

**TOBACCO ROOT GEOLOGICAL SOCIETY 47th ANNUAL FIELD CONFERENCE
WENATCHEE, WASHINGTON, JULY 29th – 31st, 2022**



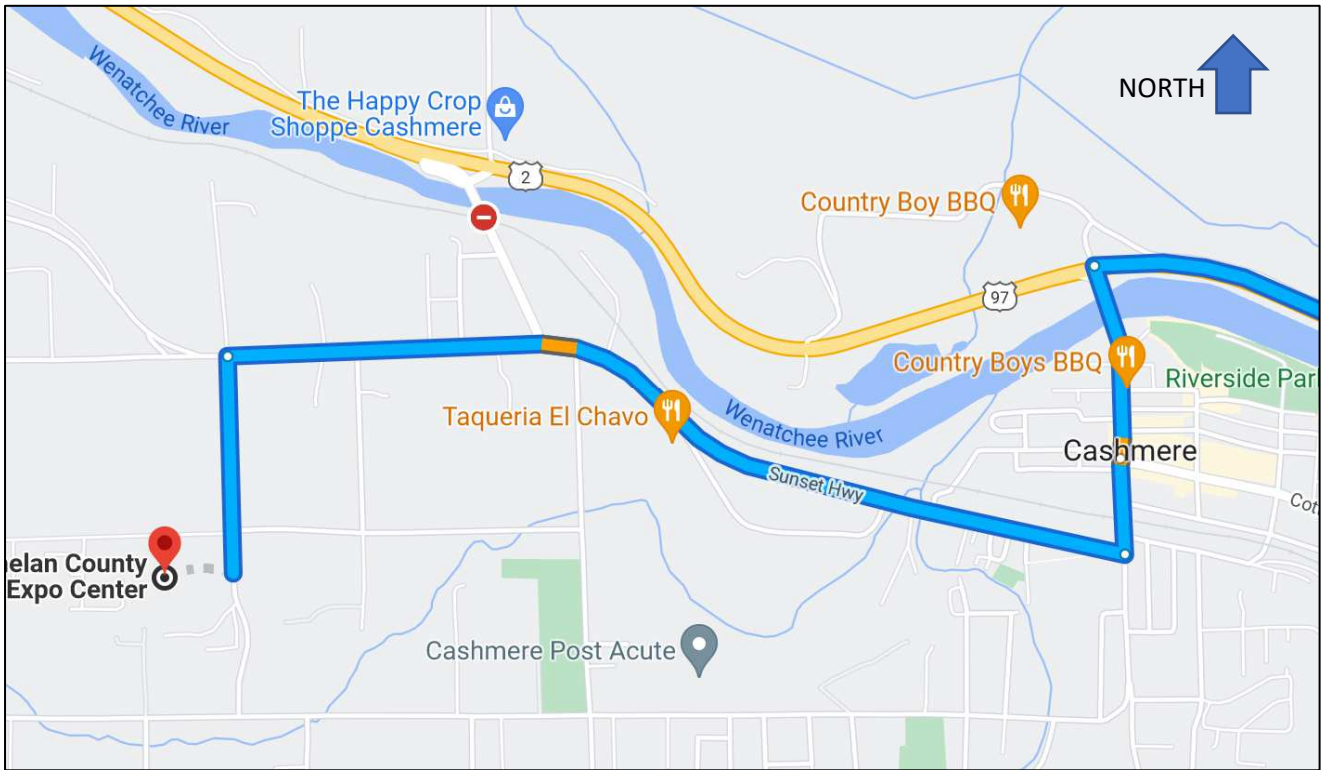
*The pinnacles that make up Saddle Rock, Wenatchee, WA are composed of Eocene volcanic rocks.
Photo by Ben Stanton*

Join us for the 2022 TRGS Field Conference in Wenatchee, WA. Central Washington has a wide diversity of geologic features, from landforms carved by glaciers and glacial outburst floods, to flood basalts of the Columbia River Basalt Group, to Mesozoic igneous and metamorphic rocks that make up the Stuart Range/western Wenatchee Mountains. If you'd like to volunteer or have questions, please contact Kelsay Stanton (kelsaystanton@gmail.com). Kelsay is our "point" conference organizer.

Meeting Location

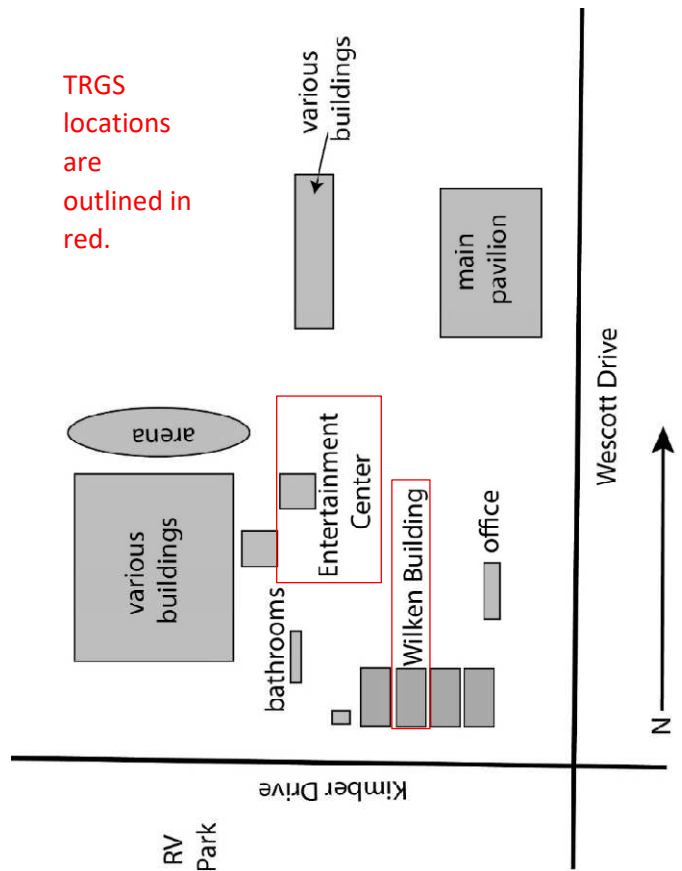
Our venue will be at the Chelan County Expo Center (5700 Wescott Drive, Cashmere, WA 98815). We'll host Friday morning talks and Saturday evening BBQ at the Wilken Building. Full day field trips will start at the Entertainment Building, where you can pick up your breakfast, lunch, and organize for the trips.

Directions: From Hwy 2/Hwy 97 going either west (from Wenatchee) or east (from Leavenworth) turn south onto Aplet's Way into the town of Cashmere. At the traffic circle continue south and cross the railroad tracks. Turn west onto Sunset Hwy. Turn south onto Wescott Dr. Turn west onto Kimber Drive and south into the RV Park. The Expo Center is north of the RV park across Kimber Drive.



Detailed map of Expo Center and RV Park approximate location. Note that the TRGS will use the Wilken Building as well as the Entertainment Center. FC registration/check in will start Thursday July 28th ~4p.

We've reserved 50 campsites at the Expo Center RV park (across the street from the main fairgrounds). These are blocked out so all TRGS folks can be camping together. RV park has water/electricity hookups as well as showers/bathrooms. **DO NOT RESERVE USING THE COUNTY ONLINE SYSTEM.** If you'd like to receive our group rate of \$22 per night, please call the main office (tel #: [509-782-3232](tel:509-782-3232)) to reserve your spot. Tell them you are with the Tobacco Root Geological Society. When you arrive, you will pay the main camp host and they will direct you to the TRGS area. There is not an option for no hookups, unfortunately. Normal prices are ~\$30 per night. Alcohol can be consumed in the RV park.



If you'd rather try to find your own camping, there are multiple camping areas in Leavenworth and Wenatchee but summer is prime tourist season so reserve your sites ASAP. Here are a few options:

Lake Wenatchee State Park

Eightmile Campground

Bridge Creek Campground

Confluence State Park

....many others – just search for camping in Wenatchee or Leavenworth.

There are limited free campsites in the area. Search maps for Forest Service land but beware that access is not always easy or is across private land.

If you prefer to stay in a hotel, there are numerous options in the region but again, note that this is prime tourist season and reserve sooner rather than later!

Overview:

The TRGS meeting format is informal and begins on Friday morning with invited talks, followed by half-day field trips on Friday afternoon. Saturday and Sunday have full-day field trips. On-site registration is available Thursday evening between ~4-7p and on Friday morning between 7a-9a.

An informal poster session will begin Friday morning; posters may remain hanging through Sunday morning. We encourage posters to be on display at least through the Saturday evening BBQ event.

Breakfasts can be purchased Friday, Saturday, or Sunday for \$10 each. This is with online registration only and we cannot guarantee breakfasts for onsite registration.

Lunches will be provided with field trip registration. Please check the box on the registration if you need a vegetarian option.

Friday and Sunday dinner will be on your own.

There will be a BBQ dinner on Saturday evening provided by RRShack, with beer provided by Blewitt Brewery. Dinner may be purchased for \$25.

We will supply drinks, including soft drinks and water, for the field trips.

Transportation to various field sites will be by small group or individual private vehicle. Some field trips have rough roads or have limited parking. We encourage individuals to carpool when possible and according to individual comfort level.

Washington State does not currently require masking except in health care/correctional facilities. Please be aware that this mandate may change depending on COVID transmission rates.

2022 WENATCHEE CONFERENCE SCHEDULE

Thursday, July 28th, 2022

~4p-7p **On-site registration** at Entertainment Center (see map above), Chelan County Expo Center, 5700 Wescott Drive, Cashmere, WA.

Friday, July 29th, 2022

~7a-9a **On-site registration** at Entertainment Center (see map above), Chelan County Expo Center, 5700 Wescott Drive, Cashmere, WA.

~7a **If you ordered breakfast** pick it up at the Entertainment Center starting around 7a.

Join us at the Chelan County Expo (5700 Wescott Drive, Cashmere, WA 98815), Wilkens Building (see map above), for talks from 8:30a to ~12p. Talks will range from 20-30 min with ~5 min for questions.

8:30a Welcome and schedule

8:40a Awards and scholarships

9:00a Kelsay Stanton – Overview of north central Washington geology

9:30a Eric Cheney – Rise of the Cascade mountain range

10:00a Brent Cunderla – Glacial outburst floods in north central Washington

10:30a Ralph Dawes – Subglacial and proglacial landforms of the Okanogan Lobe of the Cordilleran Ice Sheet: An assessment of competing models.

11:00a Jeffrey H. Tepper, Audrey V. White, and Ralph L. Dawes – Petrology and Tectonic Setting of Eocene to Miocene Magmatism Near Wenatchee, Central Cascades, Washington

11:35a review posters, pickup sack lunches, prepare for field trips

Half-day field trips – Field trips start around 12p (after talks). Each registration includes a sack lunch.

A1. Kelsay Stanton – Glacial geology of Icicle Creek. ~2 miles of easy to moderate hiking total, most of which will be in direct to partial sun on a trail.

A2. Eric Cheney – Geospectaculars along State Rte 28 from East Wenatchee to Lynch Coulee. Roadside trip with minor walking.

A3. Chris Mattinson – Chelan migmatite complex: mafic magmatism and crustal recycling at the deep levels of a continental magmatic arc. Roadside trip with minor walking.

A4. Ralph Dawes and Jeff Tepper – Geology of the Wenatchee Pinnacles. 4 miles round trip of moderate hiking in direct sun on a trail.

Friday night dinner will be on your own. Check out nearby Leavenworth or Wenatchee for LOTS of restaurant/brewery options if you want to eat out.

Saturday, July 30th, 2022

~7a If you ordered breakfast pick it up at the Entertainment Center starting around 7a.

~8a All field trips leave from the Entertainment Center, Chelan Co Expo Center (see maps and address above) and include sack lunch with registration. Pick up your lunch and check in at the Entertainment Center before 8a.

B1. Skye Cooley – Calcrete in the Channeled Scablands, Yakima Fold Belt, and Palouse Hills. Includes minor walking at most stops and a 2-mile hike at one stop.

B2. Brent Cunderla – Ice age floods features from Moses Coulee to Dry Falls and glaciation of the Waterville Plateau. Roadside trip with minor walking.

B3. Ralph Haugerud and Kelsay Stanton – Lithology and structure of sedimentary rocks comprising the Eocene Chumstick Formation. Roadside stops with minor walking. Includes dirt roads requiring moderate clearance vehicles.

Saturday night starting ~6p we will have a BBQ at the Wilkens Building! Bring your own chair.

Sunday, July 31st, 2022

~7a If you ordered breakfast pick it up at the Entertainment Center starting around 7a.

~8a All field trips leave from the Entertainment Center, Chelan Co Expo Center (see maps and address above) and include sack lunch with registration. Pick up your lunch and check in at the Entertainment Center before 8a.

C1. Ralph Dawes – Big ice and big water: questioning the Pleistocene geomorphology of the Okanogan Lobe landscape. Roadside trip with minor walking

C2. Kelsay Stanton and Ralph Haugerud – Wenatchee, Washington area mineralization, in context: untangling the Cenozoic structural story. Includes ~3 mile hike with little shade on and off trail, with some uphill.

C3. James McDonald, Joe Dragovich, and Peter Davis – Field Geology of the Hicks Butte complex and Easton Metamorphic Suite: a record of Jurassic and Cenozoic tectonism in the central Cascades, Washington. Roadside trip with minor walking.

Sunday dinner will be on your own again! Enjoy and have a fun, safe trip home (if you have time, check out Palouse Falls, Dishman Hills, or Banks Lake if you're headed east. Check out Icicle Creek, Lake Wenatchee, or the hikes out of the Teanaway River drainage if you're headed west).

REGISTRATION

Registration for the meeting includes a hard copy of 2022 Northwest Geology, edited by Kelsay Stanton.

Questions about the field conference, accommodations, or volunteering should be sent to Kelsay Stanton (kelsaystanton@gmail.com). Additional conference information may be posted on the TRGS webpage (<http://trgs.org>) or the TRGS Facebook page.

REGISTER BY MAIL: Complete the enclosed registration form and pay by check (**postmark by July 13**). Send to: Tobacco Root Geological Society, P.O. Box 118, Butte, Montana 59703-0118.

REGISTER ONLINE*: **Online registration opens on June 1 at www.trgs.org.** After registration opens, complete the [online registration form](#)* and send a check for registration fees to Tobacco Root Geological Society, P.O. Box 118, Butte, Montana 59703-0118 pay by PayPal. Please be sure to print your completed registration form before you submit your responses. Please complete the online registration form **no later than July 20**.

***Online registration is the preferred method of registration for accurate attendee contact information, trip registration, and meal selection.**

Reminder: Breakfasts are only available with on-line registration.

All field trip participants, including leaders, must register for the conference. Field trip leaders do not need to pay for the field trip(s) they are leading. Friday, Saturday, and Sunday. Field trip registration includes a lunch. Please note that there are two places on the form where you can contribute to the scholarship fund of the TRGS – by purchasing a conference T-shirt or by making a direct contribution to scholarships.

MAIL-IN CONFERENCE REGISTRATION FORM

Please send form with check made out to Tobacco Root Geological Society to:

Tobacco Root Geological Society, P.O. Box 118, Butte, Montana 59703-0118

Attendee Name: _____

Attendee Address: _____

Phone: (____) _____

Email: _____

	No.	Amt. Paid
Conference Registration		
1. Professional \$ 65		\$
2. Student \$ 35		
Meals <i>Breakfasts guaranteed only with on-line registration!</i>		
		\$
Breakfast Friday Morning \$10.00		\$
Breakfast Saturday Morning \$10.00		\$
RRShack BBQ Dinner Saturday Night \$25.00		\$
Breakfast Sunday Morning \$10.00		\$
FIELD TRIPS: A = Friday, B = Saturday, C = Sunday. \$15/trip, includes a sack lunch		
Vegetarian lunch? Y <input type="checkbox"/> N <input type="checkbox"/>		
Trip A1: Glacial geology of Icicle Creek (Stanton)		\$
Trip A2: Geospectaculars along State Rte 28 from East Wenatchee to Lynch Coulee (Cheney)		\$
Trip A3: Chelan migmatite complex: mafic magmatism and crustal recycling at the deep levels of a continental magmatic arc (Mattinson)		\$
Trip A4: Geology of the Wenatchee Pinnacles (Dawes and Tepper)		
Trip B1: Calcrete in the Channeled Scablands, Yakima Fold Belt, and Palouse Hills (Cooley)		\$
Trip B2: Ice age floods features from Moses Coulee to Dry Falls and glaciation of the Waterville Plateau (Cunderla)		\$
Trip B3: Lithology and structure of sedimentary rocks comprising the Eocene Chumstick Formation (Haugerud and Stanton)		\$
Trip C1: Big ice and big water: questioning the Pleistocene geomorphology of the Okanogan Lobe landscape (Dawes)		\$
Trip C2: Wenatchee, Washington area mineralization, in context: untangling the Cenozoic structural story (Stanton and Haugerud)		\$
Trip C3: Field Geology of the Hicks Butte complex and Easton Metamorphic Suite: a record of Jurassic and Cenozoic tectonism in the central Cascades, Washington (McDonald, Dragovich and Davis)		\$
Field Conference T-shirt, please specify number and size, \$15/each		\$

TOTAL CONFERENCE FEES \$ _____

DONATIONS (Optional)

Complete this portion of the registration form if you wish to **MAKE A DONATION** to the TRGS Scholarship fund. PLEASE SPECIFY ALLOCATION(S) BELOW.

<p>TRGS Scholarship for field-based projects in the northern Rocky Mountains. Preference given to mapping projects in Montana, Idaho, and northern Wyoming. Based in part on need, the scholarship is expected to be used for field expenses.</p>	\$
Please indicate: to grow the TRGS endowment _____ OR to spendable funds _____	
<p>Belt Association Scholarship. (This is not an endowment; all contributions are spendable.) Funds are available to support field-based student projects in the Belt Supergroup or correlative strata.</p>	\$
<p>Harrison Scholarship In memory of Jack Harrison and made possible by a generous endowment from Jack to the TRGS, awards go to students working on any project involving Precambrian rocks. Based in part on need, this award can only be used for field expenses.</p>	\$
Please indicate: to grow the Harrison endowment _____ OR to spendable funds _____	
<p>Foster Scholarship (This is not an endowment; all contributions are spendable.) Given in memory of Michael Thompson Foster, to students, researchers, or explorationists who best exemplify the prospector ethic. Criteria are a demonstrated interest and ability in mineral exploration, field research, or economic pursuits which advance our knowledge of mineral commodities and public commitment to responsible mining. Supported by generous grants from Rob Foster and additional donations.</p>	\$
<p>M. Dean Kleinkopf Scholarship (This is not an endowment; all contributions are spendable.) Given in memory of Dean Kleinkopf, for geophysical and geologic investigations in the northern Rocky Mountains. Supported by an initial grant from Nancy Kleinkopf and additional donations.</p>	\$
<p>The Betty Skipp Research Award for Field Studies in the Rocky Mountains (This is not an endowment; all contributions are spendable). Given in honor of Betty Skipp, to women M.S. or Ph.D. students for research with a significant component of original geological fieldwork in Idaho, Montana, Utah, Colorado, or Wyoming. If funds are sufficient, men may also be supported.</p>	\$
<p>Unrestricted</p>	\$

TOTAL DONATION \$ _____

TOTAL AMOUNT ENCLOSED (Conference + Donation) \$ _____

** Please submit payment by check with this registration form**