

TATLAYOKO FIELD STATION



SUMMER UPDATE 2022

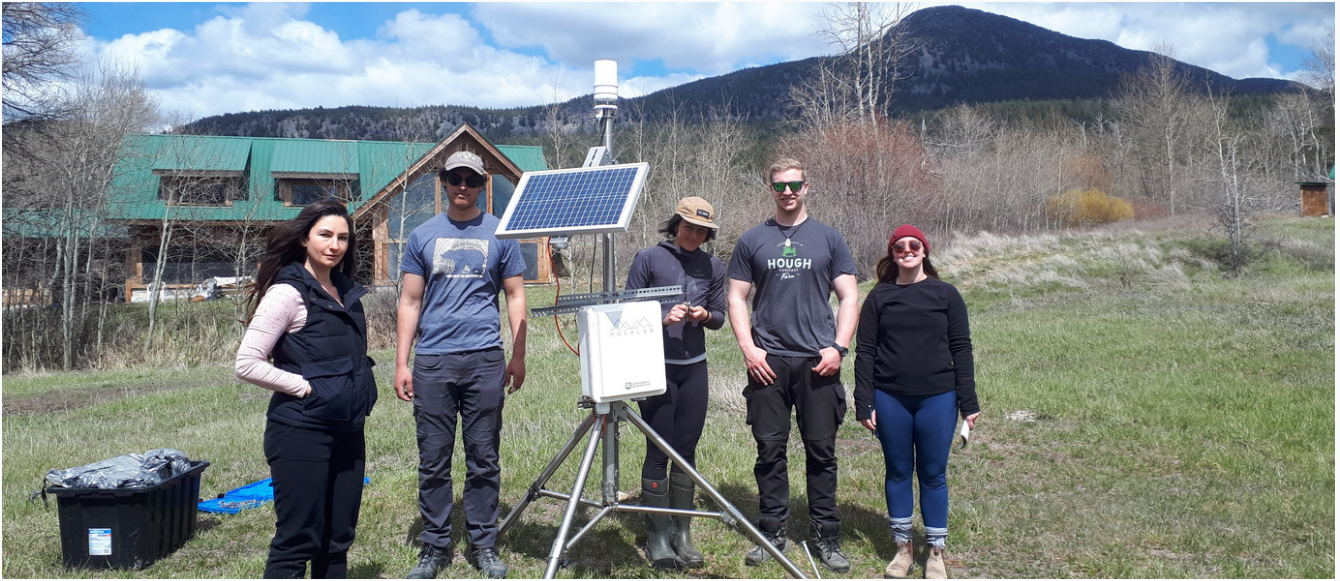
Tatlayoko Field Station Society (TFSS) has had a very successful year.

We've expanded our local programming, hosted our first group of university student researchers, and achieved registered charity status.

Here is a brief accounting. If you have comments or suggestions, please contact us: info@tatlayokofieldstation.org

INSIDE OUR NEWSLETTER:

- UNBC FIELD SCHOOL AT TFS
- HUMMINGBIRDS
- TATLAYOKO LAKE BIRD OBSERVATORY
- NATURE DAYS
- CHILCOTIN LOCALS FILM FESTIVAL
- FUNDRAISING
- THANK YOU
- LOOKING AHEAD
- LAST DETAILS



UNBC FIELD SCHOOL AT TFS

In early May the Tatlayoko Field Station hosted the University of Northern BC Physical Geography Field School for several days. This was the first time the UNBC Field School has visited the Chilcotin, and, what's more, this was the first time university students have used the facilities at the Field Station.

It was great to have the students and their teachers here with all their energy and enthusiasm. With meteorological equipment and sensors set up in the yard, and people bustling everywhere, it was easy to envision how the Field Station will be in future seasons.

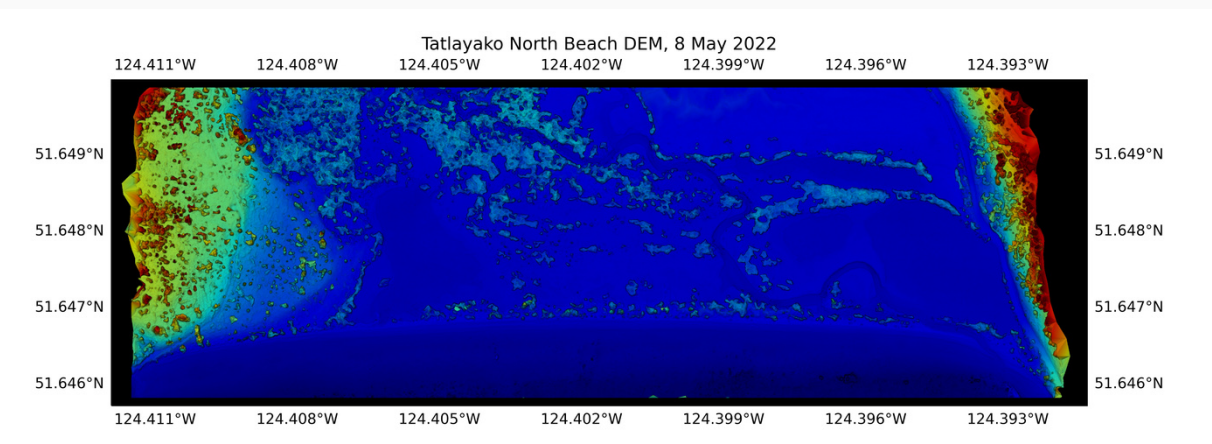
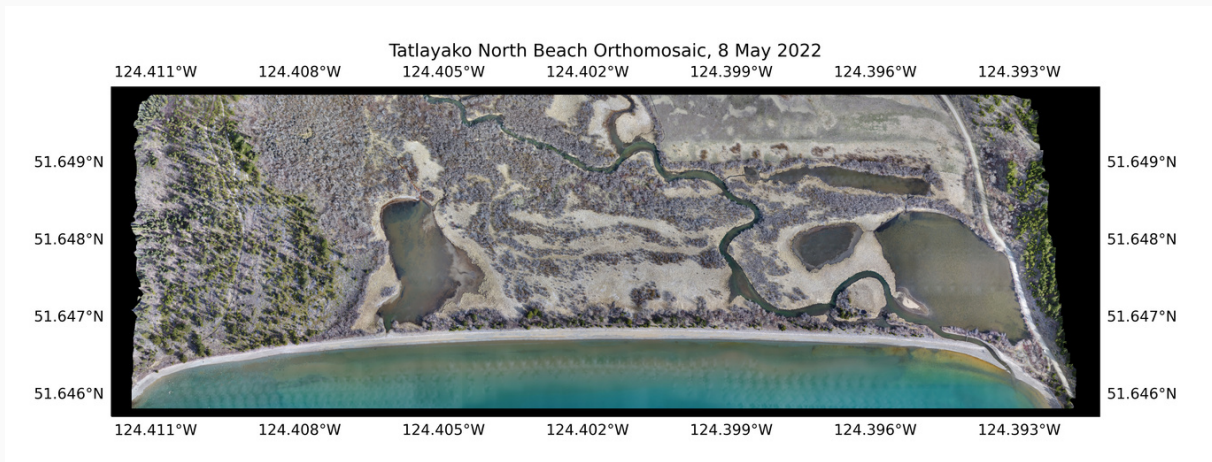


The focus of this year's Geography Field School was on glacier landscapes and snowmelt. The group spent their first week visiting glaciers high in the Rockies, and their second week here in the valley at Tatlayoko.

Here is a selection from Professor Joseph Shea's report:

At the field station, the crew installed an automatic weather station, and then proceeded to place temperature sensors in the ground and in the Homathko River at different locations. Snow melt (and ice melt in glacierized basins) keeps rivers cold well into the summer. And while we didn't really get summer-like weather, the students were able to observe how gauging site stream temperatures at the surface and at the bed were nearly identical due to the mixing of the waters. Stream temperatures at the outlet, however, were warmer and showed large differences between the surface and at depth due to the shallow pond immediately above Tatlayoko Lake.

Two surveys of the area were conducted with a remotely piloted aircraft system (RPAS, aka drone) - the goal here was to collect overlapping air photos from above, stitch them together into a mosaic, and produce a digital elevation model (DEM) of the surveyed areas. During the field school, the students learned how to interpret glaciated landscapes, and the Tatlayoko Valley is a fascinating place to study! The DEMs taken on the shore of Tatlayoko lake seem to suggest that lake levels were higher in the past, probably as the great ice sheets that covered the area melted between 10,000-20,000 years ago.



HUMMINGBIRDS

Also in May we had a visit by hummingbird bander Barry Lancaster. Every spring for many years Barry has spent approximately a week at Tatlayoko banding hummers. He does his banding at several sites, including the Travers, Harris, Circle X, and Lincoln Creek ranches, and at Shaughnessy's home.

Weather is always a factor, and this year's cold spring was no exception. Nevertheless, Barry captured and banded 40 Rufous Hummingbirds in total over a period of 5 days. Circle X Ranch was the most productive site, by far, with 26 of the birds banded at that location. As a reference, in 2021 Barry banded 135 hummers, the most ever in a single season.

Barry also recaptured and released a total of 10 rufous hummingbirds. Half of those recaptures were banded in 2021.

Barry has developed a simple but very practical hummingbird trap consisting of a circular net surrounding a suspended feeder. Birds can enter from either the top or bottom. Once a bird is caught, Barry records its species, age, sex, and weight, then takes several morphometric measurements before attaching a tiny leg band with a unique number. Barry plans to write a report in the near future summarizing all his banding results.

The photo is of a juvenile male calliope hummingbird, taken in Barry's yard in Oliver. Calliope's are present at Tatlayoko, but in much lower numbers than Rufous hummingbirds.



TATLAYOKO LAKE BIRD OBSERVATORY

TFS FLAGSHIP PROJECT

The Tatlayoko Lake Bird Observatory 2022 banding season is well underway. The banders arrived in the valley on the last day of August, and by the time you read this, they will have been at work for more than a month.

Bander-in-charge this year is Sachi Dell; Assistant Bander is Sachiko Schott. Sachi has been Assistant Bander for several previous seasons. Sachiko is new to TLBO, but has extensive banding experience at a number of other banding stations around Canada. Last season she was at the Lesser Slave Lake Bird Observatory in Alberta. Avery Bartels, who has been Bander-in-charge for many seasons, is spending this summer in Whitehorse and remains the TLBO lead.

Monitoring and banding efforts at the TLBO focus primarily on both resident and migratory songbirds, such as Warbling Vireos, Yellow-rumped Warblers, American Pipits, Ruby-crowned Kinglets, and Dark-eyed Juncos. Beginning in September, the banders add owl banding to the repertoire, with a focus on the little Northern Saw-whet Owls.

TLBO remains the flagship project of TFSS and consumes the bulk of our organizational and fund-raising efforts. 2022 is the 16th season for TLBO, and the second season entirely operated and fund-raised for by TFSS. Director Peter Shaughnessy is our TLBO coordinator, ably assisted by Secretary/Treasurer Sandra McGirr and Avery Bartels. Sachi and Sachiko are paid contractors, assisted by numerous volunteers who come here from elsewhere in Canada and the US.



The TLBO's first rose-breasted Grosbeak! The yellow underwing identifies this Rose-breasted Grosbeak as a female; males have pink underwings.

Last season we were able to establish a MOTUS tower – a wildlife tracking system using radio telemetry – and to participate in a joint Saw-whet owl banding project with Vancouver Island University and Rocky Point Bird Observatory. MOTUS tags are quite expensive, and our quota was less than a dozen. “Our” owls have since been located at Kamloops, Merritt, and at Nanaimo, which is quite exciting, and also a bit amazing, given the small number of owls actually tagged. This year we won’t do additional MOTUS tagging, but we plan to continue in future years as funding permits. See our 2021 Summer Update for a fuller description of MOTUS, or visit the MOTUS website (<https://motus.org>).

Special thanks go to Michal Smialowski, who allowed us to put our MOTUS antenna on his radio tower on Skinner Ridge, and who has since developed a system that allows us to download data at a distance without having to physically go up to the tower.

Don’t forget to visit the TLBO blog: tatlayokobirds.wordpress.com

Sachi and Sachiko write new and very interesting entries every day.



NATURE DAYS

TATLA LAKE SCHOOL AT TFS

The Field Station's Nature Days program (formerly Nature Fridays) is offered during the school year from September to June. During the 2021/2022 school year, four Nature Days events took place for students of the Tatla Lake Elementary-Junior-Secondary school.



In September students visited the Tatlayoko Lake Bird Observatory to experience bird observation techniques, bird banding, data collection, and to learn about bird migration.

In November Dancing Water Sandy from School District 27 shared her Indigenous knowledge of food and medicinal plants with the students. Students made their own healing Pine Pitch salve to take home.

A wintry Nature Day was held at the Field Station in December. Students learned about animal and human survival in extreme environments and the adaptations needed.

Bryant Race led a "Wild and Immersive Program" at April's Nature Day event. This program incorporated outdoor education, natural science, environmental stewardship, creative expression, problem solving, and team building.

For the 2023 season, the Tatlayoko Field Station is proposing to hire a Program Designer and Educator to prepare two full-day nature programs focused on 'Water and Wetlands'. We hope to offer the courses in both spring (April and May) and fall (September and October). It's our hope that exposure to the same materials during the two seasons will deepen student knowledge of the subjects.



CHILCOTIN LOCALS FILM FESTIVAL

AT LINCOLN CREEK RANCH HOUSE

The first event of the season took place on September 10 with a mini film festival featuring the work of three young Chilcotin videographers.

First up was a film by Niall Hart, "Where Do We Stand?", with its nuanced discussion of the pros and cons of a proposed LNG project at Squamish. Keith Koepke followed with a collection of beautiful and interesting photos of his Xeni Gwet'in home, accompanied with an equally special commentary. The feature film was Trevor Mack's superb "Portraits from a Fire", filmed at Tl'etinqox with local actors and crew. Who knew we had such talent in the Chilcotin?

The festival was well-attended (38 attendees) and there was ample room in the Ranch House for everyone. This was a first public gathering of this type for the Field Station.

We were very honoured to have Trevor, Keith, and Niall share their work and ideas with us. A most enjoyable and interesting afternoon and evening at the Field Station.



FUNDRAISING

CHARITY STATUS

As reported in the 2021 Summer TFSS applied some time ago to the Canada Revenue Agency for status as a charitable organization. We received notice in June that our application was successful. This is an extremely important milestone for TFSS. Charity status will open many fund-raising possibilities formerly unavailable to us, as many grant-givers accept applications only from charitable organizations.

TLBO 2022 BUDGET

This year's TLBO budget is approximately \$23,000, up \$1600 from last year's budget. As of this writing, we have raised \$21,500, so we still have a bit more fundraising to do. This year we put up a donation box and accompanying sign at the Banding Lab. If you know of possible sources of funding, please let us know, and please consider making a donation yourself.

AUDIO-VISUAL EQUIPMENT

TFSS received a generous grant from the Tatla Resource Association for the purchase of audio-visual equipment, and we now have a beautiful new 4K projector and a 10-foot screen. Both had their first trial at this past weekend's film festival and worked well. They will be available for future programs and meetings to be held at the Field Station.

GAMING GRANT APPLICATION

We recently applied to the province of BC for funding under the Gaming Grant program. The focus of our application is on support for two TFSS programs – TLBO and Nature Days. Sandra McGirr was the principal writer for the application.

After an organization has received a grant under this program, many of them receive annual renewals. Rocky Point Bird Observatory near Victoria is an example. If we are successful this year, we are hopeful that Gaming Grants might become a continuing source of funding for both TLBO and Nature Days. Notification of results of the application will come in November.

THANK YOU

We are very grateful to the many individuals and organizations that contribute time, money, and energy to TFSS. Our TLBO and Field Station projects simply would not be happening without the encouragement and involvement of so many people.

To name a few recent contributors: all eight of the TFSS directors, in particular Peter Shaughnessy, Sandra McGirr, Fritz Mueller and Sandy Hart; Avery Bartels; Michal Smialowski; Barb Pryce at Nature Conservancy of Canada; Andrea Brot; Meshach Emke; Sachi Snively; Sachiko Schott; numerous TLBO volunteers; Rod De Leeuw; Tatla Lake and Area Community Association; and many others, including Gabriel Cadieux, a Canada Revenue Agency analyst who voluntarily helped us re-phrase the purposes of our Society so that we would qualify for Charitable Status. Apologies to those whose names we might have missed. You're all important.

DONORS 2022

A very special group to whom we are most grateful:

Anonymous
Canadian Wildlife Service
Tatla Resource Association
Michael Lancaster
Cariboo Regional District
Jorg and Hannelore Fischer
Charles and Ruth Travers
Calypso Environmental Services
Avery's Birdathon
Sachi's Birdathon
John Snively
Otter Books
Peter and Roma Shaughnessy
Hana Kamea
Nellyda Anslow
Eileen Dell

A very sincere Thank You to everyone.



LOOKING AHEAD

AGM IN NOVEMBER

This year's AGM will be held in November at the Field Station. Elections for four of eight directors' positions will be held, including for the president's position. Announcements will be sent out in October. A date has not yet been set.

TFS RESEARCH PROGRAM and SCIENTIFIC ADVISORY PANEL

We would like to begin discussions this fall in regard to the TFS Research Program – what it is, how we will develop it, how we will fund-raise for it, where to begin.

These discussions are likely to be lengthy and detailed, but hopefully lots of fun too. This is at the heart of the Field Station's work. We will be trying to set both short- and long-term goals for the research program, and at the same time give direction to our fund-raising efforts. As part of this, we will reach out to possible partners (universities, scientists, other research groups, field stations, etc). We will also give consideration to the possibility of establishing a Scientific Advisory Panel.

Our thinking for some time has been that the TFS research program will eventually have three major components: monitoring; research projects sponsored by TFS; research projects sponsored by an outside group but hosted by TFS. The three components are not mutually exclusive, and, in fact, overlap is desirable. One of our tasks as program designers will be to explore ways to get maximum synergy from our research and monitoring projects. Fortunately, we won't need to re-invent the wheel, as there are many models out there to emulate. Our goal will be to develop a research and monitoring program that fits the ecology of our area as well as the capabilities of our group.

For those who might be interested, here are some links to check out:

- [Greater Yellowstone Inventory and Monitoring Network](#)
- [Ecological Monitoring and Assessment Network](#)
- [Long Term Ecological Research](#)
- [International Long Term Ecological Research](#)
- [Global Observation Research Initiative in Alpine Environments \(GLORIA\)](#)
- [National Ecological Observatory Network \(NEON\)](#)
- [Wildlife Conservation Society Canada](#)

If you would like to participate in the discussions this fall, please let the Directors know. All members are welcome. Notice of the first meeting will be sent out soon.

NATURE EVENINGS AND NATURAL HISTORY BOOK/MOVIE CLUB

Now that covid restrictions have lessened, and now that much of the foundational infrastructure for TFSS is in place, we would like to have more events at the Field Station for members to attend. Ideally, some sort of event would happen at the Field Station every month.

Accordingly, we would like to get underway this fall with our long-talked-about Nature Evenings. We have not yet created a program, but if you are interested in helping develop one, or if you have suggestions for possible Nature Evenings' topics, please contact one of the Directors. Speakers, movies, special events—all of these are great possibilities. The recent Chilcotin Locals Film Festival is a good example. We hope to have a Nature Evening every second month.

Also, at a recent Directors' meeting, several people expressed interest in creating a book/movie club devoted to natural history topics. If other members are interested, this is a second program that we would like to undertake. Meetings could take place at the Field Station every second month, alternating with the Nature Evenings program.

Both the Nature Evenings and Book Club programs are meant to be fun and informative, not stressful. If these sound like good ideas to you and/or you would like to participate, please let the Directors know.

LAST DETAILS

MEMBERSHIP

We currently have 22 voting members and 36 associate members. Please don't forget to renew.

HEAT FOR LCRH

We've learned the hard way how inadequate the heating system in Lincoln Creek Ranch House is. This year we plan to install a supplementary system, but we've yet to decide exactly what it might be. Since we don't own the building and don't want to invest in an extensive upgrade at this time, supplementary heat will likely need to come from some sort of portable heater (or heaters), operated either with propane or electricity. Thoughts? We welcome any advice or suggestions.

OH-OH

It's that time of year again. Leaves are starting to turn, there's a cool edge to the warm days, and the Field Station needs firewood. Anyone want to donate a pickup load? Or two? Or organize a work bee?

Hope to see everyone at the Field Station soon.