# 2024 Youth Day Programs Churchill Northern Studies Centre

## The Centre

The Churchill Northern Studies Centre (CNSC) is an independent, non-profit research and education facility, located 23 km outside of Churchill, MB.

churchillnorthernstudiescent

The CNSC facilitates scientific research and programming on the natural sciences and the environment in pursuit of its mission to understand and sustain the north.

No matter the season, guests enjoy a variety of immersive experiences in subarctic surroundings, all while benefiting from the CNSC's community atmosphere, which includes dorm-style bedrooms and a vibrant cafeteria, where researchers and visitors alike can mingle and share ideas.

### **Itinerary Overview**

This sample itinerary is four separate day programming options at the Churchill Northern Studies Centre. All meals and activities are included in the booking fee.

In this itinerary, featured activities include:

- Water Sampling
- Tree coring
- Forest assessment
- Aquatic sampling
- Ecosystem classification
- ITEX

Other activities may be available depending on the time of year and size of your group. All tours are subject to GST.

Cn-site accommodations (up to 84 people)

understand and sustain

- Ӯ Full service cafeteria
- 🕺 Five laboratories
- 🚍 Three classrooms
- 📮 Audio-visual lounge
- 😵 360° Aurora viewing dome
- Fitness room
- 🙆 Outdoor viewing platform



# **Churchill Northern Studies Centre**

## Youth Day Programming

#### Lunch in CNCS cafeteria (12pm-2pm)

21/person

#### Water Quality Monitoring (July-September)

Learn how to monitor water quality n different bodies of water round Churchill.

#### **Ecosystem Observation (June - September)**

Students will observe biotic and abiotic aspects of the ecosystem - plants, wildlife, hydrology, landform etc. Take notes in your field notebook and observe a variety of ecosystems throughout the week.

#### **Ecosystem Classification (June-September)**

Learn to identify common plants, lichens, mosses and how to classify soil based on soil horizons, texture, and colour. Students will then have the opportunity to use this knowledge to classify different ecosystems types throughout the week.

#### Plant Communities (July-September)

Learn about different methods of sampling and how to measure species diversity and richness. Students will then sample plots along transects in different ecosystems types (tundra, boreal, forest, riparian) and will compare species diversity and richness across ecosystems. Could have students learn about and develop a sampling methodology.

#### ITEX (International Tundra Experiment) (June-July)

Compare plant growth inside and outside of warming chambers. Measure leaf area, wet weight, dry weight and plant height. Plant community composition in plots using point-intercept method to determine species abundance.



#### Plant Pressing / Herbarium Specimen Creation (All Year)

Collect plant species and identify them as you press them in a book for safe keeping.

#### Aquatic Invertebrate Sampling (June-September)

Head to sample invertebrates and then identify them at the centre using microscopes.

#### Forest Stand Assessment (All-Year)

Measure tree diameter, height, age, health.

#### Tree coring (All Year)

Count flagged vs non-flagged trees, count rings and determine the age of each individual.