

## Black Mountain Ash Flow Tuffs

You can see something really amazing from Black Mountain. On the mountain for several miles southeast along the crest, there are thick outcrops of ash flow tuffs. These are from numerous pyroclastic flows from explosive volcanic eruptions hundreds of kilometers to the east and southeast in central Nevada. These hot ash flows evidently traveled downhill from their origin, mostly down river valleys. It is believed that central Nevada may have been a high volcanic plateau at the time. So, this location must have been a large river valley or stream canyon that these hot volcanic ashes flowed down on their way west (to what is now the Central Valley of California). Thick deposits would form in the valleys, to then be eroded for hundreds of thousands of years before another eruptive explosion and another hot ash flow. These explosive eruptions occurred from 27 to 23 million years ago.

**Warning, this road can be difficult. It is better with a high clearance vehicle. Don't go if you think you might encounter snow.** To get there, drive south toward Reno on U.S. 395 to Milford. At Milford turn right and go past the post office. Continue on this paved road toward the Laufman Work Center (ranger station). At this point the road turns to dirt. Set your mileage to zero and continue. You will go past a campground and road will begin to switch back and climb the steep grade. At about 2.1 miles look up to the left (southeast) and you should be able to see a thick reddish bed of rock that is nearly level. **Take a picture of this formation from here; you will be on top of it later.** This is one of the ash flow tuffs, specifically the Tuff of Rattlesnake Canyon. Continue to 2.8 miles. There is a sharp bend in the road and once again there is a good view of the bed of tuff to the left. **Take another picture.** Continuing to the top of the grade (3.1 miles), and you will cross a cattle guard. Take the left fork after crossing the guard. Continue until 3.9 miles and look for a left turn with sign to Black Mountain. Follow this road until you reach a wide spot just before a sharp hairpin turn at about 6.3 miles. Park here.

This road seems to be a contact between the ash flow and rhyolite of the mountain's top. Collect some of the rhyolite from the uphill side of the road. Then hike out (about 1/2 mile) to the edge of the flow to look over onto the Honey Lake playa. The rock here is an ash flow tuff and has a very rusty surface color. Collect a sample. **Take a picture with you in it showing the valley below.**

Back at the car, think about continuing the drive up to see the lookout. It is less than a mile. You can spend a night in the lookout for \$60. From the top several more lookouts can be seen. Binoculars will help.

GPS Info. (Latitude, Longitude) of Black Mountain Lookout  
40.11528, -120.32111  
40°6'55"N, 120°19'16"W

Learn more about the lookout:

[http://www.reserveamerica.com/camping/Black\\_Mountain\\_Lookout/r/campgroundDetails.do?contractCode=NRSO&parkId=72306](http://www.reserveamerica.com/camping/Black_Mountain_Lookout/r/campgroundDetails.do?contractCode=NRSO&parkId=72306)

This trip takes lots of gas and time (4 to 5 hours). **This trip is voluntary and optional.** You can get a good grade by attending class, and doing well on labs, homework and tests. These trips are primarily designed for students who missed classes due to illness or personal emergencies. Be careful and safe. Don't drive or ride with someone who is impaired or not careful. Be careful and safe. Don't drive or ride with someone who is impaired or not careful. The trip can earn 80 extra credit points. All work must be handed in two weeks before the last day of regular classes before the final. This road could be closed with the first snow. Off road driving, hiking, and other outdoor activities involve risk to both persons and property. There are many variables including, but not limited to, weather, fitness level, terrain features and outdoor experience, that must be considered. Be prepared for your journey and be sure to check the current weather and conditions before heading outdoors. Always exercise common sense and caution.