

# 2018 Volcano Awareness Month "After Dark in the Park"



# Kīlauea Visitor Center Auditorium • 7:00 p.m. Hawai'i Volcanoes National Park

(Directions: <a href="http://www.nps.gov/havo/planyourvisit/directions.htm">http://www.nps.gov/havo/planyourvisit/directions.htm</a>)

Park entrance fees may apply.

### **Tuesday, January 9**

### Kīlauea Volcano's East Rift Zone: 35 years and still erupting

January 3, 2018, marks the 35th anniversary of Kīlauea Volcano's ongoing East Rift Zone eruption. During its first three years, high lava fountains erupted episodically from the Pu'u 'Ō'ō vent. Since then, nearly continuous effusion of lava has sent countless 'a'ā and pāhoehoe flows downslope, burying about 55 square miles of the volcano's south flank. USGS Hawaiian Volcano Observatory geologist Carolyn Parcheta briefly describes the early history of this eruption and provides an in-depth



look at lava flow activity during the past year, including the Kamokuna ocean entry and lava delta. USGS photo: Lava dribbles into the ocean at the front of Kīlauea Volcano's Kamokuna lava delta, October 2017.

#### **Tuesday, January 16**

# Kīlauea summit eruption: story of the Halema'uma'u lava lake



The story of Kīlauea Volcano's ongoing summit eruption within Halema'uma'u is the focus of a recently released USGS documentary that will be introduced by Hawaiian Volcano Observatory geologist **Janet Babb**, who coproduced and co-wrote the video. The story recounts the formation and growth of the summit vent, describes the fluctuating lava lake within it, and features USGS scientists sharing their insights on various aspects of the eruption. Following the 24-minute video, USGS

Hawaiian Volcano Observatory geologist **Matt Patrick**, one of the featured scientists in it, will provide an update on what's happening at Halema'uma'u today and answer questions about the summit eruption. *USGS photo: Kīlauea Volcano's summit lava lake in foreground, with Mauna Loa in distant background, November 2016.* 

### **Tuesday, January 23**

# Volcanic ash from Kīlauea Volcano's summit lava lake: from the mundane to the unexpected

Pele's hair, Pele's tears, and other ash are produced by bursting gas bubbles in the lava lake at Kīlauea's summit. The amount of ash erupted daily ranges widely owing to short-term fluctuations in vigor of spattering. The monthly amount of ash, however, varies systematically with time, reflecting changing lake level, which, in turn, varies with the rate of magma supply. The methodical collecting of ash unexpectedly discovered a magma supply that pulses over several-month periods—the first such pulsing recognized at any volcano. This illustrated lecture, presented by USGS Hawaiian Volcano Observatory geologist **Don Swanson**, demonstrates how



systematic, long-term collections can lead to surprising but fundamental discoveries. *USGS photo: Volcanic ash fallout in this bucket is a gold mine for HVO researchers.* 

#### **Tuesday, January 30**

## Volcanic geology along Saddle Road on the Island of Hawai'i

The new Daniel K. Inouye Highway, Route 200, commonly called the Saddle Road, crosses the center of the Island of Hawai'i between its two largest volcanoes, Mauna Loa and Mauna Kea.



Traveling this road takes you through a varied landscape of historically interesting geological features, including large and young lava flows, cinder cones, kipuka, and ancient ice age dune fields. This contrasting scenery shows outstanding examples of how Hawaiian volcanoes mature and age. Join **Rick Hazlett**, affiliate geologist with the USGS Hawaiian Volcano Observatory and University of Hawai'i at Hilo, as he describes this "outdoor classroom" in which visitors can learn more about

how our aloha 'āina (precious land) came to be. USGS photo: Pu'u Huluhulu, a forested Mauna Kea cinder cone surrounded by younger Mauna Loa lava flows, is at the crest of Saddle Road.

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