

The Vermillion Cliffs can be seen to the north in the distance. Photo Paul Fretheim CLICK IN THE IMAGE TO OPEN A  $360^{\circ}$  PANO OF THIS LOCATION.

Topo Map: Littlefield; Coordinates: 36° 45' N - 133° 03' W

## Across the Uinkaret Plateau

by Paul Fretheim

The road leading across the Uinkaret Plateau south to Toroweap from Colorado City, marked as County Road 5 on the BLM "Arizona Strip" map, is my favorite way to get to the Grand Canyon at the Toroweap Overlook. The more frequently traveled Route 109 that heads south near Pipe Springs National Monument gets you to the same place as Route 5, but Route 5 is more of an adventure, especially during the monsoon season as I found the July day I first made my way out to Toroweap.

## **Colorado City and Polygamy**

Colorado City is a small community located some 22 miles east of Hurricane, Utah on Arizona 389. Colorado City is in the remote



The 1000 meter sheer cliffs of the inner gorge at the foot of the Toroweap. Photo Paul Fretheim CLICK IN IMAGE TO OPEN A  $360^{\circ}$  PANO OF THIS LOCATION.

corner of NW Arizona known as the "Arizona Strip." The 160 kilometer long by 100 kilometer wide Arizona Strip is isolated politically and geographically by the Grand Canyon, the Utah state line and the high plateaus of southern Utah. To this day it is one of the most sparsely populated areas outside of the arctic regions on earth.

When the Mormon church outlawed polygamy in the 1890s after Wilford Woodruff's Manifesto, many practicing polygamists retreated to remote areas to continue their life-style. Polygamy was already against the laws of the United States, and one of the reasons the Mormons came out against it was their desire to join the Union. The Arizona Strip offered the kind of seclusion desired by followers of the "abundant life," and even to this day many of the families in the Colorado City area live in the traditional manner of the early Mormon elders. Look for unusual architecture as you pass through town. Watch for homes that have several entrances and almost look like apartment buildings. They are built simply, yet very large.

#### Route 5 to Toroweap

If you decide to take County Route 5 to Toroweap, be sure to bring a compass and a good map the first time through. This route is not marked clearly as is County Route 109, which heads south some 5 miles east of Pipe Spring National Monument off of Arizona Route 389. But for the adventurous, Route 5, which turns first west and then south just east of Colorado City, is the most interesting way to go. The first 30 miles is a dirt track across the flat Uinkaret Plateau. Please be aware that this stretch of the road becomes an impassable gumbo when wet.

After crossing the wide open part of the Uinkaret for the first 30 miles the road skirts the Mount Trumbull Wilderness for several miles before entering the Toroweap Valley and then threads down the valley some 25 miles to the rim of the Canyon at the foot of Toroweap valley.

The first time I crossed the Uinkaret I was driving a Dodge Durango which was a rental that I had been provided by an insurance company while my Mercedes was at a body shop in Las Vegas.

Early in the morning of July 16, 1999 I headed south from Colorado City on Route 5 . You actually travel west for the first few miles and pass various unmarked intersections. You mostly just stay on the main road at each one. The change of direction to the south and the unmarked intersections are pretty confusing the first time through and I may not have prevailed if the Durango had not had a convenient on-board compass.

## Summer Brings the Monsoon

During July and August, a high pressure system parked in the Gulf of Mexico sends humid air to the northwest, that is, over the American Southwest. The airflow rises and cools as it encounters high elevations after making landfall. The result is often spectacular cumulonimbus clouds and thunderstorms.

Skies were clear early that July morning, but not long after I crossed the 30 mile expanse of open plateau and began driving the winding roads that circuit Mount Trumbull, the trademark afternoon thunderstorms of the summer monsoon began to boil up over the southern horizon.

In just a few minutes the sky above turned black. Bright flashes of lighting and heavy peals of thunder split the sky. Sleet, hail, and heavy rain began to pour down. Visibility dropped to zero. Violent winds shook my car as the sheets of rain and hail swept past. Old timers of the desert used to call these cloudbursts "waterspouts," and it's easy to see why. Several centimeters of rain and hail fell in a matter of moments. In less than five minutes the surrounding slopes were cloaked sliver with a layer of water that was several centimeters deep. In places the hailstones were piled 10 and 15 centimeters deep. Entire hillsides were awash with a thick layer of water and slush which began rushing downslope and collecting in flash floods in all the surrounding low spots and arroyos.

The road itself became a red torrent. I had to stop and wait out the storm. I certainly could not turn back as I was sure that by now the red dirt of the first 30 miles of road south of Colorado City would be an impassable mud wallow. After Route 5 reaches the Mount Trumbull area, however, it climbs onto rocky ground, and continues to be passable, even when wet.

What had been a sunny country road a few minutes before was now a muddy stream. The outside temperature had dropped from 95 to 55 in about 5 minutes! The rumble of the thunder was further away now, and rainbows were starting to appear at the edges of the clouds as the storm swept northward above and behind me.

I continued on when the rain let up a bit and as I was driving down a slope to a small valley, I came upon a pond a couple of acres in extent that had formed over the road, spilling out into the sagebrush on either side of the road, submerging all but the tops of the largest plants with the turbid red water. The surface of the pond had a strange texture I didn't recognize, and it was impos-



In seconds the road became a river. Photo Paul Fretheim

sible to determine how deep the water was. I didn't dare drive ahead without checking out the depth of the water.

I stopped the car and shut off the motor and tried to figure out what to do. I decided to get out and wade into the water to see how deep it was and if the bottom was solid or not. I took off my shoes and socks, opened the door and gingerly walked to the pond ahead. As I approached closer I realized that the strange surface texture was caused by hail floating on the muddy water. I waded in and discovered that there was about 15 centimeters of slushy hail floating on the surface. I waded out. The water was near freezing with all the ice floating on the surface. In just a few seconds my feet were screaming in pain from the cold. I waded out to the middle though, and found that the water was no more than knee deep, even in the deepest part of the pool, and the bottom seemed solid enough to drive on.

I got back into the car and started the engine, put the transmission in 4-WD Low Range and crept slowly forward into the water. About three-fourths of the way across I came to the place where the water's main stream flowed across the road and the car suddenly dropped what felt like about two feet. The rushing red torrent, which was flowing from right to left across the road, splashed all the way up over the passenger side window and the hood of the car. I got a sinking, sickening feeling in the pit of my stomach and though, "Oh boy—here we go." But the engine didn't drown out, and the front wheels caught solid ground on the other side of the washout. The Durango chugged faithfully forward to the far side of the pond. I breathed a sigh of relief and continued onward.

I had to cross several more rushing streams of muddy red slurry between Trumbull and the Toroweap valley, but the Durango successfully negotiated them all. By early afternoon I was at the campground on the brink of the Canyon at the foot of the Toroweap. I was the only one there. I had left Colorado City early that morning, and had just made it across the muddy Uinkaret before it became impassable. No one else came across that day. I was the only person for miles, as the Ranger at Toroweap was on vacation, and there was no one at the Tuweap Ranger cabin as the replacement Ranger had not made it out before the rain.

#### Lighting Illuminates My Camp

That evening it began to storm at about 8 p.m. Lightning began to flash and thunder to crash all around. Torrential downpours of rain and hail began again. The lighting flashes came so frequently I could almost read by them. I huddled in my tent and waited for the storm to pass. The thunderheads seemed to become trapped between the walls of the outer canyon. The thunder echoed back and forth between the sheer cliffs of the inner gorge, shaking the ground like 5.0 quake on the Richter scale! Every ravine and arroyo became flooded with water and all the streams began to rush headlong over the brink of the inner gorge down into the Canyon in countless roaring waterfalls cascading 1000 meters over the sheer drop to the river below. The roar of the waterfalls was added to the howling wind and the incessant thunder. It was a wild night indeed!

The rain which fell on the road gathered into a stream that flowed across the campground. I could hear the torrent getting louder and louder as it grew bigger and came closer to my tent. The wind was buffeting my tent, but I didn't think the wind would



I was hoping the flood would not wash me and my camp over the brink. *Photo Paul Fretheim* 

take me. I was beginning to worry, though, that I might be washed over the precipice that was just a few meters below my campsite if torrent racing across the campground got any bigger.

Continuous explosions of lighting seared the sky for the next six hours. Suddenly I would hear a crackling sound streaking down through the sky and then would hear a dull hum like a big short circuit, the world would turn iridescent green, and then a huge clap of thunder would instantly shake the earth where I lay in my tent. Other times there would be a 20 second delay between a flash directly overhead and the arrival of the thunder, telling me that the thunderhead rose at least 6 kilometers into the sky. Finally about 2 a.m. the storm passed on to the north and things quieted down. I was glad to still be in one piece after all those thunderous green flashes that came crashing down so close to my tent.

#### No Stars Forgot to Shine

In a few minutes, the sky was as clear and dark as the sky ever gets. The nearest street light or farm light was over 60 miles away,

and the rain had washed all the dust from the air. The black dome overhead was carpeted with diamonds as no star forgot to shine in the moonless sky.

# A Burst of Erosional Activity

The next morning I witnessed something which taught me an the important fact that erosion's relationship to human time is different from its relationship to geologic time. While erosion proceeds as a continuous process over geologic time, it can happen in sudden bursts relative to human time.

After I got up the next morning I walked over to the edge of the Canyon and scrambled out on one of the boulders at the very edge. I was laying on my stomach with my head extended over the precipice, watching the ravens soaring over the river below, when I heard a sudden and tremendous crashing. At first I didn't



Tuweap Church, Toroweap Valley. Photo Paul Fretheim CLICK IN THE IMAGE TO OPEN A  $360^\circ$  PANO OF THIS LOCATION.

know what was happening, but then I saw the huge blocks of stone weighing tens of tons each which had calved off the rim just a few meters to the right of where I was peering over the edge. They were rolling and bouncing with incredible speed and violence over the platform of shale some 150 meters below crushing everything in their path and sailing over the edge down over the even higher 800 meter limestone cliffs below to crash down all the way to the river. It was a very impressive sight to see, but I felt very lucky that had not chosen to walk a bit to the right that morning before crawling out to the brink.

Seeing that huge rockfall taught me that erosion often occurs in sudden bursts of activity and from then on I will approach canyon rims with great caution after such a significant meteorological event.

See Also: Lava Falls Scramble

The So'-Kus Wai'-Un-Ats. (A Pauite Folk Tale) from Powell

The Toroweap and Uinkaret from Dutton