

## 2015 Volcano Awareness Month “After Dark in the Park”

Kīlauea Visitor Center Auditorium ▪ 7:00 p.m.  
Hawai‘i Volcanoes National Park  
( <http://www.nps.gov/havo/planyourvisit/directions.htm> )  
Park entrance fees may apply.

### **Tuesday, January 6**

#### **Updates on Kīlauea Volcano's Two Eruptions: Pu‘u ‘Ō‘ō and Halema‘uma‘u**

Kīlauea has been erupting nearly continuously since 1983, when a vent, now called Pu‘u ‘Ō‘ō, opened on the volcano’s East Rift Zone. Then, in 2008, a second vent opened within



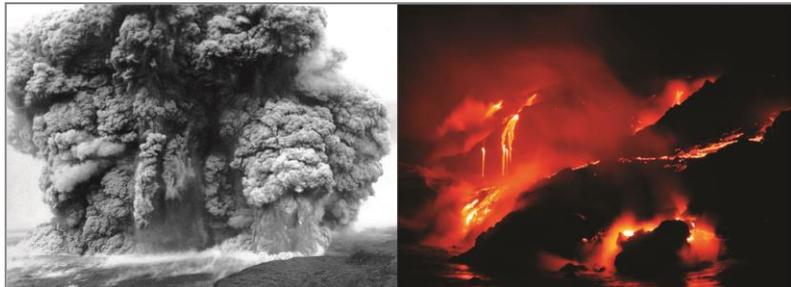
Halema‘uma‘u Crater at the summit of Kīlauea. Both eruptions are ongoing. **Matt Patrick**, a geologist with the USGS Hawaiian Volcano Observatory, presents an update on the Halema‘uma‘u lava lake,

a brief overview the first 30 years of the Pu‘u ‘Ō‘ō eruption, and an in-depth account of the current lava flow that has advanced toward Pāhoā over the past six months. *USGS photos: Halema‘uma‘u lava lake in October 2012 (left) and Pu‘u ‘Ō‘ō lava flow in June 2014 (right).*

### **Tuesday, January 13**

#### **Kīlauea Volcano’s Dual Personality: A Historical Perspective**

Kīlauea is temperamental, alternating between quiet effusion of lava and violent explosive eruptions. Each eruptive style lasts for centuries and reflects very different conditions in the caldera. USGS Hawaiian Volcano Observatory geologist **Don Swanson** looks at what we know and don't know about these conditions. The current effusive nature is beguiling but misleading,



for the volcano has been

explosive for 60 percent of the past 2,500 years. From a historical perspective, there is reason to think that the Pu‘u ‘Ō‘ō eruption may be a prelude to an explosive period. *USGS photos: Kīlauea Volcano’s explosive eruption in 1924 (left) and “quiet” effusion of lava at ocean entry in 2002 (right).*

**Tuesday, January 20**

### Watching Mauna Loa Shake

An earthquake sequence leading to Mauna Loa's summit eruption in November 1914 was the first to be tracked by newly-installed seismographs at the Hawaiian Volcano Observatory. Though primitive by today's standards, this was an early success for monitoring and research efforts on Hawaiian volcanoes.

U. S. Geological Survey geophysicist **Paul Okubo** will talk about the relationship between earthquakes and eruptions on Mauna Loa, including an update on the volcano's

current status, and how HVO's seismic network has evolved over the past century.

*USGS/HVO Photo: Hawaiian Volcano Observatory founder Thomas A. Jaggard with early seismic instruments housed in the Whitney Laboratory of Seismology circa 1913.*



**Tuesday, January 27**

### Pāhoehoe Lava: The Ebb and Flow of Molten Rock



Lava erupted from the Pu'u 'Ō'ō vent on Kīlauea Volcano's East Rift Zone has been advancing in fits and starts toward the community of Pāhoa since June 2014. After the flow stalled just 155 m (170 yds) from Pāhoa Village Road in early November, a new breakout of lava began moving toward Pāhoa Marketplace. University of Hawai'i at Hilo geologists **Ken Hon** and **Cheryl Gansecki** have spent decades studying

and filming the behavior of pāhoehoe lava, and will use time-lapse and recent videos to explain how and why these flows advance, stall, and inflate. *USGS Photo: Pāhoehoe lava advancing through forest downslope of Pu'u 'Ō'ō on November 20, 2014.*

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For more information, call (808) 985-6011 or (808) 967-8844.