



2022 Canadian Tectonics Group Field Trip and Workshop

Field Trip: Friday September 23rd to Sunday 25th Workshop: Virtual, Saturday October 1st

Field Trip Leader: Dave Pattison and grad student helpers, U. Calgary , Dave Pattison, <u>pattison@ucalgary.ca</u> Field Trip Logistics Coordinator: Benjamin Neil, U of A, PhD Candidate, <u>bneil@ualberta.ca</u>, 587-643-7679 Workshop Coordinator: Mo Snyder, Acadia University, Mo Snyder, <u>morgan.snyder@acadiau.ca</u>

3 Day Field Trip: Geology and tectonics of the Foreland and Omineca belts of the southern Canadian Cordillera, SW Alberta and SE British Columbia

Sponsored by the Cordilleran Section GAC

This field trip will give participants an overview of some of the key geological/tectonic elements of the southeastern portion of the Canadian Cordillera: stratigraphic, structural, metamorphic and tectonic. The field trip starts and finishes in Calgary and goes as far west as Castlegar, BC. Geologically, the field trip starts in the Interior Platform, just east of the Cordilleran deformation belt, and traverses the Foreland belt and part of the Omineca belt. More details on the elements to be seen are provided in the itinerary below. The field trip is based on Days 1 to 4 and 8 of a 2020 field guide to the geology and tectonics of the southeastern Canadian Cordillera.

Dates: Friday – Sunday September 23 – 25, 2022

Departure time: Friday, September 23, 2022 07:30 (aim to arrive 15 minutes in advance)

Meeting place: University of Calgary - bus/passenger bump-out on the south side of the Energy, Environment and Experiential Learning (EEEL) building, between the cross walk and the entrance to Parking Lots 20 and 22 on Campus Drive NW. The EEEL building is directly SE of the intersection between EW-trending 32nd Ave NW and Campus Drive, and is across Campus Drive from the Earth Sciences (ES) building. Look at p. 2 of the <u>campus map</u> or zoom in on: https://www.ucalgary.ca/ancillary/parking/parking-permits/find-parking.

End time: Sunday, September 25 ~14:30

Drop off locations: 1) Calgary International Airport, followed by 2) University of Calgary pick-up location (above).

Cost: Student: \$650 Professional: \$875

Enrollment cap: 35 people





Included in cost:

- Transportation by motor coach with toilet; professional driver
- Two night's accommodation Friday/Saturday (September 23/24) Shared double room at the Heritage Inn in Cranbrook, BC: <u>https://heritageinn.net/locations/cranbrook-bc/home</u>
- Meals: Friday Lunch+Dinner; Saturday Breakfast+Lunch+Dinner; Sunday Breakfast+Lunch. Vegetarian options available (select at registration)
 *Beverages included in breakfast and lunch, Water/Juice/Snacks during the day
 *Please inform Ben (<u>bneil@ualberta.ca</u>) of any Allergies/ Dietary restrictions upon registration (earlier preferred)
- Workshop attendance (below)

Not Included in cost:

- Meals: Friday breakfast; Sunday dinner
- Beverages for dinner
- Field trip guide, this can be downloaded and printed from: <u>https://prism.ucalgary.ca/handle/1880/112712</u>

It is highly recommended to bring a copy of the field guide (printed, or on digital device), as all stops and maps to be shown on the field trip come from the guide. A few copies will be available for borrow, but not enough for everyone.

*Field guide can be printed for you at a cost of \$10 (select at registration)

Tentative itinerary:

Day 1 – F Sep 23, 2022 - Calgary to Cranbrook via Kimberley (07:30 - 18:00; 440 km)

Interior Platform, Foothills, Rocky Mountain fold-thrust belt (Front Ranges, Main Ranges), Kicking Horse Rim facies break, Rocky Mountain Trench, Purcell anticlinorium, Matthew Creek metamorphic zone **Stops from field guide** (see list of stops in Table of Contents of field guide, and their location on Fig. 5 of field guide): 1-1, 1-4, 1-8, 1-9, 1-11, 1-16, 2-1, 2-2.

Day 2 – Sa Sep 24, 2022 – Cranbrook to Castlegar via Creston & Salmo, & return (07:30 - 18:30; 460 km) *Purcell Trench normal fault, northern lobe of Priest River complex, Cryogenian Toby conglomerate, Kootenay arc, Quesnellia, overview of Valhalla complex* **Stops from field guide:** 2-0a, 4-1, 4-3, 4-6, 4-8, 4-10, 4-12, 8-1, 8-2.

Day 3 – Su Sep 25, 2022 – Cranbrook to Calgary (07:30 – 14:30 at Calgary airport; 425 km) Drive back to Calgary, with possible breaks at: Columbia Lake overview, Kootenay River overview, Vermilion Lakes/Mt. Rundle overview (the last not in field guide but ~ the same as Stop 1-8) Stops from field guide: 1-17a, 1-14, ~1-8.

*High-visibility vests and hard hats will be provided

Registration: *Link here* Registration opens: August 1, 2022 Registration deadline: September 9, 2022





1 Day Virtual Workshop

Please join us virtually, on Saturday October 1, 2022, for the annual Canadian Tectonics Group Workshop! We encourage all CTG members to attend as this will be held separately from the field trip.

Cost: Free to field trip participants, free for students, and \$20 for professionals.
Platform: Zoom
Talk Timeslot: 20 minutes, with an additional 5 minutes for questions and change over.
Posters: 1 hour in a breakout room with participant moving from multiple poster rooms.
Registration Deadline: September 9, 2022 to submit either a talk or poster abstract.

Abstracts should be submitted to <u>morgan.snyder@acadiau.ca</u> in 12 point, Times New Roman font, be 300 words or less, double spaced, and contain no references.

Please send any questions about the virtual workshop to Mo Snyder at morgan.snyder@acadiau.ca

Thank you in advance for your participation! We look forward to seeing you at this years CTG!