

August 18, 2010 - Jewel Cave, a National Monument

First, a short explanation why there has been a fairly long lapse since my last article. Due to a family medical emergency, I had to take a commercial flight to West Palm Beach and was gone for almost 3 weeks. I returned to South Dakota just a few days ago, and have resumed my part time "work" assignment at the Custer County Airport.

On my day off, this past Wednesday, I took my plane up for a flight around Jewel Cave, the second longest cave (150 surveyed miles thus far), in the World!! (Mammoth Cave in Kentucky is the longest). I quickly located this National Monument site from the air. It is located just 15 miles to the West of the town of Custer and about an equal distance from the Wyoming state line. It was a cool, clear pre-fall morning and the air was as smooth as glass. After circling and photographing the entrance and visitor's center area I flew back to Custer airport and broke out my motor scooter for the 30 minute drive back to the site.

The cave was first discovered in 1900 and originally was privately owned and operated as a tourist attraction. In 1908 President Theodore Roosevelt proclaimed it a National Monument and opened it to the public. (National Monuments are declared by Presidential proclamation while National Parks are set aside by acts of Congress). There are around 85,000 visitors each year to Jewel, and since all of the tours are conducted by park rangers, reservations are recommended. I had phoned for one once I landed, and booked the 2:40 tour. Cost for a Golden Age Passport holder was \$4.00 for the hour and a half long guided "scenic tour" which began with a high speed elevator ride to our starting point located 70 feet below the museum floor.

Once there, and after a briefing by our tour ranger, a young lad by the name of Tyler, we began our 200 foot decent beneath the surface for the half-mile journey along concrete path walkways over steel bridges and up and down hundreds of stairs. All the while we were careful as not to get off of the walkway or touch any of the wall formations. It is this human contact that is most detrimental to the cave's ecology. For example, each year over 350 pounds of lint is removed from the traps that are located beneath the metal grid walkways alone. There is no such capturing devices for the remaining walkways and this lint simply settles, along with human hair, spit and dead skin cells. (Ugh!)

Jewel Cave is a "wet" cave, meaning that it was developed by water entering through cracks that had occurred in the sub-strait when the Black Hills were formed some 60 million years ago. The acid rich water began dissolving the interior limestone leaving layers of calcite behind. Crystals began forming on the calcite each time water was re-introduced during several periods of additional flooding. It is these jewel like crystals that gives the cave its name and very special appearance.

Jewel is one of the two distinct type of caves located near Custer. The other is Wind Cave, which features an entirely different type of ecological formation. It is considered to be a "dry" cave and has a a unique type of "box work" formations. I hope to get to visit it as well while I am here in the Black Hills.



My fly-over of the terrain located above Jewel Cave



This is the cave's entrance, elevator and museum



Our Ranger tour guide Tyler making a point



Some of the formations found on the cave walls