

NORTHWEST GEOLOGICAL SOCIETY

A regional association of professionals, students & others interested in geology
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January, 2020 Newsletter

Volume 34, Number 1



January 14 Program Speaker

Speaker: Dr. Jackie Caplan-Auerbach, WWU

Title: The End of an Era: The 2018 Eruption of Kilauea Volcano,

Hawai'i

Abstract: In spring and summer of 2018, a new phase of eruptive activity on Kilauea volcano fundamentally changed the appearance and behavior of one of the world's most active volcanoes. The eruption destroyed over 700 structures, enlarged the

5:30pm: No-host social hour6:30pm: Buffet dinner7:30pm: Speaker programAll are welcome to attend –reservations are required if coming for dinner.

► Reservations here



Big Island by nearly 900 acres, and created a 300 m deep crater at the volcano's summit. Perhaps most importantly, it brought an end to 35 years of eruptive activity at Kilauea. This presentation will provide an overview of the 2018 eruption, focusing on a network of ocean-bottom seismometers deployed off of Kilauea's coast during the event. These data provide a window into interactions that take place when lava enters the ocean—sometimes this activity is passive, while at other times it results in significant and sometimes damaging explosions. These data allow us to better understand how Hawaiian Islands evolve and grow, particularly in the undersea domain.

PROGRAM DINNER RESERVATIONS: please make dinner reservations at www.nwgs.org by the Thursday prior to the meeting (now capped at 60 people due to room capacity and fire code, so reserve early!). Once you have submitted your reservation, you may pay online using your debit or credit card or your PayPal account (follow the online prompts), or by mailing a check or money order to Northwest Geological Society, 4616 25th Ave NE #397, Seattle, WA. 98105 (must be received by the Thursday prior to the meeting). NWGS member dinner: \$45; non-member dinner: \$55; late registration: \$55, student dinner: \$20.

<u>MEETING LOCATION</u>: <u>Silver Cloud Hotel Seattle—University District</u>, 5036 25th Ave NE, Seattle, WA 98105. No-host social hour is in the Ag47 Bar & Bistro. <u>Please check in at the Secretary/Treasurer table to get your name tag, which will be your dinner ticket</u>. <u>Dinner & speaker</u> are in the <u>Husky Dining Room</u> downstairs. Parking is free. See <u>Google Maps directions</u>.

Upcoming Speakers and Field Trips

February 11: David Williams, Naturalist & Author, Stories in Stone: Travels Through Urban Geology

March 10: Dr. Gerald C. Bryant, Dixie State College, Ancient Soft-sediment Deformation Features in the Navajo Sandstone April 14: TBA

May 12: Dr. Sean Mulcahy, WWU, Subduction Initiation and Early Evolution of the Easton Metamorphic Suite, Northwest Cascades, Wash. Spring Field Trip: Skye Cooley (Idaho Geol. Sur.), possible spring field trip, Othello area looking at calcrete deposits and their implications regarding Yakima fold belt tectonism and the late(?) rise of the Cascade Range, April .24-26, 2020 (dates pending confirmation).

If you would like to volunteer to give a talk or lead a field trip for NWGS, please contact President Katie Brower.

Announcements

- 2020 member dues are due NOW! Payment may be made at nwgs.org or at each meeting.
- Reminder: the new meeting venue is the Silver Cloud Hotel-University District, (see PROGRAM DINNER RES-ERVATIONS, p. 1 for details).
- To ensure you have a space due to room capacity and fire code at the new venue, please make your dinner reservations early! Dinner reservations will be closed at 60 people.
- Tom Bush is leading a geology field trip to south-central Utah for Pierce College over Spring Break, 2020 that is open to the public (March 26-April 4, \$839). Please contact Tom for de-
- Next Board of Directors meeting: January 14, 2020, 4:30 P.M., Silver Cloud Hotel.

YOU would like to be involved!

Photo Spotlight



Lava flows into the ocean during the 2018 eruption of Kilauea volcano, Big Island, Hawai'i. This process enlarged the island by nearly 900 acres (3.65 km²).

About NWGS

The Northwest Geological Society is a non-profit educational organization which provides a forum for information and discussion on Northwest geology and related topics. The Society sponsors talks by leading academic and professional geologists at its monthly meetings, conducts field trips to locales of regional geologic interest, and publishes meeting summaries and field guides based on those activities. Membership is open to anyone interested in regional geoscience issues.

Program meetings are the 2nd Tuesdays, October through May at the Silver Cloud Hotel Seattle-University District. Anyone may attend the speaker program, but a reservation is necessary for those wanting dinner (see 1st page).

Field trips (members only): The Society sponsors two overnight field trips each year, in the fall and the spring, to locales of regional geologic interest.

Membership is open to anybody with an interest in geology. Annual dues: Professional: \$55; Student: \$10. To join or pay annual dues: go to www.nwgs.org, or mail a check or money order to Northwest Geological Society 4616 25th Ave NE #397, Seattle, WA. 98105. Please include your name, address, home phone, email, and employer/affiliation (if any). Please visit About NWGS for more details.

Recommended Readings

Neal, C.A., et al., 2019, The 2018 Rift Eruption and Summit Collapse of Kilauea Volcano, Science, Vol. 363, Issue 6426, pp. 367-374, DOI 10.1126/science.aav7046.

Patrick, M.R., et al., 2019, Cyclic Lava Effusion During the 2019 Eruption of Kilauea Volcano, Science, Vol. 366, Issue 6470, DOI DOI: 10.1126/science.aay9070.

Caplan-Auerbach, J., and Duennebier, F, 2001, Seismic and Acoustic Signals Detected at Lo'ihi Seamount by the Hawai'l Undersea Geo-Observatory, Geochemistry, Geophysics, Geosystems, 2.5, doi.org/10.1029/2000GC000113.

Please send your reading recommendations to Newsletter Editor Tom Bush.

To report a change of email or postal address or request to be removed from mailings, notify Membership Chair George Bennett. Questions or comments? Contact President Katie Brower.

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