Rising 570 ft to an elevation of 5910 ft., Pilot Rock is perhaps the most striking feature of Cascade-Siskiyou National Monument. Visible from much of the Shasta Valley in northern California and parts of Oregon’s Rogue Valley, the Rock serves as a friendly beacon to some five million vehicles and their passengers that travel the I-5 corridor annually.

Competing Theories
Pilot Rock is part of the Cascade Range, a mountain range notable for its string of volcanic peaks stretching from British Columbia to northern California’s Lassen Peak. The Monument’s proclamation refers to Pilot Rock as “a volcanic plug,” describing it as “a remnant of a feeder vent left after a volcano eroded away, leaving an outstanding example of the inside of a volcano.” Pilot Rock is composed mostly of volcanic andesite and has sheer, vertical faces with classic columnar jointing created by the cooling of its andesite composition.

Plug or a Neck or both?
Many geologists use the terms “neck” and “plug” interchangeably, while others believe the terms apply to different types of volcanic structures. Some geologists use the different definitions of lava and magma to make the distinction between a volcanic “neck” and a volcanic “plug.” Magma is molten or partially molten rock beneath the earth’s surface. Magma collects inside a volcano’s magma chamber before it erupts. When magma breaches the earth’s surface, the magma becomes lava and a volcano is formed.

Geologists who make the distinction between volcanic necks and plugs consider a volcanic “neck” indicative of an actual volcano – a column of igneous rock formed by congelation of lava in the conduit or vent of a volcano and later exposed by the erosion of surrounding rocks.

In contrast, these geologists consider a volcanic “plug” to be a structure formed by a body of magma that never reached the earth’s surface. Over time, the softer exterior rocks eroded away, leaving behind the now-cooled magma.

Put simply, a “plug” is an intrusive body formed by magma which cooled underground and was later exposed by erosion.

Recent Research
Recent research regarding Pilot Rock suggests that 25 million years ago, magma oozed through a weak spot in the earth’s crust, but did not reach the surface. As a result, some geologists refer to Pilot Rock as technically a “volcanic plug,” but NOT as defined in the Monument’s proclamation. (The proclamation evidently uses “plug” and “neck” interchangeably.) However “plugs”and “necks” are defined, what they both have in common is erosion. After the softer rock is eroded, the remaining harder volcanic structure stands up in bold relief to the surrounding landscape as the blockish, irregular, columnar structure you see today.

Cousins
Ship Rock in New Mexico and Devil’s Tower in Wyoming are considered to be volcanic necks or plugs, which were exposed after the surrounding sedimentary rocks eroded and fell away.

Human History
The Takelma people called it Tan-ts’at-seniptha, “Stone Standing Up.” In 1841, an enterprising U.S. Navy lieutenant scouting a route from the Columbia River to San Francisco Bay named it for himself: Emmons’ Peak. Today we know it as Pilot Rock, a welcome landmark for weary migrants on the Applegate Trail in the 1850s, and for travelers on I-5 today.

Did you know?
According to local newspaper reports, nine aircraft have crashed into Pilot Rock since 1942, usually due to poor visibility and low clouds.
Trail Head Directions
From Medford-Ashland, take I-5 south to Exit 6 - Mt Ashland exit. Heading south, follow Old Highway 99 for 2 miles. Turn left onto Pilot Rock Road 40-2E-33. Stay left. At mile 1 you will cross the PCT; at 2 miles you will see an old quarry to your right. The old quarry serves as trail head parking. Caution: rough road, please drive slowly; some vehicles with lower ground clearance may not be suitable.

Trail Information
The trail begins on an old road located behind a boulder barrier. The trail intersects the Pacific Crest Trail (PCT) after about 0.9 miles. Follow the PCT for about 300 yards until you reach a sign and trail junction for the Pilot Rock trail. From there it is a fairly steep 3/4 mile hike to the base of Pilot Rock.

Climbing to the top of Pilot Rock can be dangerous and is not for the faint of heart. Warning: this climb is steep. Scrambling, care and dexterity are required. Going with someone who has scaled the rock before is recommended.

Be prepared and be safe!
Do not be fooled by Oregon’s stereotypical cool and cloudy weather. Summer time in the Rogue Valley sees little rain, with temperatures frequently reaching 100 degrees fahrenheit.

Wear a hat and sunblock to protect yourself from sun exposure. Wear good hiking shoes and carry water and snacks. Hike with a buddy or let someone know where you are going and when you will return. Always bring a flashlight to give yourself the option of hiking out after dark in the event that illness, injury, or enjoyment slow you down.

Check weather conditions before your hike. In cold and/or wet weather, avoid hypothermia by wearing layered clothing and being prepared for bad weather. Do not exceed your normal level of physical activity or training.

Taking care of your Monument
Please follow these simple steps and help us preserve and protect this special place. Leave what you find, practice leave no trace principles and honor private property boundaries. Harassing wildlife and cross country travel by bicycle or vehicle are prohibited.

Sources for this bulletin courtesy of the Medford Mail Tribune, Bureau of Land Management (BLM), United States Geological Survey (USGS), and the National Park Service (NPS). Update: 04.08.2013