



NORTHWEST GEOLOGICAL SOCIETY

A regional association of professionals, students & others interested in geology
Please browse www.nwgs.org for more about us

February, 2022 Newsletter

Volume 36, Number 2

February 8 Program Speaker

The [Zoom meeting link](#) will be in the meeting reminder email from [NWGS Secretary](#) to all registered members prior to the meeting.

If you are not a member, please email [NWGS Secretary](#) for the link.

Reservations are not needed.

6:30pm: No-host social hour small group break-out sessions; 7:30pm: Speaker program

Speakers: Linda Sobolewski, Ruhr-Universität, and Christian Stenner, Alberta/BC Cave Rescue Service

Title: Glaciovolcanic Cave Research in the Cascade Volcanic Arc

Abstract: Glaciovolcanism can be found on several volcanoes worldwide and has received substantial attention during the last few decades. However, a rarely studied phenomenon related to volcano-ice interactions is the formation of void spaces underneath the ice—glaciovolcanic caves. Although supposed to exist on many glacier-mantled volcanoes worldwide, studies remain limited to volcanoes in Antarctica and the Cascade Volcanic Arc in the United States and Canada. This talk briefly outlines the global distribution of glaciovolcanic caves, highlights ongoing research advances, and illustrates their relevance to modern society. Focus is given to the crater of Mount St. Helens, Mount Rainier, and the slopes of Mount Hood. At Mount St. Helens a novel system of glaciovolcanic caves is circumnavigating the 2004-2008 lava dome. Between 2014 and 2021, more than three kilometers of passages were discovered and mapped, with further exploration being planned. The summit of Mount Rainier contains the world's largest cave of this type, and studies reveal dynamism over a 50-year timeframe. At Mount Hood, glacial retreat has substantially shortened extensive cave systems in recent years.

JOIN THE PROGRAM VIA ZOOM! Join the program by clicking the link in the separate meeting email announcement. Until we start meeting in person again, there is no cost and a reservation is not needed. You may join for both the social hour (6:30 pm) and the speaker program (7:30 pm), or just the speaker program. During the speaker presentation, the host will mute your microphone, and we ask that you please also mute your camera so as to allow sufficient band width for the speaker program. A Q&A session will follow the presentation. If you have a question or comment during the presentation, click **Chat** at the bottom of your screen to type your question or comment to the general audience. You may also click the **Raise my hand** link to ask the speaker a question and the host will call on you. Click on the Zoom link above to join the meeting at the appropriate time as listed above on the day of the meeting. See the [NWGS](#)

Upcoming Speakers and Field Trips

March 8: Kelsay Stanton, Topic TBA.

April 12: TBA.

May 10: TBA.

Spring Field Trip: TBA. Some great ideas are in the works, so check back!

If you would like to volunteer to give a talk or lead a field trip for NWGS, please contact President [Matthew Porter](#).

Please see the [NWGS website](#) for detailed announcements.
Contact webmaster [Matthew Porter](#) if you have any announcements to post on the website.

Announcements

- [NWGS](#) has a new, modern website! You can now update your membership, access publication, and more! Check it out!
- Plans are in the works for the great spring and fall field trips. Announcements will be made as soon as information is available.
- **Next Board of Directors meeting:** February 8, 2020, 5:30 P.M. via Zoom.

YOU would like to be involved!

Photo Spotlight



Looking towards the entrance of Rodan Cave in the crater of Mount St. Helens, June 2021. Christian Stenner photo.

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. **Until we are able to meet in person again, meetings are held via Zoom (link is included in the email announcement to all members; nonmembers contact the [NWGS Secretary](#)). Anyone may attend the speaker program at no cost, and a reservation is not needed.**

Field trips (members only): The Society sponsors two overnight field trips each year, one in the fall and one 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 the [NWGS website](#), or visit our website for more details. We look forward to seeing you soon!

Recommended Readings

Sobolewski L, Stenner C, Williams-Jones G, Anitori, R, Davis R, Pflitsch A (2022) Implications of the study of subglacial volcanism and glaciovolcanic cave systems. BVOL 84 (accepted).

Sobolewski L, Stenner C, Hüser C, Berghaus T, Cartaya E, Pflitsch A (2022) Ongoing genesis of a novel glaciovolcanic cave system in the crater of Mount St. Helens, Washington, USA. JCKS (accepted).

Stenner C, Pflitsch A, Florea L, Graham K, Cartaya E (2022) The development and persistence of hazardous atmospheres within a glaciovolcanic cave system - Mount Rainier, Washington, USA. JCKS (accepted).

Please send your reading recommendations to Newsletter Editor [Tom Bush](#).

To update your account information,, go to [NWGS.org/membership](#).
Questions or comments? Contact President [Matthew Porter](#).

NWGS Board

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