 miles in eight hours travel. Minimum thermometer, 43. Our usual light shower struck us about 2 o'clock and afterward the sun came out blisteringly hot. Tom and West caught 10 trout. Beckler's map seems very unreliable. The terraces, from two to four deep in this hole, are quite equal to those in the Salt Lake basin. Barometer 23.728.

August 8: Camp 13. Travel most of the day has been very laborious, slow and tedious, being over a succession of ridges covered with standing or fallen timber, with swampy bottoms between. Several mules had their packs and rigging torn off. Left camp at 7:45 and reached here at 4:45, nine hours for about 20 miles. Had a feast of strawberries and gooseberries today. Camp is on the Snake, about five miles above the head of Jackson's lake. Tom and I caught eight trout this evening. Minimum thermometer, 36; barometer, 23.588.

Enters Volcanic Region.

August 9: Camp No. 14. Camp is at the forks of the Snake and Lake Fork. Have had a good drive, by fording the river twice. Found our first hot springs on Green Valley creek and quite a number of them, both extinct and active, on the opposite side of the river from here also. Took the temperature of those here, range from 110 to 180 degrees. There are also several extinct geysers, one or two of which are still spitting a little. Made station No. 1 today and find that the country is so heavily wooded as to make it almost impossible to work it. We are just entering the volcanic region, the point between the forks being a basaltic plateau. Shot three grouse and one squirrel today and had them for dinner, along with baked whitefish, eight of which and 12 trout Tom caught this evening. Minimum thermometer, 34. West and I took a walk after dinner about two miles to a very pretty fall on a creek emptying in just above here. A polecat met our advance guard, consisting of Gannett and myself, this morning and completely routed us, driving us back in confusion. Gannett and his mule still bear the smell of the fray thick upon them. I escaped unsmelled. Covered 16 miles today in five and a quarter hours. Barometer, 23.558.

August 10: Camp No. 15. Made 20 miles today in eight and a half hours. Crossed the divide between Snake and Fall rivers at noon, a heavily timbered country but generally good traveling, not much down timber. Measured the falls mentioned yesterday and found them 30 feet high. While doing it a fine cow elk, scared up by the pack train, passed slowly within 40 yards of us. We are now camped on the Fall river about three miles below the grand falls and just at the end of Bradley's butte. The name Fall river is a very appropriate one as there are five falls between here and the divide; the first 13 feet, the next six, next a double one eight feet and 12; next eight feet and the last 140 feet. The last is divided into five separate jumps, the first 20, then rapids 50 yards, then 20 more, closely followed by a jump of 80 feet, then 30 yards of rapids, followed by two jumps of 10 feet each at regular intervals. Each fall is preceded and followed by about half a mile of swift rapids. Made two stations today but can not do much owing to the heavy timber. Minimum thermometer 35, mosquitoes are terrible. Barometer 23.862.

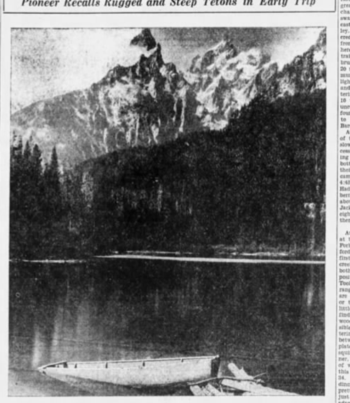
August 11: Camp 15. Today has been a layover for the train and while it gives the packers and cook a rest it entails extra work on the balance. Gannett and Peale went over on the ridge and made a station, coming back at 3. I had the river to meander as far as I could go, with West as my assistant. The river about two miles below makes a loop and flows back some distance. Owing to the heavy timber I missed this and took the first course. When I reached my foresight point I discovered my error and sighted a bluff from there at the foot of which I supposed the river ran, but found I was still mistaken. After threshing around in the timber and river until 5 p. m., tearing my hands and shirt, I finally found the river about six miles from here and I made a partial meander from there up. Gannett did not do any more from his station. This was West's first day at work and sick enough he is of it. Had the worst down timber I ever got in. Fired three shots at a big elk but did not get him. Found lots of huckleberries and a few raspberries. Reached camp at 7, had a good deal of fun with West, running him into holes and deep water. Mosquitoes were so bad in places that I had to tie up my head and face with my handkerchief, leaving peepholes for the eyes. Minimum thermometer, 51; barometer, 23.830.

His Birthday.

August 12: Camp No. 16. We have a beautiful camp here, on the edge of the bottom, about a mile from where Bechler's Fork comes out of the plateau. Traveled today six and a half hours, making 15 miles. Had just such traveling part of the day as West and I had yesterday, being so bad that we were obliged to take the back trail once for about a mile. The sides of the plateau were filled with hidden springs and the bottom with slough lakes, beaver dams and fallen timber. Attempted to make a station but could not locate. Today is my birthday. Minimum thermometer 47. Started out hunting this evening and jumped a cow elk but only got a running shot. Discovered a creek tumbling from the top of the plateau, making one of the most beautiful falls imaginable. Plateau here about 600 feet high; main fall about 400 feet. Killed three grouse today and West killed one. Mosquitoes are thicker than ever. Gannett had another of his sick spells. Barometer, 23.874.

(The diary will be concluded in next Sunday's feature section of The Billings Gazette.)

Pioneer Recalls Rugged and Steep Tetons in Early Trip



"Passed today along close to the Teton range, and a rugged and steep one it is," J. E. Mushbach wrote in his diary on Aug. 7, 1878, while with one of Dr. F. V. Hayden's survey parties. The center peak above is the Grand Teton. Jeanette peak to the left is in the foreground and appears higher. Mount Owen, to the right, is named in honor of the leader of the first party to climb its peak, Aug. 11, 1898.

Ruins Reveal Wide Influence of Egypt

Beirut, Syria, Aug. 15.—(AP)—Archeological discoveries showing the strong influence of Egypt along the Lebanon coast from the eighteenth to fourteenth centuries, B. C., have been unearthed at Djeleil, site of the ancient city of Byblos.

Excavations by archeologists of the Lebanon republic brought to light a splendid stone statue of a man in Egyptian costume, the ruins of a temple, several gold statues and ornaments set with precious stones and a silver ax.

Djeleil's archeological treasures provide a record of its age-old history and its many occupations. There are the tombs of Phoenician kings, a row of columns erected by the Greeks, a small Roman theater, Arab structures and fortifications built by the crusaders.

Today it is a minor seaport.

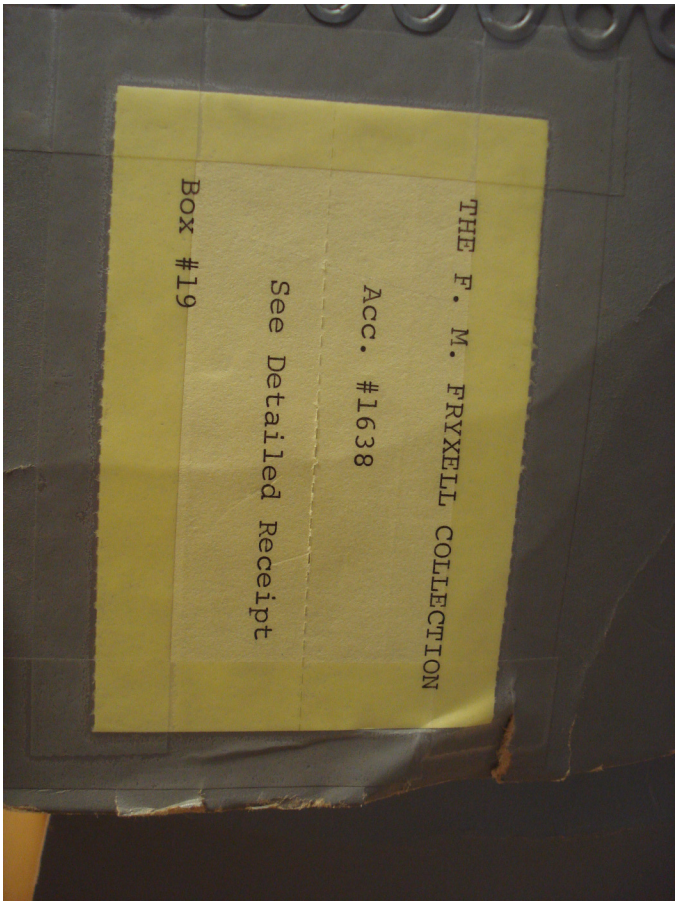
Museum Is Tribute To Priest-Inventor

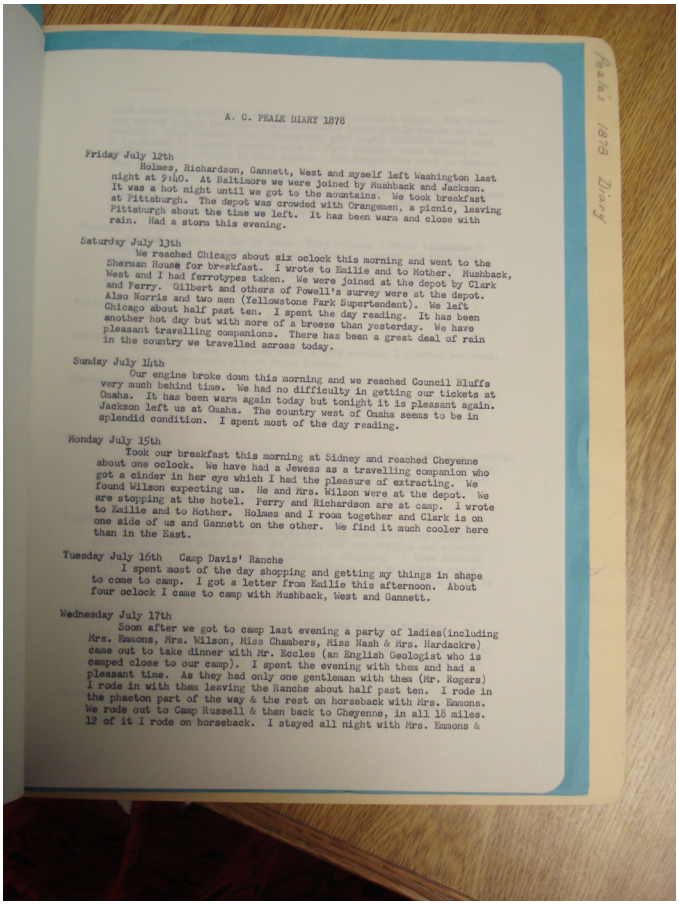
Znojmo, Czechoslovakia, Aug. 15.—(AP)—The memory of Father Procopius Divisch, a priest-scientist credited with independent invention of the lightning conductor in 1754, two years after Benjamin Franklin, is honored by a museum opened at Brendits, near here.

Father Divisch's first lightning rod, it is said, was destroyed by angry peasants who attributed a crop failure to the "strange machine" the priest put up on his vicarage. One of his models is on display in the museum.

Berlin Grants Jews Recess for Olympics

Berlin, Aug. 15.—(AP)—A damper has been put on anti-Jewish agitation in and around Berlin during the Olympic games, but elsewhere signs still warn Jews to keep out of towns and stores and nazis say their anti-Jewish beliefs have not waned. The Berlin signs were removed in order not to offend foreigners during the games.





A. C. PEALE DIARY 1878

Peale 1878 Diary

Friday July 12th
Holmes, Richardson, Gannett, West and myself left Washington last night at 9:40. At Baltimore we were joined by Mushback and Jackson. It was a hot night until we got to the mountains. We took breakfast at Pittsburgh. The depot was crowded with Orangemen, a picnic, leaving Pittsburgh about the time we left. It has been warm and close with rain. Had a storm this evening.

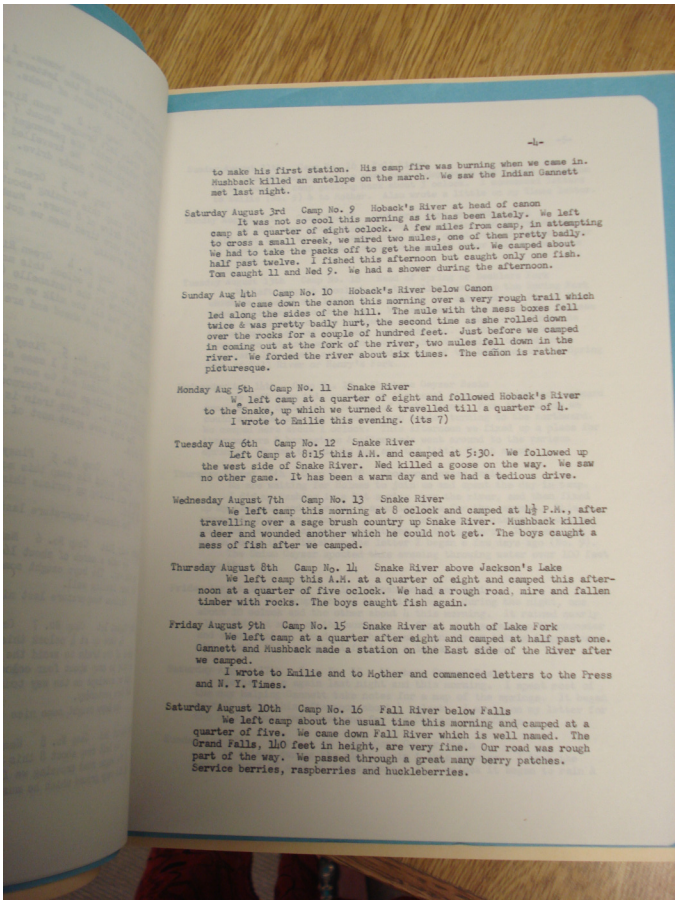
Saturday July 13th
We reached Chicago about six oclock this morning and went to the Sherman House for breakfast. I wrote to Emilie and to Mother. Mushback, West and I had ferrotypes taken. We were joined at the depot by Clark and Ferry. Gilbert and others of Powell's survey were at the depot. Also Norris and two men (Yellowstone Park Superintendent). We left Chicago about half past ten. I spent the day reading. It has been another hot day but with more of a breeze than yesterday. We have pleasant travelling companions. There has been a great deal of rain in the country we travelled across today.

Sunday July 14th
Our engine broke down this morning and we reached Council Bluffs very much behind time. We had no difficulty in getting our tickets at Omaha. It has been warm again today but tonight it is pleasant again. Jackson left us at Omaha. The country west of Omaha seems to be in splendid condition. I spent most of the day reading.

Monday July 15th
Took our breakfast this morning at Sidney and reached Cheyenne about one oclock. We have had a Jewess as a travelling companion who got a cinder in her eye which I had the pleasure of extracting. We found Wilson expecting us. He and Mrs. Wilson were at the depot. We are stopping at the hotel. Ferry and Richardson are at camp. I wrote to Emilie and to Mother. Holmes and I room together and Clark is on one side of us and Gannett on the other. We find it much cooler here than in the East.

Tuesday July 16th Camp Davis' Ranche
I spent most of the day shopping and getting my things in shape to come to camp. I got a letter from Emilie this afternoon. About four oclock I came to camp with Mushback, West and Gannett.

Wednesday July 17th
Soon after we got to camp last evening a party of ladies(including Mrs. Emmons, Mrs. Wilson, Miss Chambers, Miss Nash & Mrs. Hardackre) came out to take dinner with Mr. Eccles (an English Geologist who is camped close to our camp). I spent the evening with them and had a pleasant time. As they had only one gentleman with them (Mr. Rogers) I rode in with them leaving the Ranche about half past ten. I rode in the phaeton part of the way & the rest on horseback with Mrs. Emmons. We rode out to Camp Russell & then back to Cheyenne, in all 16 miles. 12 of it I rode on horseback. I stayed all night with Mrs. Emmons &



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to make his first station. His camp fire was burning when we came in. Mushback killed an antelope on the march. We saw the Indian Gannett met last night.

Saturday August 3rd Camp No. 9 Hoback's River at head of canon
It was not so cool this morning as it has been lately. We left camp at a quarter of eight oclock. A few miles from camp, in attempting to cross a small creek, we mired two mules, one of them pretty badly. We had to take the packs off to get the mules out. We camped about half past twelve. I fished this afternoon but caught only one fish. Tom caught 11 and Ned 9. We had a shower during the afternoon.

Sunday Aug 4th Camp No. 10 Hoback's River below Canon
We came down the canon this morning over a very rough trail which led along the sides of the hill. The mule with the mess boxes fell twice & was pretty badly hurt, the second time as she rolled down over the rocks for a couple of hundred feet. Just before we camped in coming out at the fork of the river, two mules fell down in the river. We forded the river about six times. The cañon is rather picturesque.

Monday Aug 5th Camp No. 11 Snake River
W. left camp at a quarter of eight and followed Hoback's River to the Snake, up which we turned & travelled till a quarter of 4.
I wrote to Emilie this evening. (its 7)

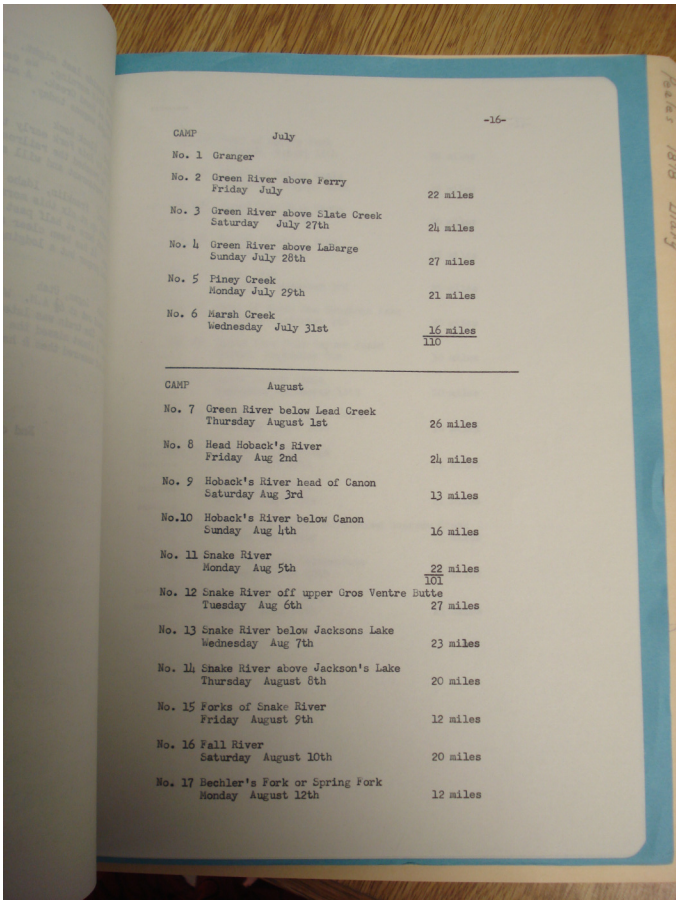
Tuesday Aug 6th Camp No. 12 Snake River
Left Camp at 8:15 this A.M. and camped at 5:30. We followed up the west side of Snake River. Ned killed a goose on the way. We saw no other game. It has been a warm day and we had a tedious drive.

Wednesday August 7th Camp No. 13 Snake River
We left camp this morning at 8 oclock and camped at 1½ P.M., after travelling over a sage brush country up Snake River. Mushback killed a deer and wounded another which he could not get. The boys caught a mess of fish after we camped.

Thursday August 8th Camp No. 14 Snake River above Jackson's Lake
We left camp this A.M. at a quarter of eight and camped this afternoon at a quarter of five oclock. We had a rough road, mire and fallen timber with rocks. The boys caught fish again.

Friday August 9th Camp No. 15 Snake River at mouth of Lake Fork
We left camp at a quarter after eight and camped at half past one. Gannett and Mushback made a station on the East side of the River after we camped.
I wrote to Emilie and to Mother and commenced letters to the Press and N. Y. Times.

Saturday August 10th Camp No. 16 Fall River below Falls
We left camp about the usual time this morning and camped at a quarter of five. We came down Fall River which is well named. The Grand Falls, 110 feet in height, are very fine. Our road was rough part of the way. We passed through a great many berry patches. Service berries, raspberries and huckleberries.



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CAMP	July	
No. 1	Granger	
No. 2	Green River above Ferry Friday July	22 miles
No. 3	Green River above Slate Creek Saturday July 27th	24 miles
No. 4	Green River above LaBarge Sunday July 28th	27 miles
No. 5	Piney Creek Monday July 29th	21 miles
No. 6	Marsh Creek Wednesday July 31st	16 miles 110

CAMP	August	
No. 7	Green River below Lead Creek Thursday August 1st	26 miles
No. 8	Head Hoback's River Friday Aug 2nd	24 miles
No. 9	Hoback's River head of Canon Saturday Aug 3rd	13 miles
No.10	Hoback's River below Canon Sunday Aug 4th	16 miles
No. 11	Snake River Monday Aug 5th	22 miles 101
No. 12	Snake River off upper Gros Ventre Butte Tuesday Aug 6th	27 miles
No. 13	Snake River below Jacksons Lake Wednesday Aug 7th	23 miles
No. 14	Snake River above Jackson's Lake Thursday August 8th	20 miles
No. 15	Forks of Snake River Friday August 9th	12 miles
No. 16	Fall River Saturday August 10th	20 miles
No. 17	Bechler's Fork or Spring Fork Monday August 12th	12 miles

Peale 1878 Diary

THE

American Fur Trade

OF THE

Far West

A History of the Pioneer Trading Posts and Early Fur Companies of the Missouri Valley and the Rocky Mountains and of the Overland Commerce with Santa Fe.

MAP AND ILLUSTRATIONS

BY

HIRAM MARTIN CHITTENDEN

Captain Corps of Engineers, U. S. A., Author of "The Yellowstone."

THREE VOLUMES

VOLUME II.

NEW YORK

FRANCIS P. HARPER

1902

often passed their winters there. In ascending the Yellowstone from the Great Bend to its source, a series of cañons is passed between which the valley spreads out into open parks, where the bottom lands and hillsides are carpeted, like the green hills of France, with meadows so uniform and lawn-like as scarcely to seem the product of unaided nature.

In an open valley of most attractive surroundings on one of the upper tributaries of the Yellowstone, a free trapper, Johnson Gardner, plied his trade as far back as 1830, and gave the river and valley his name. "Gardner's Hole" was the uncouth name of this beautiful spot which every tourist now sees as he enters the Yellowstone National Park.

South of this government reservation lies one of the most celebrated of all the mountain valleys, still known by the name first given it, Jackson Hole.[1] The name embraces the whole valley along the eastern base of the Tetons from the north shore of Jackson Lake to the mouth of the Little Grosventre river, a distance of upward of forty miles.

A most striking feature of this wonderful valley is its extremely flat topography, surrounded as it is by some of the most rugged mountains on the continent. Its beauty is greatly enhanced by the presence of several lakes which lie immediately at the base of the Teton range, and in whose placid surfaces these mountains stand reflected as from the most perfect mirror. The landscape thus formed has been the despair of painters of natural scenery since the valley became frequented by students of nature. Neither pen nor pencil, nor the modern perfection of the photographic art can reproduce its marvelous beauty.

Whatever the trapper may have thought of the scenic attraction of this valley, he certainly loved the spot, and it was always one of his favorite haunts. It was a most convenient base of operations. From north to south through it flowed the Snake river, with its sources mainly in the Yel-

[1] Named for David Jackson, of the firm of Smith, Jackson and Sublette, who did business in this region from 1826 to 1830. (Ferris.)

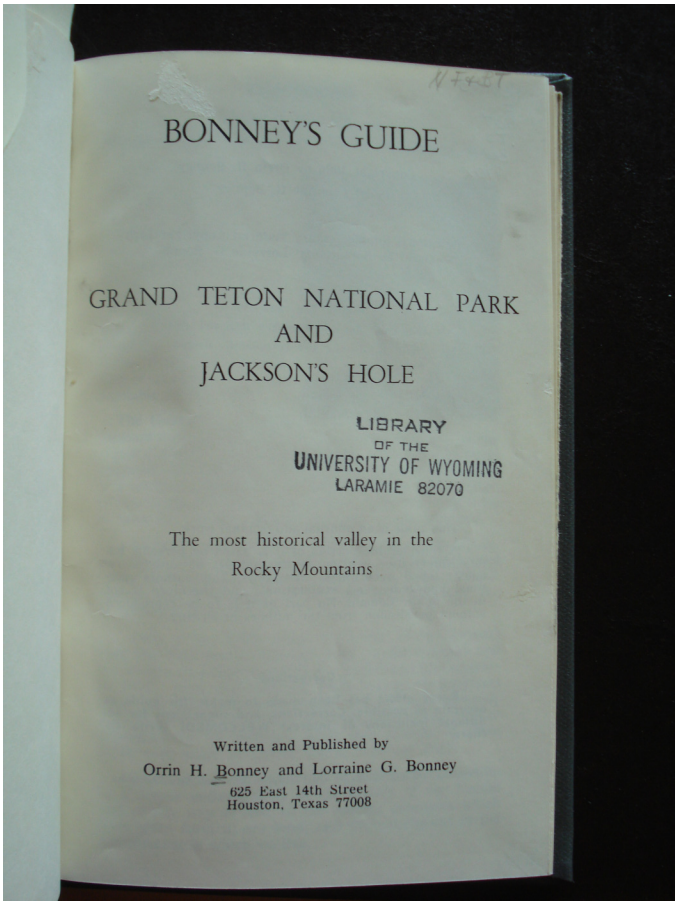
lowstone Park farther to the north. Three large tributaries joined the main stream in this vicinity and all were full of beaver when the trapper first visited them. Jackson Hole was thus a point from which small trapping parties could explore the many branches of these larger streams and to which they could return with the fruits of their labors. It was probably also safer from Indian incursions than were other valleys less difficult of access. There was no easy way to get into it, and from most directions it was then, and is still, exceedingly difficult to enter it at all.

Another valley which bore the name of Jackson was Jackson's Little Hole. It was situated at the source of Hoback river just across the Divide from Green river, and was the first camping place after leaving Green river for Jackson or Pierre's Hole.

From Jackson Hole a trail led across Teton Pass to the scarcely less celebrated locality of Pierre's Hole.[2] The Teton or Pierre river drains the western slope of the Teton mountains. It rises in Teton Pass, and flows slightly west of north for about thirty miles, when it turns due west and flows into Henry Fork of Snake river. It was that portion of the valley that lay along the northerly course of the stream to which the name Pierre's Hole applied. The open valley is about twenty-five miles long, and five to fifteen broad. On the right hand, looking down stream, rises the mighty wall of the Teton range, while on the left is the much less lofty range of the Snake River mountains. Through the center of the valley wound the inevitable line of trees which showed where the waters from the mountains were flowing, and many a tributary could be discovered coming in from the highlands on either side. The valley is a most attractive one, and is now being rapidly filled up with industrious settlers.

Pierre's Hole was a particularly favorite resort of the trader. Several of the annual rendezvous were held here.

[2] "It receives its name from an Iroquois chieftain, who first discovered it, and was killed in 1827 on the source of the Jefferson river." (Ferris.)



BONNEY'S GUIDE

GRAND TETON NATIONAL PARK AND JACKSON'S HOLE

The most historical valley in the Rocky Mountains

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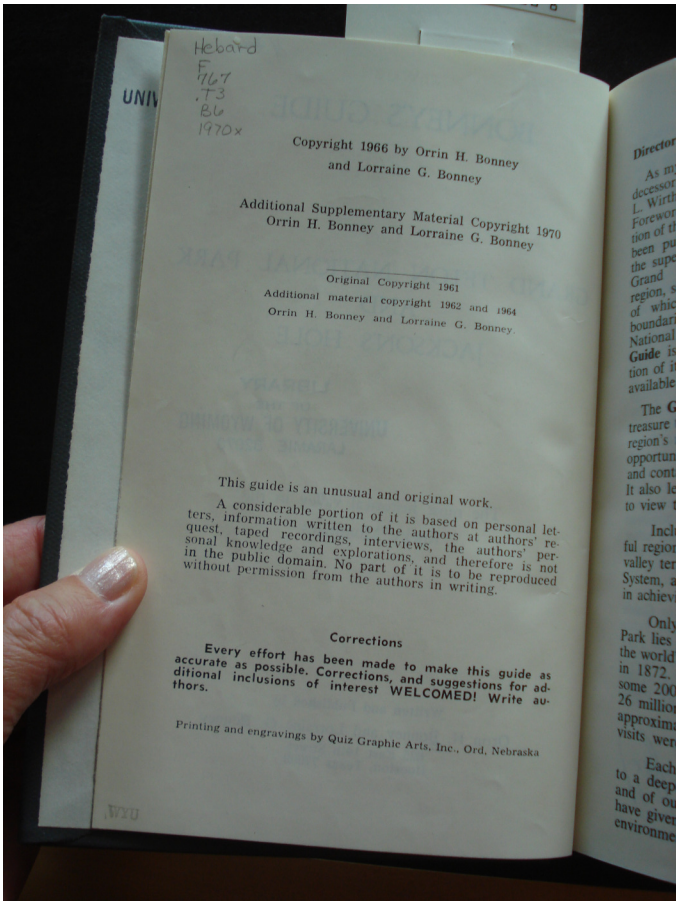

This guide is an unusual and original work.

A considerable portion of it is based on personal letters, information written to the authors at authors' request, taped recordings, interviews, the authors' personal knowledge and explorations, and therefore is not in the public domain. No part of it is to be reproduced without permission from the authors in writing.

Corrections

Every effort has been made to make this guide as accurate as possible. Corrections, and suggestions for additional inclusions of interest WELCOMED! Write authors.

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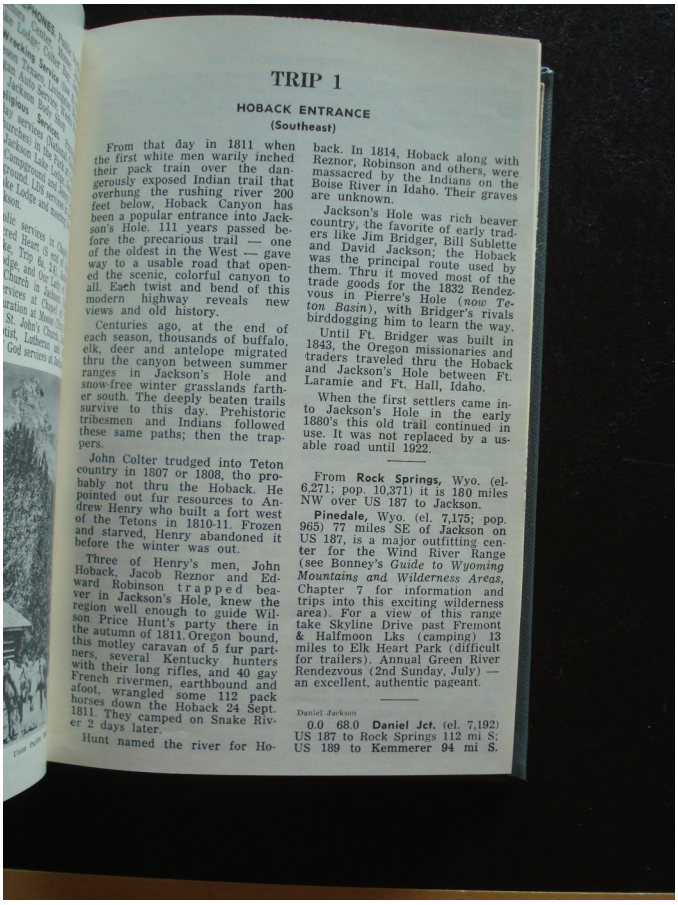


TRIP 1

HOBACK ENTRANCE
(Southeast)

From that day in 1811 when the first white men warily inched their pack train over the dangerously exposed Indian trail that overhung the rushing river 200 feet below, Hoback Canyon has been a popular entrance into Jackson's Hole. 111 years passed before the precarious trail — one of the oldest in the West — gave way to a usable road that opened the scenic, colorful canyon to all. Each twist and bend of this modern highway reveals new views and old history.

Centuries ago, at the end of each season, thousands of buffalo, elk, deer and antelope migrated thru the canyon between summer ranges in Jackson's Hole and snow-free winter grasslands farther south. The deeply beaten trails survive to this day. Prehistoric tribesmen and Indians followed these same paths; then the trappers.

John Colter trudged into Teton country in 1807 or 1808, tho probably not thru the Hoback. He pointed out fur resources to Andrew Henry who built a fort west of the Tetons in 1810-11. Frozen and starved, Henry abandoned it before the winter was out.

Three of Henry's men, John Hoback, Jacob Reznor and Edward Robinson trapped beaver in Jackson's Hole, knew the region well enough to guide Wilson Price Hunt's party there in the autumn of 1811. Oregon bound, this motley caravan of 5 fur partners, several Kentucky hunters with their long rifles, and 40 gay French rivermen, earthbound and afoot, wrangled some 112 pack horses down the Hoback 24 Sept. 1811. They camped on Snake River 2 days later.

Hunt named the river for Hoback. In 1814, Hoback along with Reznor, Robinson and others, were massacred by the Indians on the Boise River in Idaho. Their graves are unknown.

Jackson's Hole was rich beaver country, the favorite of early traders like Jim Bridger, Bill Sublette and David Jackson; the Hoback was the principal route used by them. Thru it moved most of the trade goods for the 1832 Rendezvous in Pierre's Hole (*now Teton Basin*), with Bridger's rivals birddogging him to learn the way.

Until Ft. Bridger was built in 1843, the Oregon missionaries and traders traveled thru the Hoback and Jackson's Hole between Ft. Laramie and Ft. Hall, Idaho.

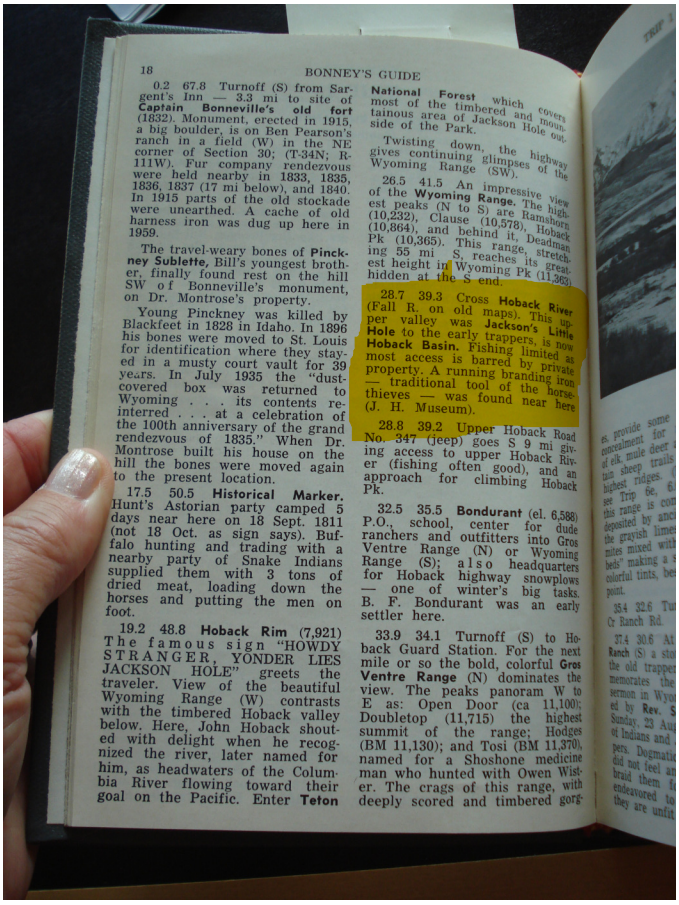
When the first settlers came into Jackson's Hole in the early 1880's this old trail continued in use. It was not replaced by a usable road until 1922.

From **Rock Springs,** Wyo. (el. 6,271; pop. 10,371) it is 180 miles NW over US 187 to Jackson.

Pinedale, Wyo. (el. 7,175; pop. 965) 77 miles SE of Jackson on US 187, is a major outfitting center for the Wind River Range (see Bonney's *Guide to Wyoming Mountains and Wilderness Areas,* Chapter 7 for information and trips into this exciting wilderness area). For a view of this range take Skyline Drive past Fremont & Halfmoon Lks (camping) 13 miles to Elk Heart Park (difficult for trailers). Annual Green River Rendezvous (2nd Sunday, July) — an excellent, authentic pageant.

Daniel Jackson

0.0 68.0 **Daniel Jct.** (el. 7,192) US 187 to Rock Springs 112 mi S; US 189 to Kemmerer 94 mi S.



0.2 67.8 Turnoff (S) from Sargent's Inn — 3.3 mi to site of **Captain Bonneville's old fort** (1832). Monument, erected in 1915, a big boulder, is on Ben Pearson's ranch in a field (W) in the NE corner of Section 30; (T-34N; R-111W). Fur company rendezvous were held nearby in 1833, 1835, 1836, 1837 (17 mi below), and 1840. In 1915 parts of the old stockade were unearthed. A cache of old harness iron was dug up here in 1959.

The travel-weary bones of **Pinckney Sublette,** Bill's youngest brother, finally found rest on the hill SW of Bonneville's monument, on Dr. Montrose's property.

Young Pinckney was killed by Blackfeet in 1828 in Idaho. In 1896 his bones were moved to St. Louis for identification where they stayed in a musty court vault for 39 years. In July 1935 the "dust-covered box was returned to Wyoming . . . its contents reinterred . . . at a celebration of the 100th anniversary of the grand rendezvous of 1835." When Dr. Montrose built his house on the hill the bones were moved again to the present location.

17.5 50.5 **Historical Marker.** Hunt's Astorian party camped 5 days near here on 18 Sept. 1811 (not 18 Oct. as sign says). Buffalo hunting and trading with a nearby party of Snake Indians supplied them with 3 tons of dried meat, loading down the horses and putting the men on foot.

19.2 48.8 **Hoback Rim** (7,921) The famous sign "HOWDY STRANGER, YONDER LIES JACKSON HOLE" greets the traveler. View of the beautiful Wyoming Range (W) contrasts with the timbered Hoback valley below. Here, John Hoback shouted with delight when he recognized the river, later named for him, as headwaters of the Columbia River flowing toward their goal on the Pacific. Enter **Teton National Forest** which covers most of the timbered and mountainous area of Jackson Hole outside of the Park.

Twisting down, the highway gives continuing glimpses of the Wyoming Range (SW).

26.5 41.5 An impressive view of the **Wyoming Range.** The highest peaks (N to S) are Ramshorn (10,232), Clause (10,578), Hoback (10,864), and behind it, Deadman Pk (10,365). This range, stretching 55 mi S, reaches its greatest height in Wyoming Pk (11,363), hidden at the S end.

28.7 39.3 Cross **Hoback River** (Fall R. on old maps). This upper valley was **Jackson's Little Hole** to the early trappers, is now **Hoback Basin.** Fishing limited as most access is barred by private property. A running branding iron — traditional tool of the horse-thieves — was found near here (J. H. Museum).

28.8 39.2 Upper Hoback Road No. 347 (jeep) goes S 9 mi giving access to upper Hoback River (fishing often good), and an approach for climbing Hoback Pk.

32.5 35.5 **Bondurant** (el. 6,588) P.O., school, center for dude ranchers and outfitters into Gros Ventre Range (N) or Wyoming Range (S); also headquarters for Hoback highway snowplows — one of winter's big tasks. B. F. Bondurant was an early settler here.

33.9 34.1 Turnoff (S) to Hoback Guard Station. For the next mile or so the bold, colorful **Gros Ventre Range** (N) dominates the view. The peaks panoram W to E as: Open Door (ca 11,100); Doubletop (11,715) the highest summit of the range; Hodges (BM 11,130); and Tosi (BM 11,370), named for a Shoshone medicine man who hunted with Owen Wister. The crags of this range, with deeply scored and timbered gorg-

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ship with Struthers Burt.[59] When the partnership failed after the 1911 season, Burt and Dr. Horace Carncross homesteaded the Bar BC, which is commonly recognized as the second dude ranch in the valley.[60] Dude ranching was slower to develop there, probably due to the remoteness of Jackson Hole from main rail lines.

By the 1920s, when dude ranching really began to take hold in the valley, outside factors were appearing on the horizon that would, in time, retard further development of dude ranching in Jackson Hole. It was in 1926 that John D. Rockefeller II first became interested in buying up a large part of the valley, for eventual transferrance to the Grand Teton National Park, and although Rockefeller favored some dude ranching in the valley, numerous dude ranches of the 1920s have now reverted to the park.[61] It was in the 1920s that John S. Turner started his family in dude ranching, and his grandsons, Harold, John, and Don Turner currently operate the largest dude ranch in Jackson Hole, the Triangle X.[62]

By the late 1920s, there were a dozen or more dude ranches in Jackson Hole, and another dozen south and east of the valley that advertised themselves as located in Jackson Hole.

Dubois, to the east of Jackson Hole, was also a thriving little dude ranch town in the 1920s, the most famous of a half dozen ranches located there being that of Charles C. Moore, the C. M. Ranch. Below "Little Jackson's Hole," which was south of the town of Jackson, were several more dude ranches extending southward down the Hoback River to the upper valley of the Green River. Altogether, by 1929, there were nearly 100 dude ranches in Wyoming, most of them within this Sheridan-to-the-Green River arc in northwestern Wyoming.

Struthers Burt has stated that dude ranching grew "willy-nilly," meaning in a compulsive, unplanned, unorganized manner. Each ranch was an individual enterprise, and in the early years there was no sense of being part of a larger industry. Organization was forced upon dude ranching from within and from without. The internal force for an association of dude ranchers was Larry Larom

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59. Elizabeth Hayden, *From Trapper to Tourist in Jackson Hole,* (Jackson. Wyoming: By the author, 1957), pp. 40-41.

60. *Ibid.*, p. 41; Burt wrote an interesting account of his and Carncross' homesteading and construction of the Bar BC in his *Diary of A Dude Wrangler,* pp. 87-136.

61. The creation and expansion of Grand Teton National Park, especially the two-decade-long expansion struggle, has never been adequately dealt with historically, although the best published treatment thus far is included in Saylor, *op. cit.,* pp. 154-213. Also see David C. Swain's *Horace M. Allbright, Wilderness Defender,* (Chicago: University of Chicago Press, 1970).

62. Harold Turner, private interview, Triangle X Ranch, Moose, Wyoming. May 19, 1972.