

"Star Trails at Coyote Gulch" by Chuck Derus

According to the Wild Backpacker, "Located in a remote section of the Glen Canyon National Recreation Area, Coyote Gulch is one of the most loved hiking destinations in southern Utah. It's natural beauty draws backpackers in and make it worthy of its famed status. The beautiful Navajo Sandstone canyon walls, the sparkling streams, two arches, a natural bridge, Fremont Indian pictographs and several waterfalls will make this hike a favorite."

Coyote Gulch is indeed a favorite of mine. Last September, we took the "shortcut" route to Coyote Gulch which was an 8 mile round trip through the desert that included a 200 foot scramble up and down a steep rocky section. After arriving, we peeled off our photo back packs, tent, sleeping bag, food and water, and settled into a beautiful campsite for an overnight stay.

I included shots of my buddy Jon and I at the trailhead and a shot of a section of the trail to Coyote.

The photograph was taken at a bend of the creek in an alcove where the roof towered 200 feet above us. We had the section to ourselves except for a herd of mule deer that intermittently wandered in and out.

I figured out the composition and locked down my camera on my tripod aimed at what I hoped would be the North star. It turned out to be darn close! I had no idea I captured a meteor or a satellite passing through the North star until I got home and reviewed all the shots. My camera didn't move for the entire night.

The dynamic range was far too wide for one exposure, so I combined two images. The exposure for the land was taken just after sunset when soft light gently illuminated the land. The star trails used image stacking.

The base exposure for inside the bend is a single ISO 100, f10, 1/15 second at 11mm during twilight on a Canon 5d mark III with the awesome 11-24mm ultra wide angle lens.

I waited until astronomical twilight ended and started shooting the stars. The star trails were captured on 394 separate images. Each star shot was ISO 800, f4.0 for 30 seconds.

The twilight image was 80% finished in Lightroom. I adjusted the first star trail image in Lightroom and synched the others with the same adjustments. The final image was combined and tweaked in Photoshop. The first star trail image was in normal blending mode and the subsequent 393 were changed to lighten mode to build the star trails. While you could do a 3+ hour single exposure, the noise would be much higher and using dark frame subtraction in camera would add an additional 3+ hours and my battery wouldn't last. When I first tried to layer 395 TIFF images at 120MB each, my PC crashed, so I had to take this project on in stages.



