



## NORTHWEST GEOLOGICAL SOCIETY

A regional association of professionals, students, & others interested in geology  
Please visit [www.nwgs.org](http://www.nwgs.org) for more about us

### February, 2021 Newsletter

Volume 35, Number 2

#### February 9 Program Speaker

**Zoom meeting link will be in the meeting reminder email to registered members prior to the meeting. If you are not a member, please email [nwgs.secretary.com](mailto:nwgs.secretary.com) for the link.**

Reservations are not needed (we may now host up to 500 participants!)

**6:30pm:** social hour small group break-out sessions; **7:30pm:** announcements and speaker program

**Speaker:** Dr. Anita Grunder, Oregon State University, *Volcanic View of Plutonic Rocks: 11 MY of Magmatism at Aucanquilcha Volcanic Cluster on the Chilean Altiplano*

**Abstract:** A cluster of more than 20 Miocene to Recent volcanoes in the Andes of northern Chile record systematic changes in magmatism that have parallels in batholith assembly, such as recorded in the Tuolumne Intrusive Complex of the Sierra Nevada, California. Over about 11 My, volcanism in the Aucanquilcha Volcanic Cluster changed from broadly distributed, compositionally diverse and with few hydrous minerals to more centralized, more felsic and homogeneous and with a hydrous mineral assemblage. The greatest eruption rates occur about halfway through the history of the magma system and coincide with the time of hottest and shallowest magma storage, which in comparably long-lived magma systems is also the time of much mineralization. Strong evolutionary similarities to the Tuolumne Intrusive Complex suggest an intrusive to extrusive ratio of more than 20:1 and magmatic reworking of much of the crust.

**JOIN THE PROGRAM VIA ZOOM!** Join the program by clicking the link above. There is no cost, and a reservation is not needed. You may join for both the social hour and the speaker program, or just the speaker program. During the speaker presentation, the program host will mute your microphone (so as to avoid accidental disruptions); however, we suggest you also mute your camera to reduce bandwidth. A Q&A session will follow the presentation. During the presentation, click the **Chat** link at the bottom of the screen to type a comment or question to the general audience, or the **Raise my hand** link to directly ask the speaker a question or make a comment and the host will call on you.

Click on the **Zoom link** above to join the meeting

See [www.nwgs.org](http://www.nwgs.org) for the full Zoom information.

#### Upcoming Speakers and Field Trips

**Mar. 9:** TBA

**Apr 13:** Pat Pringle, Centralia College Emeritus, Dendrochronology cross-dating of the Bonneville Landslide

**May 11:** TBA

**Spring, 2021 Field Trip:** It is unlikely the world will be ready for us in time.

**Fall, 2021 Field Trip:** possible rescheduling of Sky Cooley's field trip to the Othello area.

If you would like to volunteer to give a talk or lead a field trip for NWGS, please contact President [Chris Kimmel](mailto:Chris.Kimmel).

Please see the [NWGS website](http://www.nwgs.org) for detailed announcements

Contact webmaster [Julie Masura](mailto:Julie.Masura) if you have any announcements to post on the website.

## Announcements

- Please see page 3 for a special announcement from Past President Katie Brower.
- **Membership dues** for 2020/21 are due now. If you paid for 2019/20, your dues will be rolled over to the upcoming year. To pay, go to <http://www.nwgs.org> or mail a check or money order NWGS. See **About NWGS** below for amounts and the mailing address.
- Please consider **volunteering** for the upcoming President-Elect vacancy.
- **Other Board positions:** please consider volunteering for one of the **At-Large Board positions** that will become available in 2021. For more information about any of the **Board position openings** (duties, time commitment, etc.) or to volunteer, please Contact President [Chris Kimmel](#).
- The **Tobacco Root Geological Society** (<https://www.trgs.org/>) (based out of Butte, MT) is planning an exciting field trip in the Pocatello, ID area, July 29-Aug 1, 2021, with Dave Pearson and Paul Link, in conjunction with their annual symposium at the ISU field station in Mackay, ID. All are welcome. See their website for details and registration.
- **Next Board Meeting:** Tues., Feb. 9, 5:30pm via Zoom.

**NWGS needs great people like YOU!**

## Photo Spotlight



*View of the Aucanquilcha Volcano (A) and surrounding cluster of volcanoes, northern Chile. View is looking west from Ollague Volcano. Photo by Todd Feeley.*

## 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 2<sup>nd</sup> Tuesdays, October through May. **Until we are able to meet in person again, meetings will be held via Zoom (see p. 1 or [www.nwgs.org](http://www.nwgs.org) for the link). Anyone may attend the speaker the speaker program at no cost, and a reservation is not necessary.**

**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. **(Suspended pending pandemic recovery.)**

**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](http://www.nwgs.org), or mail a check or money order to **Northwest Geological Society**, 4616 25<sup>th</sup> Ave NE #397, Seattle, WA. 98105. Please include your name, address, home phone, email, and employer/affiliation (if any).

Please visit [www.nwgs.org](http://www.nwgs.org) for more details.

## Recommended Readings

Walker B.J. Jr, **Grunder, A.L.**, and Wooden J.L., 2010, Organization and thermal maturation of long-lived arc systems: Evidence from zircons at the Aucanquilcha volcanic cluster, northern Chile. *Geology* v. 38, no. 11, p. 1007-1010, doi: 10.1130/G31226.1.

**Grunder, A.L.**, Klemetti, E.K., McKee, C.M., and Feeley, T.C., 2008 for 2006, Eleven million years of arc volcanism at the Aucanquilcha Volcanic Cluster, northern Chilean Andes: Implications for the lifespan and emplacement of batholiths, *Transactions of the Royal Society of Edinburgh: Earth Sciences* v. 97, p. 415-436.

Klemetti, E.K., and **Grunder, A.L.**, 2007, Volcanic evolution of Volcán Aucanquilcha, a long-lived, monotonous dacite volcano in the Central Andes of Northern Chile., *Bulletin of Volcanology*. 70: 633-650. DOI10.1007/s00445-007-0158-x.

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 [Chris Kimmel](#).

## NWGS Board

President	<a href="#">Chris Kimmel</a> Landau Associates
President Elect	Open Please Volunteer!
Past President	<a href="#">Katie Brower</a> Nelson Geotechnical
Secretary	<a href="#">Amy Knudson</a>
Treasurer	<a href="#">Pam Osterhout</a> Floyd   Snider
At-Large Board Members	<a href="#">Maura O'Brien</a> Retired <a href="#">John LaManna</a> Retired

## Other Personnel

Membership Chair	<a href="#">George Bennett</a> Bennett Consulting
Field Trip Coordinator	<a href="#">Kathleen Goodman</a> , Wood PLC
Editor & Publications	<a href="#">Tom Bush</a> Pierce College Puyallup
Poster Chair	Open
Webmaster	<a href="#">Julie Masura</a> Univ. of Washington
Facebook Pagemaster	<a href="#">Eric Baer</a> Highline CC

## Special Announcement from Past President Katie Brower

Dear NWGS members and friends:

Happy New Year! I sincerely hope you have been enjoying our monthly virtual meetings, and have been staying safe and well. As we've gotten comfortable with the online format for things, we certainly understand this type of meeting is rather convenient, but does lack much of the qualities, particularly socialization and formalities, that we had at our in-person meetings. It is my wish that we will be able to resume in-person meetings, and soon!

I am taking the opportunity to properly recognize a few of our volunteers. In our January meeting, the baton was rather unceremoniously passed as some of our board members have changed along with the New Year. I want to take a moment to give them a round of applause for their service, if only virtually.

First of all, I would like to celebrate the past Treasurer, George Bennett, who committed and served within the Board for over five years and has done a wonderful job. Thank you very much, George, for your service. George's position will be taken by Pam Osterhout of Floyd Snider. The Board welcomes her gladly as a new member.

Secondly, I would like to welcome Chris Kimmel of Landau Associates into the role of President, as I myself pass the position on to her in the New Year, and take on the role of Past President. I thank the organization for the opportunity to serve as President. Although my term certainly wasn't what I had hoped for with having to cancel so many events, and we didn't get an opportunity to hear my full lineup of speakers, I think overall, we have done well under the circumstances as we have gone through many changes together. I hope Chris's term will bring us through 2021, where we again (cross your fingers!) get to see one another at an in-person meeting.

I know many of our attendees have been on the Board at one time or another, so I want this message to stand for them as well. Thank you to all our previous and current board members and volunteers for your service!!

Thank you for your time and attention in reading and virtually recognizing these achievements. And again, please stay healthy and safe until we are once again able to venture out and do geology together!

Sincerely,

*Katie Brower*  
*NWGS Past President*

Editor's Note:

This last year was like no other in the history of NWGS. When Katie agreed to serve our fine organization as the 2020 President back in 2019, she, like the rest of us, had no idea what lay ahead. Katie's year as our President, as we all know, was full of challenges, disappointments, and major adjustments. Serving as NWGS president is supposed to be rewarding, but this last year was likely been anything but. With the support of the folks mentioned above and others, Katie handled the challenges with alacrity, diligence, and diplomacy. Like the others she mentioned, she deserves our recognition and gratitude for being an integral part of bridging the gap from the former "normal" to whatever new normal lays ahead. Thanks, so much, Katie, for your service and dedication to NWGS!

*--Tom Bush*  
*NWGS Newsletter Editor*