

THE FOSSIL RECORD

The Northwest Museum of Natural History Association • October 2019

Field Trip

The Tillamook Highlands

Ancient volcanism & rugged landscapes and the Tillamook Fire.

Date: Saturday, November 2nd.

Cost: \$15 for non-members (families \$25), Free for members.

Call: (503) 358-9030 or
e-mail blitz124@comcast.net

Trip leader: Dave Taylor

This Saturday trip takes us to the Coast Range 20 miles east of Tillamook where we will see after-effects of the 1933 Tillamook Burn and glimpse the region's volcanic history. All this is set in a surprisingly rugged landscape of sharp ridges, steep slopes and narrow valleys.

Thousands a feet of lava erupted into seas in this part of the Coast Range 40-50 million years ago. Here, Oregon projected westerly into the Pacific Ocean at that time and has subsequently rotated into its current north-south orientation. Also, as the Atlantic Ocean has been growing it has been pushing North America to the west. Thus, the stationary Yellowstone hot spot (hot spots are stationary centers of massive volcanism) was not always in Wyoming. We think that 45 million years ago the hot spot was in what is now the Coast Range as North America tracked over it. The Tillamook highlands reveal that explosive history.

We will see firsthand these rocks that are now exposed along the Trask River and adjacent mountains.

The geological highlight will be a yellow-green rock peppered with black to green augite crystals now lying on the ground and weathering out of the bedrock. These crystals were thought to have erupted from a nearby volcano – spewing ash and crystals across the landscape.

I visited this crystal-bearing locality many years ago when the site was a clearcut, and it took four excursions this last year to relocate it in its now-forested setting. So, we are excited to give you a chance to visit this rare and interesting site, as well.

We will visit the Tillamook Forest Interpretive Center. The center will help us to appreciate the succession of trees that grow back after a burn and how the State Forest Service is managing its lands.

Logistics: You will need a vehicle with reasonably high clearance – or make arrangements with me for carpooling. It is a 5 ½ mile drive on a gravel road into the crystal locality. The road is steep in places and the last half mile is a little uneven.

Notes: Include a pair of hiking boots, and raingear. Consider binoculars for wildlife viewing. Bring a geology pick if you have one - I will have a couple extras.

Lunch: Be sure to bring along a sack lunch and water, as we will not be close to a restaurant over the noon hour.

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