

**Geology 1 Extra Credit Field Trip to Subway Cave**  
<http://www.everytrail.com/guide/subway-cave-lassen-national-forest>

Overview: Twenty thousand years ago and just 15 miles north of Lassen Volcanic National Park, the ground broke apart and huge volumes of volcanic rock poured forth to create the enormous expanse that is the Hat Creek Lava Flow.

Exposed to the air, the top of the lava flow began to cool and solidify, while molten rock below continued to flow - insulated by the now solid roof and creating lava tubes which carried the red-hot rock miles from its source.

Subway Cave is a section of lava tube less than a third of a mile long, located between two areas of ceiling cave-ins. Substantial concrete steps have been constructed at both ends of the cave, providing easy access for all would-be spelunkers.

Tips: • **Flashlights are a necessity** in the cave. Forgetful folk may be able to rent them from the information center at Old Station, just south of the Subway Cave park.

- **Take a jacket** with you if you feel the cool conditions in the cave may be uncomfortable.
- **Open from May to October** due to winter weather restrictions.
- A very short return hike is also available which double-backs across the top of the tube to the entrance near the parking lot.

The parking lot and trailhead is located at the end of a well-signed road just north of Old Station, CA on state route 89. Here you'll find plenty of parking, a restroom and several interpretive signs.

Grab your flashlights and your jackets (it does get cool down there) and head along the trail and then up a set of steps before reaching the entrance.

Someone got a little carried away when it came to naming some of the cave's features, but we'll forgive them for trying to make geology more exciting. Although it's not like Subway Cave isn't dramatic enough already.

Descend the wide concrete steps at Devil's Doorway and enter the mouth of the lava tube. There's no point waiting for your eyes to adjust to the darkness here, since once you're deep in the cave there's nothing around you except pitch blackness. Simply switch on your flashlights and start exploring.

Tripping hazards are few in this lava tube, but keep your eyes peeled for occasional obstacles nevertheless, in addition to watching out for low ceilings.

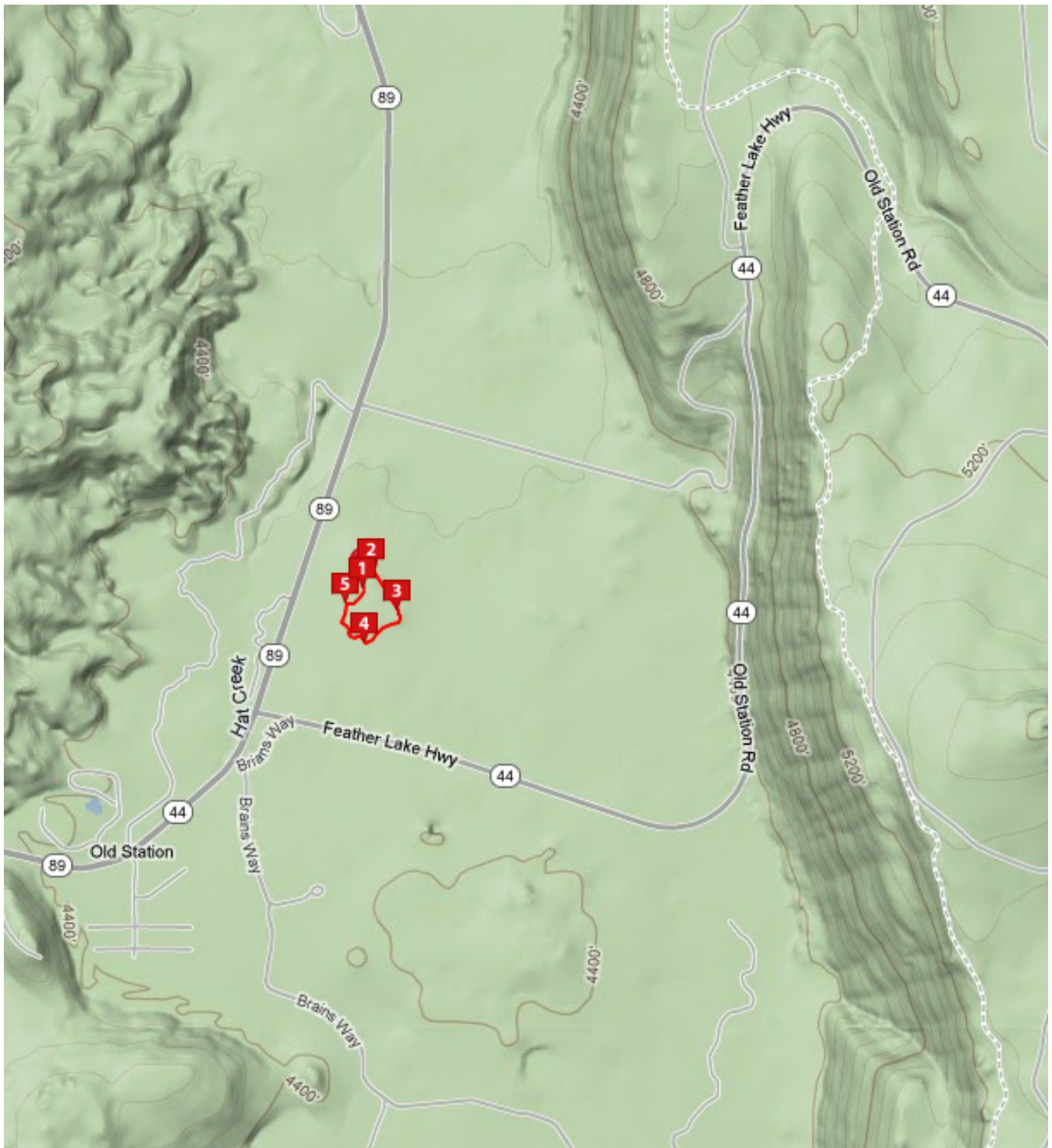
Be sure to spend some time appreciating the small interpretive signs dotted around the cave, which provide some great insights into the features of this geological oddity.

Daylight returns at the end of the Subway Cave tour and you return to the surface up the concrete steps.

There are two routes back to the parking lot from here - a sharp right turn will take you back on the quickest route, or you can follow our guide on a slightly longer, quieter, more pleasant journey through scrub and partial forest.

How to get there. Take Highway 36 (Main Street) west out of Susanville. After about 5 miles, turn right at the junction with Highway 44. After about 45 miles, turn right on Highway 89 for about 0.3 mile and turn right into the Subway Cave parking.





### Remember

This is a field trip to experience some local geology and great scenery. It is not required for the Lassen College geology class. If you do this on your own, be careful and take precautions. To get credit (50 points extra credit) take pictures at the site that includes your image. Bring the pictures and a written description or notes of your trip including exciting things that happened and difficulties encountered. This trip takes lots of gas and time (It is a good day's adventure so leave early or plan on camping). It is optional. You can get an 'A' by attending class, doing the assignments and getting fairly good grades on the tests. Be careful and safe. Don't drive or ride with someone who is impaired or not careful. The trip can earn 50 extra credit points. All work must be handed in two weeks before the last day of regular classes before the final. Also, the cave closes in the fall (check with the forest service) and these highways get snow. Plan the trip early in the semester. More credit can be earned (total of 100 points) by also doing the Bumpass Hell, Lassen Volcanic National Park trip that can be seen at <http://www.everytrail.com/guide/bumpass-hell-lassen-volcanic-national-park> Remember the road through the park is closed in late fall and might not open until very late spring or summer.