

## Four Corners Loose Ends Road Trip (U25A)

I usually head up to Utah every spring for a couple weeks. This year, plans more broadly included sites in the other Four Corners states, with an emphasis on returning to places where previous visits were a little incomplete. For weather and other reasons, things often did not go according to plan, but it still turned out to be a good trip.

For the first day, I planned to drive out to Page, Arizona, where I would stay for a couple days. Along the way, there was a spot in Grand Staircase-Escalante National Monument that I wanted to explore by car. But in spite of a dry forecast when I planned the trip, it was raining in that area. With a lot of clay in the soil, those roads become impassable when wet, so instead, I checked out the Glen Canyon Dam visitor center and Lake Powell at that area.



Looking at the Wahweap Marina, the water level at Lake Powell is slightly lower at this point this year (left) than last year (right), but it wasn't a great snow year this past winter in western Colorado, so the lake level this year is likely to drop a lot, which will also impact Lake Mead.

The rain also made me change my hiking plans in the Page area for my stay there. I took a couple short hikes in Glen Canyon National Recreation Area. Then I returned to the White Rocks area of Grand Staircase-Escalante National Monument. I took a couple short hikes there in the past, but this time I hiked to the head of the canyon there and back.



Hiking at The Chains, just above the Glen Canyon Dam. The band of white on the rock here is basically hard water deposits left behind when lake levels were higher. Because of the rock that the Colorado cuts through, the water in Lake Powell and Lake Mead is quite hard. We refer to the white band at Lake Mead as its "bath tub ring".



Hiking at Ferry Swale. The cliffs in the distances are part of Vermilion Cliffs National Monument.



Hiking in the White Rocks area. A bit further in one direction, you will find tan and grey landscape. In the opposite direction, you will find more orange. Splitting the distance is a side canyon where a rusty red is the dominant color.

From Page, I headed east across the Navajo Nation Reservation to Farmington and Aztec, New Mexico, before reaching Bloomfield, New Mexico, where I stayed for three nights. In Farmington, I stopped at two small city-operated museums, both with similar displays — a room with Navajo rugs and a room with modern paintings with Navajo themes. Neither required much time to see.



I'm a fan of old-style theatre marquees. Farmington's Allen Theatre marquee caught my eye more than anything I saw in the town's museums.



Aztec, New Mexico's Aztec Museum and Pioneer Village, however, didn't disappoint. For a museum its size, it had a nice collection of Native American artifacts representing Mesa Verde culture to the north and Chaco Canyon culture to the south – Aztec is located between the two sites. The bowl on the left is Mesa Verdean; the jar on the right is Chacoan.

Aztec itself is also home to Aztec Ruins National Monument, which I've toured twice before and thus skipped this time. The park is home to a major Chacoan ruins site (it has nothing to do with the Aztecs, an early misattribution that stuck in the name).

The museum also has collections of items associated with the pioneer history of Aztec, a collection of old buildings from the area that have been relocated to the lot behind the museum, and artifacts associated with the San Juan Basin area's oil and gas industry.

This included information on Project Gasbuggy, one of a number of experiments conducted under Operation Plowshare, a program created to find peaceful uses for nuclear explosions.



Project Gasbuggy sought to determine whether nuclear explosions could be useful for fracturing rock formations to facilitate natural gas extraction, i.e., nuclear explosion-based fracking. Except that the blast created a large underground cavity that was sealed by molten glass, closing off the rock fractures. Pictured is the test device that was lowered into the well before the atomic device.

A key reason for going to Bloomfield was to use it as a base for a return visit to Chaco Culture National Historical Park, my favorite ruins site, and a major center of Ancestral Puebloan culture between 900AD and 1150AD. Several major "great house" ruins line the main park road. The great house Chetro Ketl, for example, was built over 85 years with an estimated 500,000 man-hours of labor, and used 26,000 trees and 50 million sandstone blocks in the 400-room structure.

This was my sixth trip to Chaco, but there were two major ruins sites in the main park that I had missed, as both required significant hikes away from the park center. A 7 ½ mile round-trip hike along the Peñasco Blanco trail would get me to the Peñasco Blanco ruins site. I had taken part of the trail in the past to see two other ruins sites and some rock art sites along the way, as well as to access the Pueblo Alto trailhead for that hike. The Peñasco Blanco trail hike was on my "someday list" before I ended up in medical boots, but with my foot situation stable for a few years now, I figured I'd give that hike a try.



Early in the hike we come across the Kin Kletso, one of the youngest ruins at Chaco Canyon.



Behind Kin Kletso is the trail (red) that climbs out of the canyon to the mesa top and its 5.4-mile Pueblo Alto loop trail that features more ruins as well as nice views of the canyon floor. I took the Pueblo Alto hike in 2005 – I took the photo on the right when I was partway up the trail, but I wouldn't be able to do it today with the medical boots.



View of Chetro Ketl ruins from atop the mesa during my 2005 hike along the Pueblo Alto trail



The Casa Chaquita ruins were another stop along the Peñasco Blanco trail.



Keep an eye out for 900-year-old pottery sherds at Casa Chaquita ruins.



That row of holes in the sandstone once held the ends of logs used as roof beams, a construction technique seen at some Ancestral Puebloan sites.



There are a fair number of petroglyphs – and some modern graffiti – along the trail.



The Peñasco Blanco ruins come into view.



Peñasco Blanco ruins



With about a half mile to go, I ran into a returning hiker who asked if I was ready for some wading. Due to recent rains there was water in the wash that passed the base of the hill upon which the ruins sat. I didn't mind that — when I got my replacement medical boots this last winter, I kept the old pair for use on trails where I might run into water. But the problem for me was that both sides of the crossing were quite steep, much steeper than it looks in this picture. And with the boots designed to not bend much at the ankles, they really suck for climbing slopes. Slopes put a lot of strain on the ankles where my permanently broken bones are. I checked up and downstream a bit for a possible alternative crossing site, but I didn't find one. Slopes have stopped a number of my hikes, including this one. At least I got some look at the ruins I came to see.



For my second full day based in Bloomfield, New Mexico, I headed for the Bisti/De-Na-Zin Wilderness Area, commonly referred to as the Bisti Badlands, for some hiking in the colorful landscapes and among the hoodoos found at both the Bisti and De-Na-Zin trail areas.





This formation is known as the Howling Coyote.



A small toadstool and some of the landscape along the De-Na-Zin trail



I've been to Mesa Verde National Park twice in the past, the last time in 2005. The park is famous for its massive cliff dwelling ruins – Balcony House (pictured from 2005), Cliff Palace and Spruce Tree House in particular, where you can join group tours to visit them. Between the two trips, I toured all three of these as well as some of the mesa top ruins sites.

With all the stairs and uneven surfaces, I would slow down group tours today with my boot situation, but I hadn't fully explored the mesa top ruins sites, especially those on Wetherhill Mesa – the access road was closed for both of my past visits. So, for this trip, I focused on the mesa top sites. But not those on Wetherhill Mesa. Once again, the access road was closed.

Signs at several of the mesa top sites did a great job of explaining how Ancestral Puebloan architecture evolved at Mesa Verde, from pit houses to small stone buildings and communities to the complex cliff dwelling structures. And the Chapin Mesa Archaeological Museum displayed a nice collection of artifacts found at Mesa Verde.



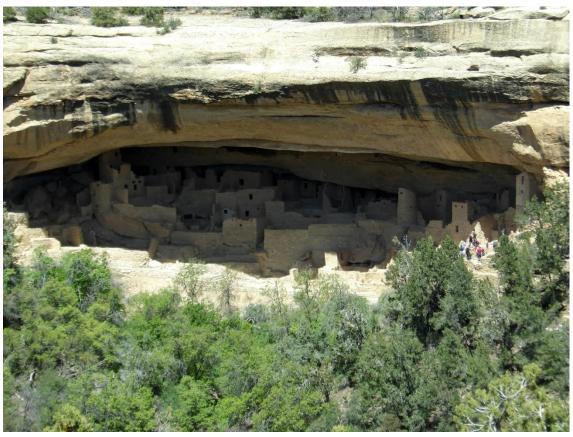
An excavated two-chamber pit house. Pit houses were partially – sometimes substantially – below ground level and entered through the roof.



An early surface-level stone and jacal structure



A more advanced mesa top community structure (heavily rebuilt and stabilized) at Far View



View of Cliff Palace, the largest cliff dwelling in North America. Cliff Palace was built between 1190AD and 1260AD, but it was abandoned by 1300AD.

I got to Blanding, Utah after spending a day at Mesa Verde. I spent two nights there, giving me a full day to hit three goals. The first was a return visit to the Alkali Ridge site. After a couple years of trying to find the archaeological site there, I found it last year, visiting a ruins site on a hike there. I had two more suspected ruins sites I wanted to check out. Alas, when I got there, I found the site fenced off with *No Trespassing* signs posted. I thought it was public (Bureau of Land Management) land, but I was wrong.

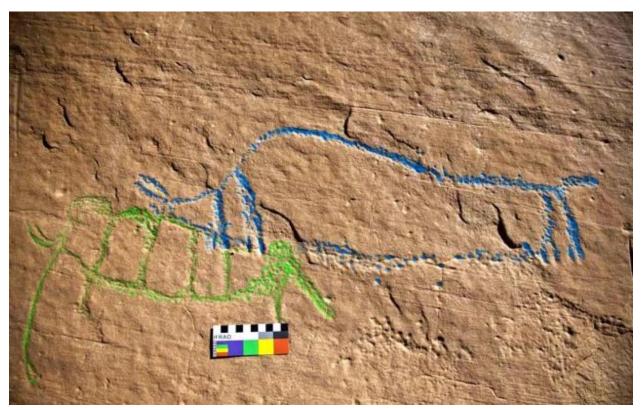
For my second goal, I went mammoth hunting. It was a bit of a quirk that I made a return visit to Sand Island last year to see its well-known petroglyphs — I had a little time to kill before returning to my hotel after a hike. After getting home, I was reading up on the site when I came across a claim that there were a couple petroglyphs of mammoths in a different area of Sand Island. Clovis Culture Paleo-Indians left behind petroglyphs, and they were the last ones to hunt mammoths before mammoths went extinct about 12,000 years ago. Archaeologists have found a significant Clovis site at nearby Lime Ridge, so that does put Clovis Culture people in the area.

Still, I was skeptical, so I wanted to check out the panel myself.

Sand Island is now in Bears Ears National Monument, and it has gotten a little money for improvements. One of those recent improvements was to put in a wheelchair-accessible trail that led right to the purported mammoth panel of rock art as well as other panels ranging from ancient Basketmaker culture to historic Navajo. But the Bureau of Land Management doesn't come right out and call it an image of a mammoth. Rather, it asks "What do you see....?"



Here's one of my photos of it, with the mammoth in front of (to the left, facing left) of a large bison.



Here's an enhanced image from Malotki and Wallace (2011), with green for the mammoth and blue for the bison.

It is notoriously difficult to date petroglyphs. However, the buildup of desert varnish and chemical/mechanical weathering can be analyzed, but cannot be faked. By comparing these features to other rock art at the site, and they were able to conclude that the "mammoth" petroglyphs are considerably older than others at the site.

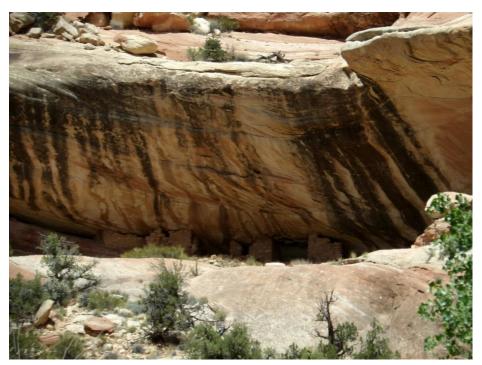
Still, I've seen some rather fantastical creatures represented in rock art. And even if this is a mammoth, was the petroglyph created by someone who actually saw mammoths or by someone who heard stories passed down orally for several generations? If it's the former, then these mammoths may be the oldest petroglyphs I've come across in my U.S. travels.



Basketmaker culture rock art dates back perhaps 2000 years



Historic Navajo rock art is less than 400 years old. The presence of horses means that these petroglyphs were created after the arrival of the Spanish.



My third goal for my stay in Blanding was to hike a stretch of Arch Canyon in Bears Ears National Monument. The canyon gets its name from three arches along the way. There are a number of minor ruins sites, too, none particularly impressive. During my hike, I spotted five minor ruins, but I didn't go nearly far enough to see any arches.



From Blanding, I headed to Torry, Utah, with plans to do some hiking at Capitol Reef National Park. Along the way, I stopped here, where the Colorado River enters Lake Powell in Glen Canyon National Recreation Area.

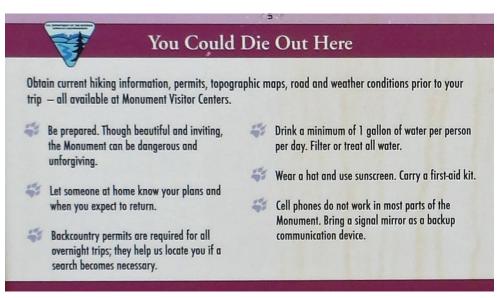


Hiking an easy trail through Capitol Reef's Grand Wash canyon



Along the way I saw the petroglyph panel on the left – likely historic Paiute, given the presence of horses. I also saw the faint handprint pictographs on the right – likely Fremont culture.

From Torrey, I headed south to Escalante, with plans to stop in the Burr Trail area of Grand Staircase-Escalante National Monument, and in particular for a canyon hike at the Little Death Hollow trail along the Wolverine Loop dirt road, about 13 miles off Burr Trail. But I underestimated how long it would take to get there. Figuring I'd need about five hours at that canyon to see its highlights, and I was still on the loop road at 11:30AM, I decided to stop instead at the Wolverine Canyon trailhead for some hiking, and put off Little Death Hollow for a future trip. It turned out that the Wolverine Canyon trail was really the Wolverine Petrified Wood Natural Environmental Area. At about a mile into the hike, the trail reaches a petrified forest, what's left of a 225-million-year-old Triassic Period forest that was standing at the dawn of the Age of Dinosaurs.



The Bureau of Land Management posted this message at the Wolverine Petrified Forest trailhead. Sure, there are some risks, but far more people die at work than on hiking trails, and yet I don't recall ever seeing similar warnings greeting us in the B5/B6 lobby at LexisNexis when I worked there. Well, maybe when Garth was there.



Hiking in Wolverine Canyon toward the petrified forest





In the petrified forest, the ground is littered with petrified tree trunks and trunk pieces primarily from conifer trees. It is the second largest known Late Triassic petrified forest in North America.

Q: How do they know that the trees are 225 million years old?

A: They counted tree rings.

Q: How did the trees become petrified?

A: Well, if you were standing in the middle of a forest and a hungry dinosaur came along, you'd probably be petrified, too!

Actually, the answer to both questions can be found in the surrounding landscape.



As this hillside slowly erodes back, more pieces of petrified wood are revealed, some of which start sliding down the slope of the hillside. But whereas sandstone pieces from the top are scattered all the way down the hillside, the petrified wood starts most of the way down the hill. The colorful part of the hill is Chinle Formation, which was made up of a mix of volcanic ash and some sand. Silica from this ash mixture replaced organic cells in the fallen trees, petrifying the trees. Using radiometric dating, the fossil record and comparisons to similar features elsewhere, researchers can determine approximate points in time that geological events – such as the deposit of large quantities of volcanic ash – occurred. As for comparisons to other areas, the trees and Chinle Formation makeup found here are about the same as in Arizona's famous Petrified Forest National Park.

When I finished up here, I stopped at Anasazi State Park Museum in Boulder, Utah at the start of the Burr Trail. They were refurbishing their visitor center displays when I was in the area last year, so I checked them out and once again toured their Coombs Site Ancestral Puebloan ruins.



In the ruins, you can see some surviving "jacal" construction technique. Floor to ceiling sticks/posts were stuck vertically into the ground and close together, and then covered with a mixture of clay, mud and straw to build non-load-bearing walls, somewhat similar to the lath and plaster approach. The posts here are charred at the end. This pueblo site burned down at the end of its occupation.

I ended the day in Escalante, Utah, where I stayed for two nights. For my full day there, I returned to the Dry Fork Narrows area. I had planned to hike the Dry Fork Narrows last year, but I almost immediately ran into a slope I needed to get down to continue the hike, a slope that was too much for my booted feet, so I ended up hiking the Dry Fork Rim trail instead. At the end of that hike, I scouted around a bit to see if there was an alternative way down that I could take, and I found a good candidate, which I noted for a future attempt.

This was that future attempt. And it worked. It took me a bit out of the way, but I got down into Dry Fork Wash, and was soon approaching the start of the Narrows.



Then the trail dropped down into this. It doesn't look like much from up here, but...



...from down here, you get a better sense of how much of a drop it was. In addition to slopes, jumping and using my feet to brace myself don't work with the broken bones and boots. But I did figure out a way down that I knew I could get back up, so I was able to continue.



But then I came across another drop, this one about 6 feet. And this time, I couldn't figure out a route down and back up. So, once again I had to give up on seeing Dry Fork Narrows.



I got out of the wash and then followed it downstream a bit further. The "crack" in the ground here is the top of Dry Fork Narrows.



Someone else's picture of the part of Dry Fork Narrows that I missed by about 100 yards 😕



The Dry Fork trailhead was one stop along Hole-in-the-Rock Road. In 1879-1880, a group of 250 Mormon pioneers from Salt Lake City were sent to colonize southeast Utah and followed this route until they reached a cliff above the Colorado River. They widened a natural crevice in the cliff, creating a steep wagon road down to the river so that they could cross it. While they worked on that, they camped near here. Some evenings, they held dances in this large natural alcove with great acoustics and a relatively even floor. It's now known as Dance Hall Rock Historic Site.



I thought I'd drive to the Hole-in-the-Rock, but about five miles after the road entered a remote part of Glen Canyon National Recreation Area, it turned into a very rough 4x4 road. I got about a mile further, stopping with this view of Navajo Mountain before deciding to turn around. And, no, it wasn't lost on me that the Mormon pioneers crossed this area and descended the Hole-in-the-Rock in covered wagons and not a Subaru with special "Wilderness package" features for backcountry travels.



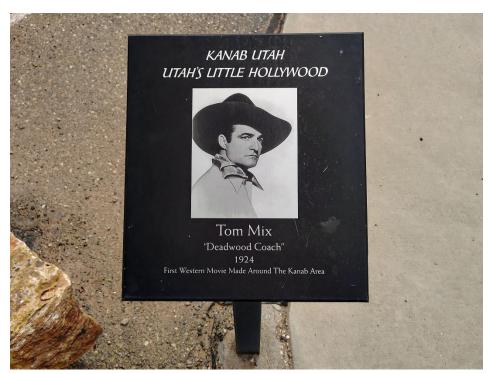
For my last night, I targeted Kanab, Utah. I stopped at a roadside area about five miles north of Kanab. Several years ago, I read about a minor ruins site here — park the car, walk towards the canyon wall, and see the ruins. But I never saw them, and the area was eventually fenced off as private property. But I got the idea to walk away from the canyon wall so that I would have a more direct view into the alcoves. And this time, I spotted what indeed was a very minor ruins site.



I checked out a pair of Kanab museums. The more traditional museum featured a number of Native American artifacts found in the area and a number of artifacts that had belonged to the Mormon pioneers who had settled in the area.



Kanab earned the nickname "Little Hollywood" because it served as the base for filming more than 100 movies and TV shows needing a classic "Western" setting, starting with *Deadwood Coach* in 1924. It was relatively convenient to Hollywood and it is surrounded by lots of red rock scenery as well as Zion, Bryce, the Grand Canyon and Grand Staircase-Escalante. The Hollywood types who were in town to work on these projects favored the Parry Lodge.



The Little Hollywood Walk of Fame features dozens of these plaques that pay tribute to the numerous actors who worked on productions in the Kanab area.



Kanab's Little Hollywood Museum has collected sets left behind from a handful of productions, including this adobe (actually, it's made of fiberglass) house used in the 1976 move *The Outlaw Josey Wales*.



Only the downstairs of the front of the house was needed as a set for the 2009 movie *The Attic Door*. The upstairs was computer-generated in the movie.



When I saw this reduced-size structure, I thought perhaps it had been a set for *The Terror of Tiny Town*, 1938's all-midget western. But then I remembered that *Terror*... was filmed using a full-size set.

I headed home the next morning.