



Field Trip Road Log

June 21, 2014: Succor Creek Fossils

Leader: Clyde Stroup

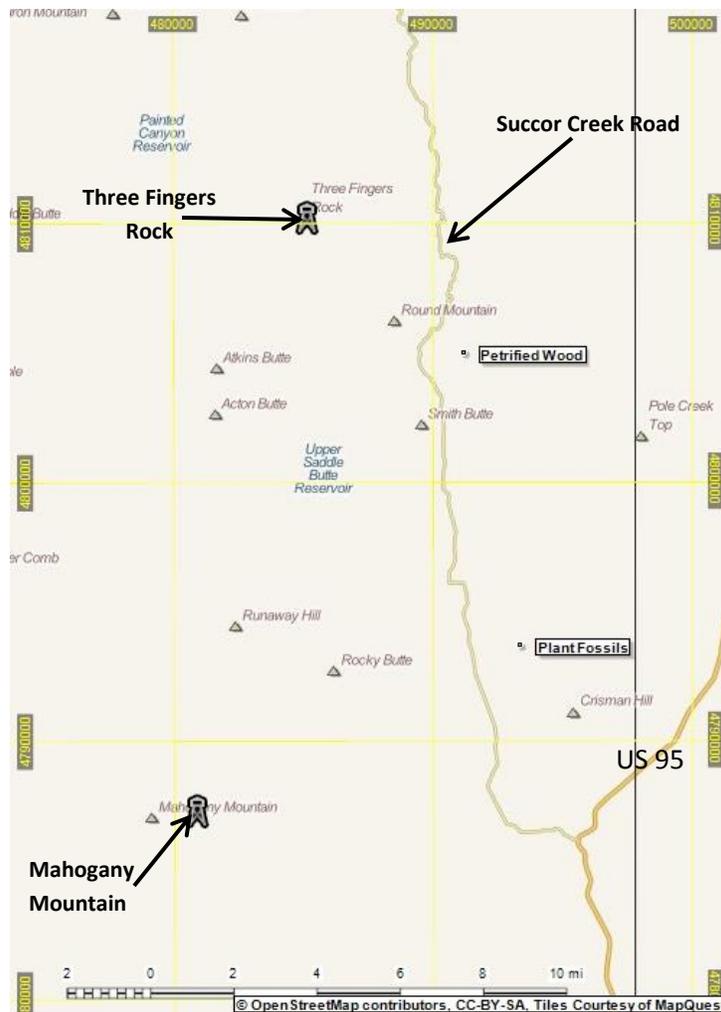
Note: odometers vary, mileages are approximate.

The map shows both stops and the route back to U.S. 95.

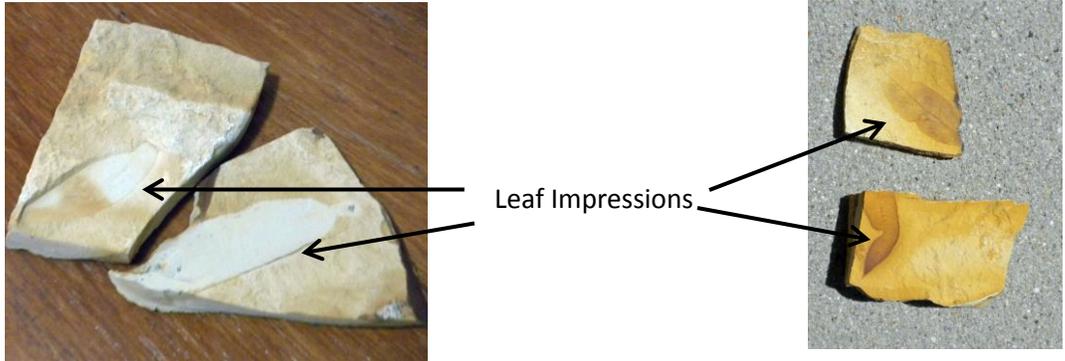
General Background

The two fossil sites for this trip (“plant fossils” and “petrified wood”) lie between two identified calderas that contributed to the lithic geology of the area – the Mahogany Mountain Caldera, about 8 miles SW of the plant fossil site and 11 miles SW of the petrified wood site; and Three Fingers Rock, about 4 miles NW of the petrified wood site and 11 miles NW of the plant fossil site. More recent study of the volcanism of the area suggests that there was a single source for the rhyolitic ignimbrite that formed the Succor Creek Formation, in which the fossil sites are located. The age of eruption is calculated at about 15.9 million years before present.

The Map below shows the locations of the field trip sites and the two calderas.

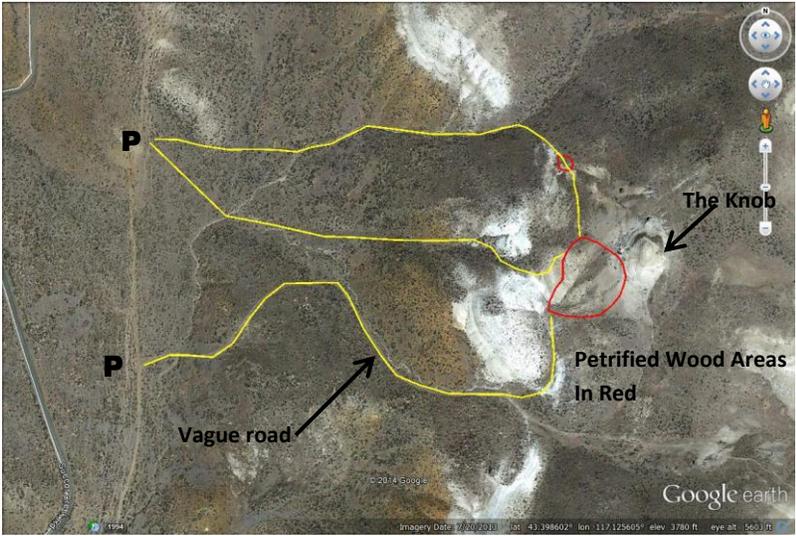


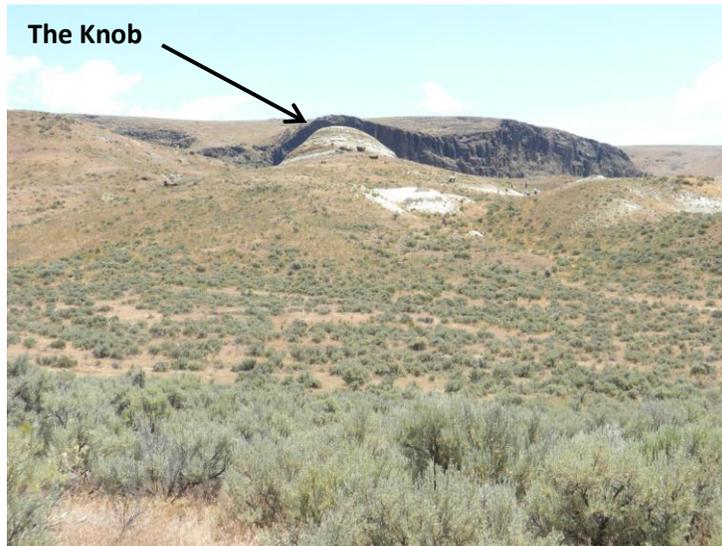
To Stop 1: Travel to Marsing via I-84 and Highway 55 (Exit 33A, Karcher Road); at the large Gem Stop truck stop west of Marsing, turn south on U.S. 95. Approximately 2.2 miles beyond the Idaho-Oregon border, turn **Right** at the signed turnoff to Succor Creek Road; **zero odometer here**. Follow Succor Creek Road for approximately 5.6 miles to a T-junction (GPS N 43.285366; W 117.102322), take the turn to the **Right** and look for a “Dead End” sign on the right. Follow this road approximately 1 mile to a light-colored shale scree slope on the left (GPS N 43.290998; W 117.081975). You can take the spur track to the left to go up to the top of the outcrop (high clearance vehicles advised) , where there are multiple pits dug by fossil seekers. The broken shale contains many plant leaf fossils (impressions), but they are subtle, as shown in the photos.



The rock containing the fossils is hard, silicified ash fall from huge volcanoes that erupted approximately 15 – 16 million years ago. In that middle Miocene epoch, the current dry sagebrush/grassland was a lush forest with lakes and marshes; leaves from many plant species fell into the lakes and were preserved when eruptions deposited ash layers into the lakes. The rock here is part of the Succor Creek Formation.

To Stop 2: Retrace the route back to the T-intersection and turn **Right** to continue on Succor Creek Road; **zero odometer here**. In about 2.2 miles, turn **Left** just beyond the Rockville School, then take the curve to the **Right** in 0.3 miles to continue on Succor Creek Road. At approximately 8.0 miles, a two-track road branches to the **Right** (GPS N 43.393292; W 117.129391); you can park here or follow the two-track for another 0.2 – 0.5 miles (high clearance vehicles advised) and find a convenient place to park. Look to the northeast for a white bald knob (photo) on the near horizon and walk toward it; your target is at GPS N 43.398624; W 117.123286. There are three potential routes to the petrified wood areas, as shown on the aerial photo (yellow). In indicated fossil areas, light-colored petrified wood is scattered all over the ground. Petrified bark pieces that are scattered throughout the area are similar to ponderosa pine (see photos). This was probably a conifer forest that was buried by volcanic ash.





Petrified Wood



Petrified Bark

The shortest route back to U.S. 95 is to return to Rockville and take the **Left** turn at the junction (McBride Ranch Road) and follow it all the way to US 95, approximately 8.6 miles, as shown on the map.

If desired, you can turn **Right** from the petrified wood site on Succor Creek Road and follow it through Succor Creek State Park to Midvale; it is 29.7 miles from the petrified wood site to the junction with Highway 201/19. Turn **Right** and follow 201/19 to Homedale. Turn **Left** on US 95/19; then take the turn to the **Right** on Hwy 19 (Simplot Blvd.). Take Rte. 19 to Caldwell and turn **Left** on Business I-84 (Centennial Way) to join Interstate 84 to return to Boise.

