

GWICH'IN TERRITORIAL PARK PLANT REPORT



Prepared for James B. Firth

By Alestine Andre, Gwich'in Social and Cultural Institute

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Photographs

Front Cover: Rock trail, Spruce trees overlooking Gwi'eeekajìlchit Van or Gull Lake (northern end of Campbell Lake), White moss, Spruce gum or dzèh, Gravel trail - Alestine Andre.

Summary

A plant inventory carried out by the Gwich'in Social and Cultural Institute in the Chii vitaii Territorial VIEW POINT area on the Dempster Highway on September 7, 2012 found berries, flowering plants, mosses and lichens, trees and shrubs and other plants for a total of 26 plant species. There are four plant species in particular that are of interest and concern to the Gwich'in people who live in the Gwich'in Settlement Area. They include birch (*Betula papyrifera*), juniper (*Juniperus communis*), spruce (*Picea mariana*) and tamarack (*Larix laricina*). According to Gwich'in Elders these plants have many uses as medicine, shelter and tools. The plants juniper and tamarack are considered sacred by the Gwich'in people as they ensure they leave offerings or payment such as wooden matches, tea, or sugar before they collect any parts of these plants. It is recommended that the birch, spruce and tamarack trees and the juniper shrub be left in their natural setting when brush and other plants are cleared throughout the area of the hiking trails.

1. Introduction

The Gwich'in Social and Cultural Institute (GSCI) was contracted to identify the plants that are found in an area known as the Tethegeh Chii vitaii Territorial VIEW POINT on the Dempster Highway. The view point, located on the south eastern side of Campbell Lake, is part of the Gwich'in Territorial Park. A system of hiking trails will be constructed throughout this area near Benoit Lake that will continue towards the nearby Gwich'in Territorial Park campground (see figure 1).

The GSCI was requested to present (a) a list of plants that may be potentially affected by the construction of the hiking trails throughout this area, and (b) to identify plant species that may be on the endangered list.

Incidentally, a similar plant report prepared by GSCI was completed for the Gwich'in Territorial Park in 1995 with Gwich'in Elders during a walk along a trail in this same area. The plant report titled "Gwich'in Territorial Park Plant Report" was prepared for the Gwich'in Geographics Ltd. in September 1995.

2. Geographic Setting

The geography and landscape near the eastern hills of Campbell Lake, where the hiking trails will run, have numerous areas where bedrock are near the surface (Western Arctic Handbook Committee 2002). On an outcrop near the Dempster Highway, the trails start at **A** (see figure 1 below). The trails meander over exposed bedrock and open spaces, through a forested and wet area below the first outcrop then connect to a prominent outcrop and more trails nearby.

We followed several trails as shown on trail network 1 that connects as A, B, E, F, and I trail. We did not go through the proposed trails marked as G, H, J, K, L, M, or O. Trail network 2, not attached, shows the trails extending to the campground area of the Gwich'in Territorial Park. We did not go through any of those trails.

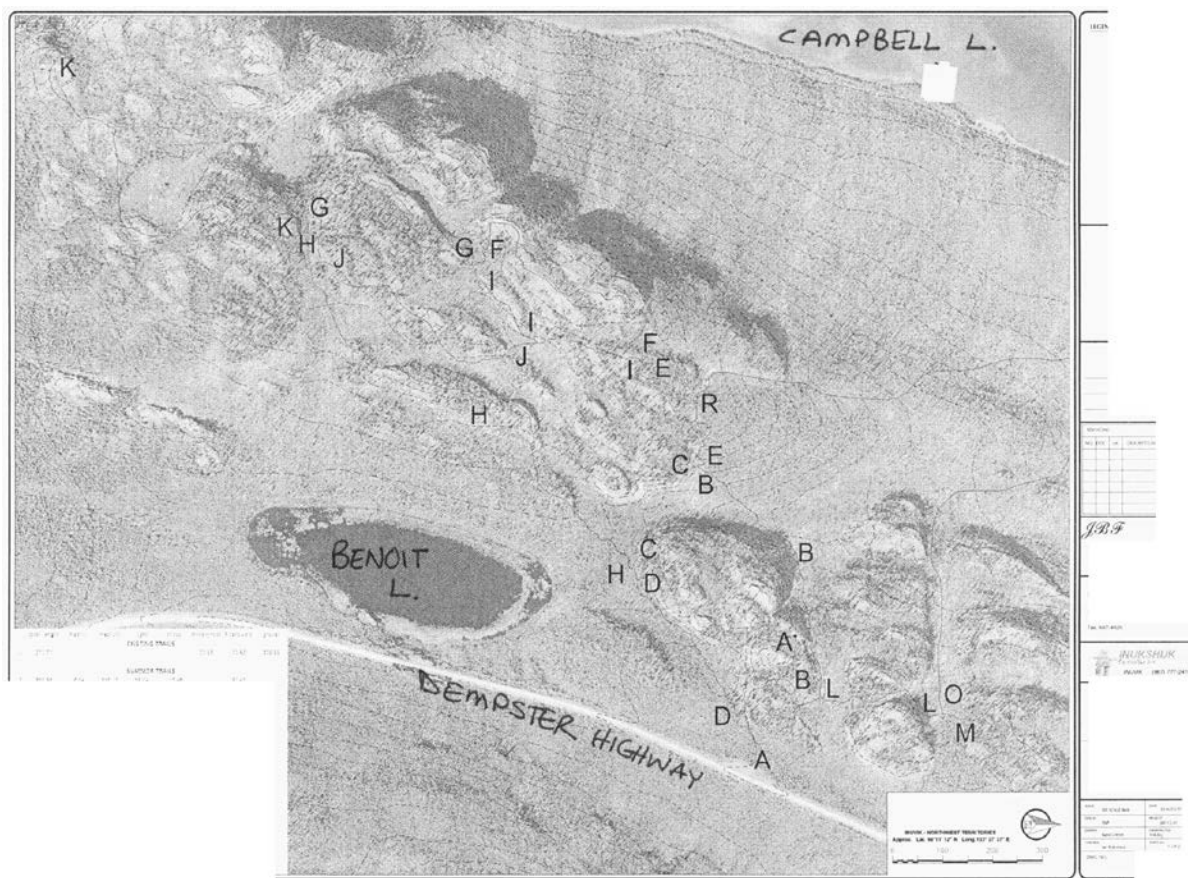


Figure 1: Trail network 1, Gwich'in Territorial Park, Aug. 30, 2012, courtesy James B. Firth.

3. Methodology

The information presented in this report is based on plants that were identified and photographed throughout the Tethegeh Chii vitaii Territorial VIEW POINT area. The walk through the trails was carried out on Friday, September 7, 2012 with James B. Firth leading the way through the boardwalk trail, over the rock and gravel trails, and through the bush. On this day most of the leaves had turned to their fall colors. Along the way we stopped at several points to rest, look at the panoramic scenery and discuss the common plant species found on the hills and in the forested area. Approx. 121 digital photographs were taken.

4. Results

The areas through which the hiking trails will be built in the park are abundant and flourishing with juniper, spruce trees, white moss, tamarack, birch, various berries, and many other plants. A total of 26 plants species found in the Gwich'in Territorial Park are grouped into Berries, Flowering plants, Mosses and lichens, Trees and shrubs, and Other plants and are listed below. To view additional descriptions of each plant by type and by use, see www.plants.gwichin.ca/database.

- Berries include Bearberry, Blackberry, Blueberry, Cranberry, Juniper berry, Soapberry, Rose hips, Stoneberry.
- Flowering plants include Coltsfoot, Wintergreen.
- Mosses and lichens include Moss (sphagnum moss), White moss.
- Trees and shrubs include Birch (dwarf, paper), Blueberry, Cinquefoil, Cranberry, Juniper, Labrador tea (dwarf, tall), Blackberry (crowberry), Red willow (alder), Soapberry, Spruce (black, white), Stoneberry (kinnikinnick), Tamarack, Wild rose, Willow.
- Other plants include Bear root, Northern ground cone ('pipe'), Horsetail.

5. Discussion

The Gwich'in people from this area consider certain plant species significant and treat them with respect. Traditional knowledge and teachings about the care and respect for these special plants continue to be passed on to younger Gwich'in generations today. Gwich'in Elders interviewed by GSCI in the past have requested that the cultural practices around traditional medicine be written down in GSCI plant publication (Andre 1995, Andre 2006, Andre and Fehr 2010) and displayed on the front page of the plant database on our website so people can read, see, and understand the importance of these plants.

The plant species considered significant by the Gwich'in people include birch (*Betula papyrifera*), juniper (*Juniperus communis*), spruce (*Picea mariana*) and tamarack (*Larix laricina*). A summary of plant medicine documented from the late Ruth Welsh, Gwich'in Plant Specialist, and Gwich'in Elders is provided alongside a photograph of each plant on the next page. For more detailed information about birch, juniper, spruce and tamarack please see www.plants.gwichin.ca/database.

Note that some plants found in the Gwich'in Territorial Park area are from the same plant family. For example, there are two types of birch found here. Dwarf birch (*Betula glandulosa*) and paper birch (*Betula papyrifera*) trees are found in the study area. Paper birch is of particular interest and concern to the Gwich'in people. The other plant, spruce includes black spruce (*Picea mariana*) and white spruce (*Picea glauca*). The white spruce looks like a Christmas tree. Both of these spruce trees are considered important and equal to the Gwich'in people as they are used to make medicines, tools, fuel, and shelter. Ruth Welsh said, “We use the black spruce just like you would the (white) spruce (Andre 2006)”.

None of the plant species in this report is listed on the Plant Species with Global Conservation Concern in the publication titled “Species at Risk in the Northwest Territories 2012”.



Birch

Birch is an important tree to the Gwich'in. There are few birch found in this area so when people want to clear the brush around their houses they generally leave birch trees standing while they clear the other plants away. Gwich'in Elders interviewed in 1997 mentioned many uses for birch, *"It is a favored material for making snowshoes. In the past, the Gwich'in also used birch to make the following: net needles, paddles, drum frames, chairs and furniture, toboggans, snow shovels and scoops, and handles for knives, axes, awls, slingshots, dog whips and sleds (Andre & Fehr 2010)."*

Birch (*Betula papyrifera*), Gwich'in Territorial Park, September 7, 2012. Photo by Alestine Andre.



Juniper

Juniper is a shrub. Ruth Welsh said the juniper plant, with or without its berries, is used to make a tea to treat colds or an upset stomach. The berries can be dried and kept on hand for later use (Andre 2006). Gwich'in Elders interviewed in 1997 mentioned that *"the blue colored berries can be picked and used year round. As with tamarack and ochre, the Gwich'in leave an offering, such as matches or tea, when collecting these berries (Andre and Fehr 2010)."*

Juniper (*Juniperus communis*), Gwich'in Territorial Park, September 7, 2012. Photo by Alestine Andre.



Spruce

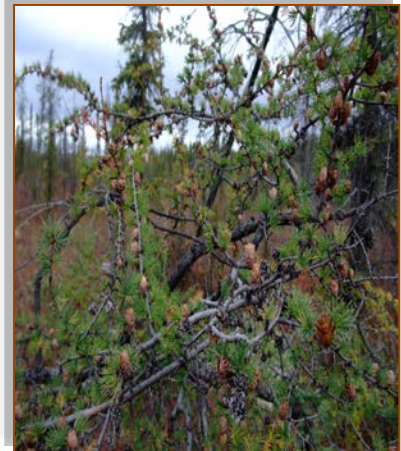
The spruce tree is a very significant tree to the Gwich'in as Ruth Welsh noted, “[*The spruce tree*] is one of the very best medicines that we have. We can use most of a day to talk about and work with that whole tree. There is so much to it (Andre 2006). Gwich'in Elders interviewed in 1997 said that spruce tree can be used as food, medicine, shelter, fuel and tools (Andre and Fehr 2010).

Spruce (*Picea mariana*, *P. glauca*), Gwich'in Territorial Park, September 7, 2012. Photo by Alestine Andre.

Tamarack

Ruth Welsh spoke about the tamarack tree as being one of the culturally significant plants used by the Gwich'in people. “Tamarack...of all the trees the (Gwich'in) like the tamarack the best because it's very potent. The medicines that (are made) from the tamarack is very special to them. And again you use the bark, the boughs, or the roots for making your teas...our people just love the medicines that are made from the tamarack. It is very special to them (Andre 2006).”

Tamarack (*Larix laricina*), Gwich'in Territorial Park, September 7, 2012. Photo by Alestine Andre.



6. Recommendations

Plants of concern to Gwich'in people

There are four plant species listed in this report that are of interest and concern to the Gwich'in people who live in the Gwich'in Settlement Area. They include birch (*Betula papyrifera*), juniper (*Juniperus communis*), spruce (*Picea mariana*) and tamarack (*Larix laricina*).

According to Gwich'in Elders these plants have many uses as medicine, shelter and tools.

Juniper and tamarack are sacred to the Gwich'in people as they ensure they leave offerings or payment such as wooden matches, tea, or sugar before they collect any parts of these plants. It is recommended that the birch, spruce and tamarack trees and the juniper shrub be left in their natural setting when brush and other plants are cleared throughout the area of the hiking trails.

Gwich'in place names

The GSCI request that all Gwich'in place names used in reports, correspondence, and at kiosks including future signage in the Gwich'in Territorial Park are presented with the proper Gwich'in spelling. For example the accurate spelling of Gwich'in place names like Tithegeh Chì' or Gwi'eekajilchit for Gull Rock, and Tithegeh Chì' Van or Gwi'eekajilchit Van for Gull Lake is important to the preservation of the Gwich'in language and culture. Furthermore GSCI wish to note there is an error in the Gwich'in name of the present signage for the territorial view point. The proper Gwich'in name should read Tithegeh Chì' Tàjì Territorial VIEW POINT. The Gwich'in place name, Tithegeh Chì' translates as 'seagull's rock', which refers to the cliff on the eastern shore of Campbell Lake. Tithegeh Chì' Tàjì translates as 'seagull's rock trail'. It is recommended that the GSCI be consulted to provide the proper spelling of Gwich'in place names signage in the Gwich'in Territorial Park area.

Information pamphlets

It is recommended that the GSCI be contracted to complete relevant Gwich'in cultural and linguistic text and information for kiosks, etc. that will be displayed in the Gwich'in Territorial Park.

Traditional medicine plants

The Gwich'in people have used and continue to use various plants to treat and heal skin and eye conditions, internal, respiratory, nasal and urinary problems, common colds and flu, as well as broken limbs, insect bites, stings, burns and to maintain good health (Andre 2006). It is not the practice of Gwich'in people to sell traditional medicine for profit so such practices must be discouraged and there must be no selling of traditional plant medicine.

Archaeological work

From oral history interviews carried out in the Gwich'in Territorial Park Oral History Project 1993/94 (Kritsch 1994), and the Gwichya Gwich'in Place Names in the Mackenzie Delta Project 1994 (Kritsch and Andre 1994), Gwich'in Elders provided TK information about the seasonal movement and activities of Gwich'in families in the area near Tithegeh Chì' or Gull Rock. There is potential for cultural material to be found in these areas. In 1995, archaeological

assessments carried out in the Gwich'in Territorial Park area by Eric Damkjar (Damkjar 1995) did not include the area near Tithegeh Chì' or Gull Rock (personal conversation with Ingrid Kritsch September 13, 2012). It is therefore recommended that GSCI carry out an archaeological survey in this area and other areas not assessed by Damkjar.

Use of hiking trails

This recommendation concerns the use of the Gwich'in hiking trails. The landscape and plants which hikers will view and see from the trails must be kept as natural as possible. This includes the natural flow of the streams that run through this area. Due to the presence of Birch, Juniper, Spruce and Tamarack it is also recommended that no fires be permitted in the area of the hiking trails of the Gwich'in Territorial Park.

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