

# Chapter Twenty-Seven

## THE WALCOTT JOURNAL:

# DECIPHERING THE GRAND CANYON EXPEDITION OF 1882-1883

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*In the written history of the exploration of Grand Canyon little mention is usually made of Charles Doolittle Walcott's nearly three months spent below the rim over the winter of 1882-1883.<sup>1</sup> Even with the little that is written about Walcott, the story is not always correct. For example, Bruce Babbitt writes, "In 1890, Walcott blazed a trail from the north rim down Nankoweap Canyon and spent the winter contentedly studying the Precambrian strata, totally cut off from the outside world by heavy snows on the rim."<sup>2</sup> In fact, the year was 1882, the party didn't come down from the north rim, some members came and went, and they had hired an Indian to bring mail twice monthly from Kanab, Utah. Indeed, as to Walcott being content, he wrote, "I do not mind spending the winter away from all human habitation... but the thought of not seeing friends at home until another winter is trying ...."<sup>3</sup>*

For most of the time since Walcott's stay in the Canyon, the single best source of information on the specifics of the expedition was found in his annual report to the United States Geological Survey (USGS).<sup>4</sup> Here, Walcott wrote a brief account of his experiences in the Canyon. A more extended account of the months Walcott spent in the Canyon had to wait until 1998 with the publication of the first of a two volume biography of Walcott by Ellis Yochelson.<sup>5</sup>

There are three factors that may account for Walcott's relative obscurity. First, unlike the Grand Canyon expedition conducted by Clarence Dutton, his more prosaic colleague at the USGS,<sup>6</sup> Walcott's writing style can be fairly described as pedestrian. Walcott kept his writing closely focused on his geologic findings. And while the drawings made by B. L. Young of the eastern portion of the Grand Canyon that

Walcott surveyed are striking, they hardly compare to the masterpieces drawn by William Henry Holmes and Thomas Moran as part of the Dutton expedition.

Second, Walcott's expedition predated the arrival of miners and entrepreneurs such as William Wallace Bass, John Hance, and Ralph Cameron. Consequently, those with some measure of continuity at the Canyon figure much more prominently in its history.

And third, much of the writing about early Grand Canyon history centers around river runners, starting with Major J. W. Powell's expeditions in the late 1860s and early 1870s. Books by Powell,<sup>7</sup> Frederick Dellenbaugh,<sup>8</sup> and Robert Brewster Stanton<sup>9</sup> set the history of the Canyon squarely on the River, and Walcott's travels have been overlooked as a result.

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1 See, for example, J. Donald Hughes, *In the House of Stone and Light* (Grand Canyon, Ariz.: Grand Canyon Natural History Association, 1978), 39, and Michael F. Anderson, *Living at the Edge: Explorers, Exploiters and Settlers of the Grand Canyon Region* (Grand Canyon, Ariz.: Grand Canyon Association, 1998), 123.

2 Bruce Babbitt, *Grand Canyon: An Anthology* (Flagstaff, Ariz.: Northland Press, 1978), 133-134.

3 Charles D. Walcott Collection, 1851-1940, Box 17, Folder 6, Smithsonian Institution (Washington, D.C.). Photocopy of newspaper clipping, no source or date.

4 Charles D. Walcott, "Report of Mr. Charles D. Walcott," in *Fourth Annual Report of the United States Geological Survey 1882-1883* (Washington: Government Printing Office, 1884), 44-48.

5 Ellis L. Yochelson, *Charles Doolittle Walcott, Paleontologist* (Kent, Ohio: The Kent State University Press, 1998), 143-149.

6 Clarence E. Dutton, *Tertiary History of the Grand Cañon District* (Washington: Government Printing Office, 1882).

7 J. W. Powell, *The Exploration of the Colorado River and its Canyons* (New York, NY: Dover Publications, 1961).

8 Frederick S. Dellenbaugh, *A Canyon Voyage: The Narrative of the Second Powell Expedition* (Tucson, Ariz.: The University of Arizona Press, 1988).

9 Robert Brewster Stanton, *Down the Colorado* (Norman, Okla.: University of Oklahoma Press, 1965).

The story of Walcott's eighty-two days<sup>10</sup> in the Grand Canyon can't help but intrigue us. With the aid of his journals, we can sketch out the remarkable range of Walcott's travels during this winter in Grand Canyon. It all begins with a telegram that Walcott received from Major Powell dated October 24, 1882. "I am coming across the Colorado to Kanab by way of Lee's Ferry and desire [you] to join me in an expedition to Grand Cañon."<sup>11</sup>

### THE JOURNEY BEGINS: GETTING TO "NUN-KO-WEAP"<sup>12</sup>

Walcott arrived in Kanab on October 30 and in a few days became very ill. Consequently, he lagged behind the work party in leaving Kanab for House Rock Spring. There they awaited Major Powell who arrived on November 11. The party went on and Walcott still lagged behind trying his best to convalesce. On November 16 he finally was able to leave House Rock Spring and traveled to the end of the wagon road, camping on the slopes at the southern end of House Rock Valley.

On November 17, Walcott reached Powell's camp from which the trail work was proceeding. Most likely this was at the saddle between the Kaibab Plateau and Saddle Mountain. There is plenty of space here for an extended stay by the trail-building party.<sup>13</sup> And it is here where one of the three key spots of concerted effort were needed to make a route passable for the pack animals. The trail drops through a series of switchbacks carved out along a major cliff in the Supai layer. Once through, the trail more easily contours along a ledge for many miles before more serious work needs to be done.

Walcott was still ill and unable to participate in the trail construction. On November 18 he notes that the camp was "moved down the trail 1200 feet."<sup>14</sup> This would place them at the beginning of a ridgeline that descends to Tilted Mesa, where there is enough room to accommodate this work force.

Three days later, the camp was moved down "a mile or more." Given the terrain, this would place the party below the Redwall Limestone formation, which is the second section that would require major trail-building efforts. They may have camped on the Bright Angel Shale that provides some suitable space above the Tapeats Sandstone cliffs. Indeed, Walcott

notes that he "walked over Tonto group," which is consistent with this placement.

The final major effort would be to carve out a trail through the Tapeats cliffs. After this, their route seems to differ from the modern day trail. They may have contoured to the west into the dry ravine that is flanked by Marion Point and Tilted Mesa, which they dubbed "Trail Cañon." This would bring them to the dry creek bed about a mile from Nankoweap Creek, as Walcott wrote that he took a "long walk down cañon to Nun-ko-weap valley with Major [Powell]."

The placement of "Trail Canyon" is consistent with the section lines shown on the map in Walcott's published report<sup>15</sup> and his journal entry for November 27 that he was, "Taking section of Tonto Gp. in Trail Cañon."

On November 24, seven days after Walcott first arrived, the camp was moved to running water at the junction of Nankoweap Creek and the side canyon that is flanked by Bourke Point and Marion Point. The area is suitable for camping, but subject to flash flooding and strewn with rocks. Later, Walcott would comment that their campsite in Kwagunt Canyon is "much pleasanter" than this one in Nankoweap.

On November 25, Walcott and Powell rode down to the Colorado River, undoubtedly to look over the terrain and finalize Walcott's task in the canyon. The next day Powell and the trail-building party left Walcott to his work, accompanied by three men—Charles Haskell, John Brown, and Joseph Hamblin—and nine pack animals along with provisions for four months.<sup>16</sup>

Walcott spent the next ten days doing geologic work in Nankoweap. He didn't provide much in the way of specific written comments on where he hiked, although one may draw many inferences from his published map. However, he did make a note of the fact that he climbed up to the top of Nankoweap Butte, as he extended his section line south.

On December 3, Walcott spent the day with Joe Hamblin looking for a route over to Kwagunt, and on December 6, their camp was moved to that canyon.

10 According to his journal, Walcott arrived at Powell's camp on November 17, 1882, which was likely on the rim of the Canyon, and departed on February 6, 1883.

11 Charles D. Walcott Collection, Box 3, Folder 3, Smithsonian Institution Archives.

12 What today we refer to as Nankoweap, in the Grand Canyon, was referred to as Nun-ko-weap in Walcott's journals and that spelling continued, although without the hyphens, in his reports for many years thereafter.

13 The total number of men in the party is uncertain. Walcott mentions fourteen different individuals in his journal who left Kanab with him, were on the trip to the Canyon, or were there during the trail-building phase.

14 This, and all following quotes that are not otherwise documented, come from Walcott's journal. Smithsonian Institution Archives, RU 7004, Charles D. Walcott Collection, 1851-1940, Box 11, transcribed by Ellis Yochelson and Dennis Foster, copies author's possession.

15 Charles D. Walcott, "Pre-Cambrian Igneous Rocks of the Unkar Terrane, Grand Canyon of the Colorado, Arizona," in the *Fourteenth Annual Report of the United States Geological Survey, 1892-1893* (Washington, D.C.: Government Printing Office, 1894), 497-524.

16 In box 4, folder 5 of the Walcott Collection at the Smithsonian is a copy of a letter written by Walcott at the time the trail was being built into the Canyon where he wrote that he would be left with "four months supplies." Also, in the newspaper clipping referenced in Footnote 3, Walcott states that he didn't expect to go out of the canyon until April 1, which would mean he anticipated that his stay would last about four-and-a-half months. Yet, in the *Fourth Annual Report* of the USGS he writes that he was provisioned for three months. That later figure may only reflect the fact that his actual stay lasted about three months.

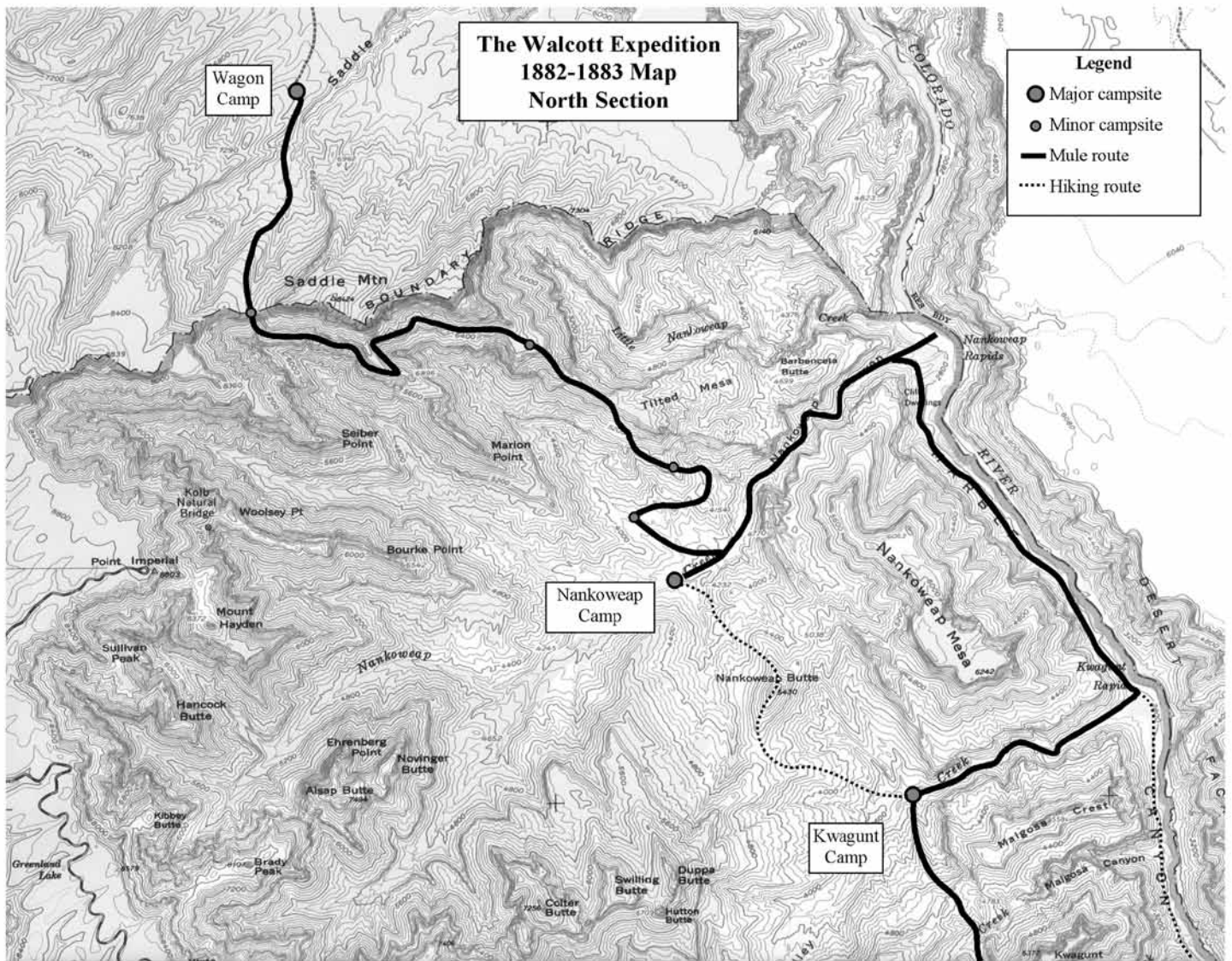


Fig. 27-1. *The Walcott Expedition, 1882-1883, North Section Map.*

### A BRIEF STAY IN KWA-GUNT CANYON

Walcott does not detail his route to Kwagunt, but it is clear that the party traveled along the River from Nankoweap. This is not only easier than crossing the high ridge between these two canyons, but for his move to Chuar Canyon he does write that they first looked for a river-level route before having to follow along the Butte Fault that crosses over the side canyons between Kwagunt and Chuar.

For the next six days, the party camped in Kwagunt. Walcott hiked up the canyon and up to the ridge leading to Malgosa, the next canyon to the south. Meanwhile, Brown and Hamblin made a trip back to Nankoweap to retrieve more supplies.

On December 8, Walcott wrote that he and Hamblin “went down to the Colorado looking for trail to Chuar valley. Failed to find a practicable route [*sic*].” It is quite possible to follow along the River all the way to the Little Colorado

River. Since Walcott spent only one day looking for such a route, it seems unlikely that he got this far, even if they were riding mules. Perhaps he had information from Powell that travel beyond the Little Colorado would be too difficult. If so, then he may have gone only down river far enough to see the Little Colorado junction and then turned back.

While Brown and Hamblin scouted out an alternate route to Chuar, Walcott made another climb up to Nankoweap Butte to continue his section line. On December 13, the party headed out on what today we call the Butte Fault route, moving their camp to the “lower end of Chuar valley” and reaching “water after dark.”

Chuar Valley is enormous and the party would likely have encountered water as they came down Carbon Creek on their way to Lava Creek. However, from Walcott’s journal notes, it is clear that the group made it all the way to Lava Creek, from Kwagunt, in one long day.

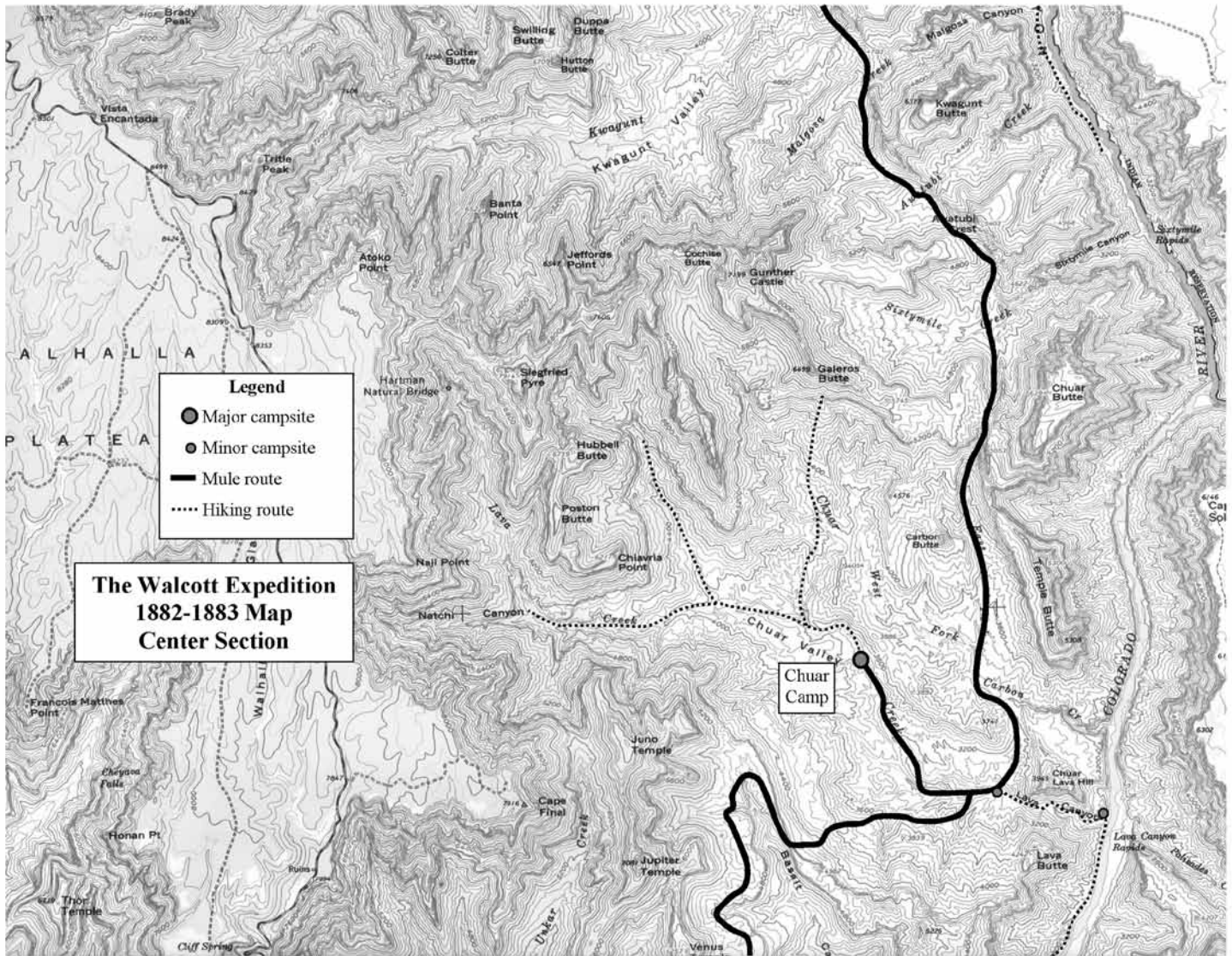


Fig. 27-2. The Walcott Expedition, 1882-1883, Center Section Map.

### AN EXTENDED STAY IN CHUAR

Walcott and various versions of his party would spend the next thirty-three days in Chuar. Add to that the five days they spent here on their way back and nearly half of his time in Grand Canyon was spent in Chuar Valley. Initially, they probably camped right where the gentle saddle from Carbon Creek leads over to Lava Creek. During their first morning Walcott walked down to the Colorado River. In the afternoon the camp was moved to the “upper end of the valley.” Their likely site was just downstream of where the creek changes from an easterly flow to a southerly one, where a spring is located.

On December 15, Walcott notes that he was up at the four-way junction of canyons below Naji Point. Three

days later, his primary assistant, Charles Haskell, who had “succumbed to the feeling of depression resultant upon living in the depths of the canon,”<sup>17</sup> left the party, accompanied by Joseph Hamblin. For the next fifteen days, Walcott only had the assistance of John Brown, who had been hired on as a cook.

Over the last week-and-a-half of December, Walcott did many treks by himself. He notes going up to a “high ridge” to the north, which would likely be near Galeros Butte, which is along the line of one of the three sections Walcott traced out in the Canyon. He also went “up NW cañon of Chuar valley” which is probably the canyon that is flanked to the west by Chiavria Point, Poston Butte, and Hubbell Butte.

17 Walcott, *Fourth Annual Report of the United States Geological Survey 1882-1883*, 46.

Walcott did not use any names for the creeks here, referring instead to the north outlet and the south outlet, respectively, for Carbon Creek and Lava Creek. On December 30, he climbed up to the top of the ridge to the south and “saw much hard work ahead down the Grand Cañon.”

On the last day of the year, Walcott wrote in his journal, “With 1882 I part kindly. May 1883 be as good & considerate to me & mine. Camp in upper Chuar valley within the walls of the Grand Cañon of the Colorado, Arizona. Weather like that of late fall at home.”

On January 2 of the new year, Joe Hamblin returned to the camp accompanied by B. L. Young who would assist Walcott in his survey, and Achilles Brown who replaced John Brown. The next day, John Brown left the expedition while Walcott and Young set up a temporary camp at the Colorado River.

On January 4, Walcott and Young followed the shore of the River “about 4 miles.” That would place them at Basalt

Canyon. Indeed, a drawing made by Young, titled “Cliffs formed by lava beds on the Colorado River about two miles south of Chuar Lava Hill”<sup>18</sup> is, despite the apparent mileage contradiction, the view one gets of the Canyon looking northeast from the Basalt area.

Walcott and Young spent a week studying the Chuar area while Hamblin and Brown hauled a load of specimens back to the wagon camp. They were also tasked to “kill a deer if possible.” When they returned on January 10, Walcott wrote, in his laconic style, “Joe returned with meat. First fresh meat in 7 weeks. O.K.”

On January 11, the river camp was packed, and they moved to the camp at the lower end of the valley. The next day Walcott helped with making a trail up the south side of Chuar and then “followed along on top of the Tonto sandstone several miles.” A few more days were spent studying the rocks in Chuar. Then, on January 16, the camp was moved up to the Tonto level as the party began the most challenging phase of their journey—getting to Unkar Creek.

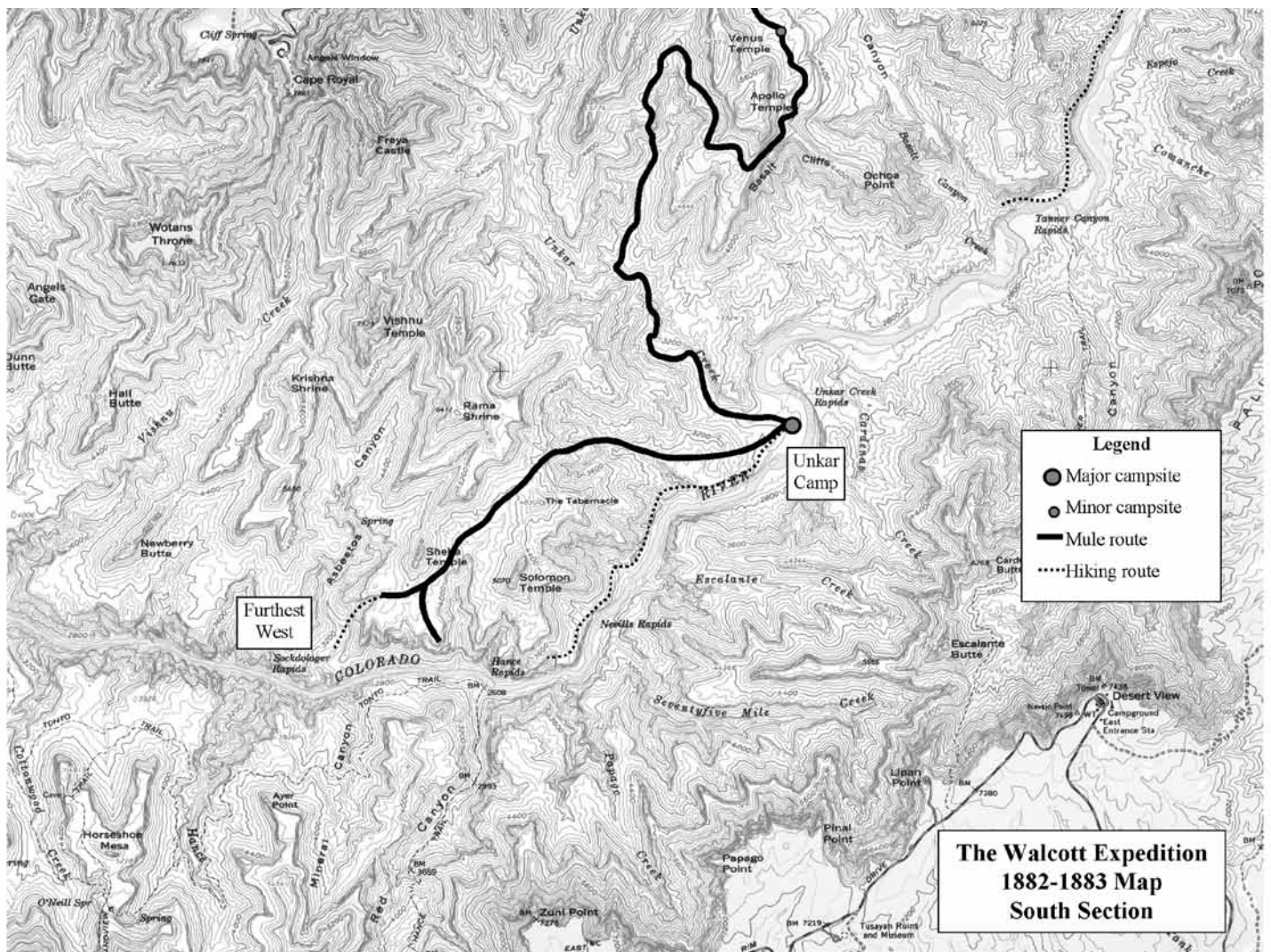


Fig. 27-3. *The Walcott Expedition, 1882-1883, South Section Map.*

18 Walcott, “Pre-Cambrian Igneous Rocks,” printed between pages 508 and 509.

## THE ROUGH ROAD TO UNKAR AND ASBESTOS

The trek to Unkar Creek was stymied right away by the weather. They followed the Tonto Platform from the ridge above Lava Creek all the way into Unkar. Walcott wrote that they camped “the first night in a little cañon beside a few shallow water pockets.”<sup>19</sup> This is likely to be somewhere on the Tonto level east of Apollo and Venus Temples. The next day they had to build a fire to melt the ice that had formed in these pools.

On January 18, they were able to contour around into Unkar and descend to the creek. Walcott wrote that, “a trail was cleared as we proceeded, sometimes along the level terrace and again on the brink of the cliff, where a stumble or a false step would have sent man or animal over a cliff of from 300 to 800 feet in height and down a terraced slope a thousand feet or more.”<sup>20</sup> The party reached the river at the mouth of Unkar and set up camp where the “roar of rapids sounds like Niagara.”

On January 19, the cold weather persisted and they had “snow until noon.” Later, Walcott trekked down the riverbank three miles until the River headed in a west-northwest direction. This would place him about a mile above Hance Rapid and opposite Papago Creek.

For the next couple of days, Walcott refers to the cold weather, noting that his pen wouldn’t thaw out during the day even though he kept it in his vest pocket. On January 22, he and Joe Hamblin took the mules up atop the Tonto and rode out “to [the] long point south of Vishnu’s Temple.” He found a place to go down into the next canyon, but the difficulty of the route meant that the mules would go no further than this in the Grand Canyon.

Walcott rested for a day in camp, preparing for the climb down into Asbestos Canyon via a chute southwest of Sheba Temple. On January 24, he and Young rode to the descent ravine and did “a hard climb down & up 1700 feet.”

This would be as far south and west as Walcott would travel in the Grand Canyon. “The animals were getting weak from hard work and poor pasturage. The supplies were running low, and the building of a trail further was impracticable with the men and tools at hand.”<sup>21</sup>

## LEAVING GRAND CANYON

On January 25, Walcott wrote, “After a long parting look over Red valley I left camp & with the pack train continued up onto the Tonto.” In Walcott’s journal there is no mention of the name Unkar. This journal entry is the only reference to a name for this canyon and it appears to come from Almon Harris Thompson, of the second Powell expedition down the

Colorado River in 1871-1872. On August 27, 1872, while camped at this location, Thompson wrote in his journal, “Have named it Red Shales.”<sup>22</sup> However, before another year would pass, Walcott would refer to this area as Unkar Valley in his report for the USGS.<sup>23</sup>

In less than two weeks Walcott would be out of the Grand Canyon. The party retraced their way back to their Chuar camp where he would spend five days reviewing his work and filling in missing information to his geologic study of the Canyon. Meanwhile, the men were busy hauling their camp materials and specimens back to Kwagunt and then to Nankoweap.

Unlike the previous week, the weather had turned quite pleasant. On January 31, Walcott wrote, “Came in early & cleaned up. Warm spring-like day.” On February 2, he “Bid Chuar valley a final farewell & at night camped in Kwa-gunt valley...Distance 10 miles.”

The next day he was “Nicely settled in Nun-ko-weap.” Two days later, he would make his last geologic foray, “Up on the devide [sic] east of Nun-ko-weap butte. Met with good success & clear up the last missing link in the butte fault line as far as I know.”

On February 6, 1883, Walcott traveled up the Nankoweap Trail and out to the old wagon camp. It must not have been without some melancholy, as one of their mules was killed on the way out and another injured. Three days later another mule would be badly hurt when the men went back to retrieve packs they had left behind on the trail.

It would be six more days before reaching Kanab and Walcott used the time to further his geologic study. But once in town he wrote, “Glad to get back to P.O. & people in houses once more.”

Charles Doolittle Walcott had a long and successful career. In 1915, he would travel back to the Grand Canyon, this time by train to the South Rim. There he rode a horse down the Bright Angel Trail and spent a night at Indian Garden.<sup>24</sup> He succeeded Powell as the Director of the USGS in 1894 and continued in that post until 1907. He then served as the Secretary of the Smithsonian Institution until his death in 1927.

19 Walcott, *Fourth Annual Report of the United States Geological Survey 1882-1883*, 47.

20 Ibid.

21 Ibid.

22 Almon Harris Thompson, “Diary of Almon Harris Thompson, Geographer, Explorations of the Colorado River of the West, 1871-1875,” ed. J. Cecil Alter, *Utah Historical Quarterly* 7 (1, 2, 3) (1939), 95.

23 Unkar is a Paiute word meaning red creek or red stone, Nancy Brian, *River to Rim: A Guide to Place Names along the Colorado River in Grand Canyon from Lake Powell to Lake Mead* (Flagstaff, Ariz.: Earthquest Press, 1992), 52, 152.

24 Ellis L. Yochelson, *Smithsonian Institution Secretary, Charles Doolittle Walcott* (Kent, Ohio: The Kent University Press, 2001), 171.