

FUTURE PLANS FOR THE TRAIL

The Canol Heritage Trail has the potential to become a well known and widely recognized recreational corridor. It capitalizes on a largely ready made trail, one that offers a unique opportunity to appreciate the history of the area and to experience the wild beauty of the Mackenzie Mountains. In the future a number of provisions are proposed which will accommodate an increase in visitors to the area. These include recreational and interpretive opportunities that retain the cultural and natural resource values of the area and the wilderness qualities of the visitor's experience. Examples of these proposed projects which will be aimed at broadening the appreciation and use of the area are: developing promotional material, construction of a visitor centre in Norman Wells (which would provide details on trail conditions, historical and cultural aspects of the project and services offered by local businesses), and the distribution of information regarding trail opportunities. However, these projects are only now in the proposal stage and it will likely be some time before any are realized.

FOR MORE INFORMATION

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CANOL HERITAGE TRAIL



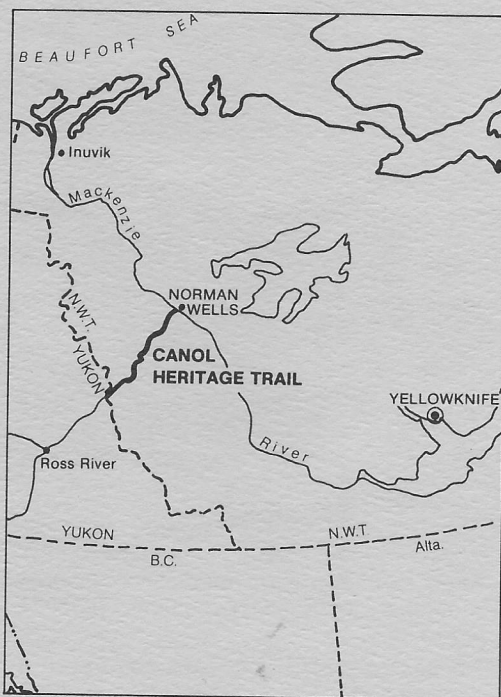
INTRODUCTION

Come and enjoy the diversity of the Mackenzie Mountains. Hike across the plateaux and barrenlands and through jagged mountain peaks and river canyons. Be a part of the nearly forgotten history of one of Canada's first megaprojects. The Canol Heritage Trail provides a chance to experience a landscape that is captivating and intriguing, a wilderness that shows the lasting scars of man's intrusion.

The abandoned Canol Road winds its way for 372 km from the Norman Wells oilfield, across the broad plains of the Mackenzie River Valley, through several mountain ranges, over the Mackenzie Mountain Barrens and up to Macmillan Pass on the Continental Divide before passing over and into the Yukon and on to Whitehorse. To the people who built the road and laid the pipeline, it was unknown country. They were faced with an unforgiving climate and major construction challenges in the flat, swampy terrain as well as the deep canyons and rugged mountains. To today's adventurer there is a unique opportunity to relive the hardship of that construction task. At the same time it is possible to appreciate some of Canada's most interesting and beautiful country, with the same deep canyons and rugged mountains as well as broad, expansive flatland, white spruce forests, and tundra.

This historical route has been designated as the Canol Heritage Trail. Scattered along the road today, abandoned camps, wanigans (portable shelters), pipe sections and pump stations are delapidated reminders of the hectic 35-month period during which the mammoth CANOL Project was conceived, constructed, operated and abandoned. It is an extremely significant heritage resource which has been given National Historic Site status by the Historic Sites and Monuments Board of Canada.

Take this chance to explore a wilderness area of incredible beauty and rich natural resources and relive what was a major, though now essentially forgotten, event in Canadian history.



Tractor mired in mud during construction

THE CANOL PROJECT

In its time the Canol Road was an amazing engineering feat in terms of and degree of difficulty with environmental conditions. The road, pipeline, and telephone line were built during the fall and winter of 1943-44 in a cooperative World War II effort between the United States and Canada to provide a secure source of oil. It was designed to transport crude oil, produced at Norman Wells on the Mackenzie River, 929 km to Whitehorse in the Yukon Territory where it was refined and piped to Alaska.

Construction on the project began in the fall of 1942 from both the north and south. Men recruited to work on the CANOL were warned of the dangers and the backbreaking work:

"THIS IS NO PICNIC . . . Men . . . will be required to work and live under the most extreme conditions imaginable. Temperatures will range from 90° above zero to 70° below zero. Men will have to fight swamps, rivers, ice and cold. Mosquitos, flies and gnats will not only be annoying but will cause bodily harm. If you are not prepared to work under these and similar conditions - DO NOT APPLY".

The environment was foreign, harsh and unforgiving and the attrition rate was high for both workers and machinery. Construction practices from the south failed to recognize the importance of permafrost and resulted in numerous cases of mired and ruined machinery.

The CANOL project was rapidly conceived and executed with little understanding of northern environmental limitations, yet it is still one of the largest projects ever undertaken in northern Canada. Between 1942 and 1945, more than \$300 million was spent, 30,000 people employed, 1,600 kilometres of telephone wire strung and 2,560 kilometres of 4- and 6-inch pipe laid. Despite this investment, the whole project was abandoned in April, 1945 after less than a year of operation.



Historical remains

(Photo: G.P. Kershaw)

THE CANOL LEGACY

Remnants of the CANOL Project lie strewn along the 372 km trail and little has been done to renovate or preserve them in the Northwest Territories. Six pump stations, three road camps and numerous wanigans, bridges, barrel and truck dumps, as well as long term environmental impacts such as oil spills can still be seen along the road. However, many structures and artifacts are rapidly deteriorating, as a result of salvage for use elsewhere, vandalism and the action of natural processes (e.g. wind and water erosion).

Today, the raised roadbed provides an excellent opportunity to traverse many portions of the route with relative ease allowing visitors to experience a wilderness of incredible beauty. Abundant natural and cultural resources of great interest combine to offer a superb recreational experience.

Many historical records of the project are available, including excellent historical photographs and a colour documentary film made during the course of the CANOL Project. As well, numerous articles, reports, analyses and diaries from the 1940's are available from a variety of sources.

THE LANDSCAPE

The landscape varies considerably throughout the route; from scenic mountain peaks and alpine vegetation in the south to broad, low expanses of muskeg in the north and flat tundra of the plateaux. It is this diversity of terrain coupled with the extreme climatic conditions that challenged the CANOL Project and yet intrigues today's visitor.

The region displays numerous landforms of both glaciated terrain, such as broad, U-shaped valleys, and of unglaciated terrain, such as steep-sided valleys and sharp prominent features. Permafrost is extensive and, as a result, many examples of patterned ground (where the continuous freezing and thawing of the top layers of ground cause sorting of rocks into distinctive patterns) are evident adjacent to the road.



Rock glacier

(Photo: G.P. Kershaw)

Along the trail a variety of plant life is apparent. The Canol Road passes through extensive areas of alpine tundra, sub-alpine forests and large areas of muskeg. The alpine tundra regions are particularly noteworthy for their abundant lichen communities which present an unbelievable array of colours and textures. Of interest to the avid naturalist are many plant species found living outside their expected habitat range. For example a number of species that are typically found in the high arctic occur along the roadside on Blue Mountain (from mile 60 to mile 69).

WILDLIFE

The black beady eyes of an arctic ground squirrel peering out from the tussocky terrain, the sweeping flight of a gyrfalcon eyeing his prey, or perhaps the peaceful grazing of a nearby herd of woodland caribou are sights and experiences typical of a visit to the area. The Canol Road passes through land that provides ideal habitats for a variety of wildlife species. Beaver, ermine, wolverine, and arctic ground squirrel are some of the small mammals of the region. Larger mammals such as the woodland caribou, Dall's sheep, grizzly bear, moose, wolves and foxes are also commonly seen inhabitants. The land with its numerous rivers and open expanses of tundra and shrubland offers excellent habitat for breeding bird populations such as jaegers, eagles, falcons and owls. Migratory ducks, geese, swans and cranes are plentiful along the route as well. Fish such as Arctic grayling, whitefish, and trout are abundant in most of the streams, rivers and lakes.

Because of the diversity and quality of the natural resources of the region, several areas of special status have been recognized along the CANOL route for their landscape features, wildlife populations, and biological communities. These areas have been recognized nationally as containing significant landscape and ecosystem characteristics.

GEOLOGY

Sir Alexander Mackenzie, while exploring the area in 1789, made note of 'pieces of petroleum like pieces of yellow wax' lying on the surface of the ground. Since then, the Mackenzie River valley has been known for the oil beneath its surface and since the turn of the century has been an area under intensive study by geologists. The Norman Wells oilfields, locked in the sedimentary rock layers underlying the Mackenzie River lowlands, are the *raison d'être* of the CANOL Project.

A second area of geological significance associated with the trail is the highly mineralized portion of the Selwyn Mountains along the Yukon border, which contains major tungsten, lead/zinc and silver deposits. Although considerable exploration and investment have already taken place, these minerals are currently uneconomical to extract.

RECREATIONAL OPPORTUNITIES

Hunting, fishing, horseback riding, hiking, nature study, wilderness camping, trail-bike riding, and snowmobiling are some of the activities currently engaged in by visitors to the area. Facility development along the Canol Heritage Trail is minimal. As already noted there are delapidated shelters, dating back to the time of road construction, scattered along its length. It should be stressed that these buildings are not in good repair and should not be relied upon for accommodation. One commercial facility exists (Oldsquaw Lodge on the Mackenzie Mountain Barrens), operated by a local naturalist and wildlife biologist. The lodge, and a base camp operated by a local outfitter, are the only facilities for visitors along the trail.

HOW DO I GET THERE?

A visit and/or hiking trip along the Canol Heritage Trail requires transportation either to Norman Wells at the northernmost end or to Macmillan Pass on the Yukon/N.W.T. border. Norman Wells is serviced by Pacific Western Airlines from Edmonton. Camp Canol can be reached from here by boat across the Mackenzie River or plane charter from Norman Wells. From the south it is possible to drive from Whitehorse to Ross River on the Robert Campbell Highway and then northeast on the North Canol Road to Macmillan Pass. This is a rough road and drivers should be warned that there is no fuel available past Ross River, travelling north on the Canol Road. It is also possible to fly from Whitehorse to Ross River on Trans North Air. It is advisable to check with a travel agent when considering a flight into the area as northern flight schedules are apt to change frequently.

For those visitors who wish to visit a particular portion of the trail, there are a number of landing strips and lakes along its length which are accessible by fixed-wing aircraft and float plane. Local charter services operate out of Norman Wells and Ross River as well as other regional centres in the Northwest Territories and the Yukon. Helicopter transportation is also available in Norman Wells and can provide access to almost any point along the trail.

General Notes

1. When hiking along the trail there are many river crossings for which no facilities are available. The crossings vary in difficulty. Some can be easily forded such as Dodo Creek, Ekwi River, Godlin River, Intga River, and the Tschu River. On the other hand, the Twitya River crossing is very difficult and always requires swimming and rafting of packs. The Little Keele River and the Carcajou River can be forded late in the summer but otherwise require swimming and rafting. Dodo Creek, although small in size, is fast flowing and treacherous in flood. All river crossings along the trail are unpredictable and vary with the weather and time of year - extreme caution is advised.
2. Environmental conditions in the vicinity of the Canol Road are often unpredictable and hazardous. During the summer, hazards include unstable mountain slopes that are prone to slumps, mudflows and rockfalls especially along the section of the road crossing Blue Mountain. Under winter conditions debris flows, slush and snow avalanches occur frequently on steep slopes. Winter blizzard conditions are common at Camp 108 due to a funnelling of wind by the steep-sided valley.
3. Water of drinking quality is sometimes hard to find along the flatter sections of the trail, notably the Mackenzie Plains (muskeg) and the Mackenzie Mountain Barrens. It is wise to carry extra supplies when travelling through this area.
4. The availability of firewood varies considerably along the trail, ranging from virtually non-existent to plentiful. In alpine areas where firewood supplies are typically scarce, camp stoves should be used. This is especially true in the portion of the trail south of Caribou Pass.
5. Should an extensive trip on the Canol Trail be planned, such as the entire length of the trail, it is advisable to establish food caches or arrange for a number of food drops.
6. Topographical maps are required when planning a trip into the area. The numbers of the topographical maps covering this area (at a scale of 1:250,000) are 96D, 96E, 106A, 105O and 105P
7. **The removal of artifacts and historical remains from the trail and its surrounds is prohibited and constitutes a criminal offence.**

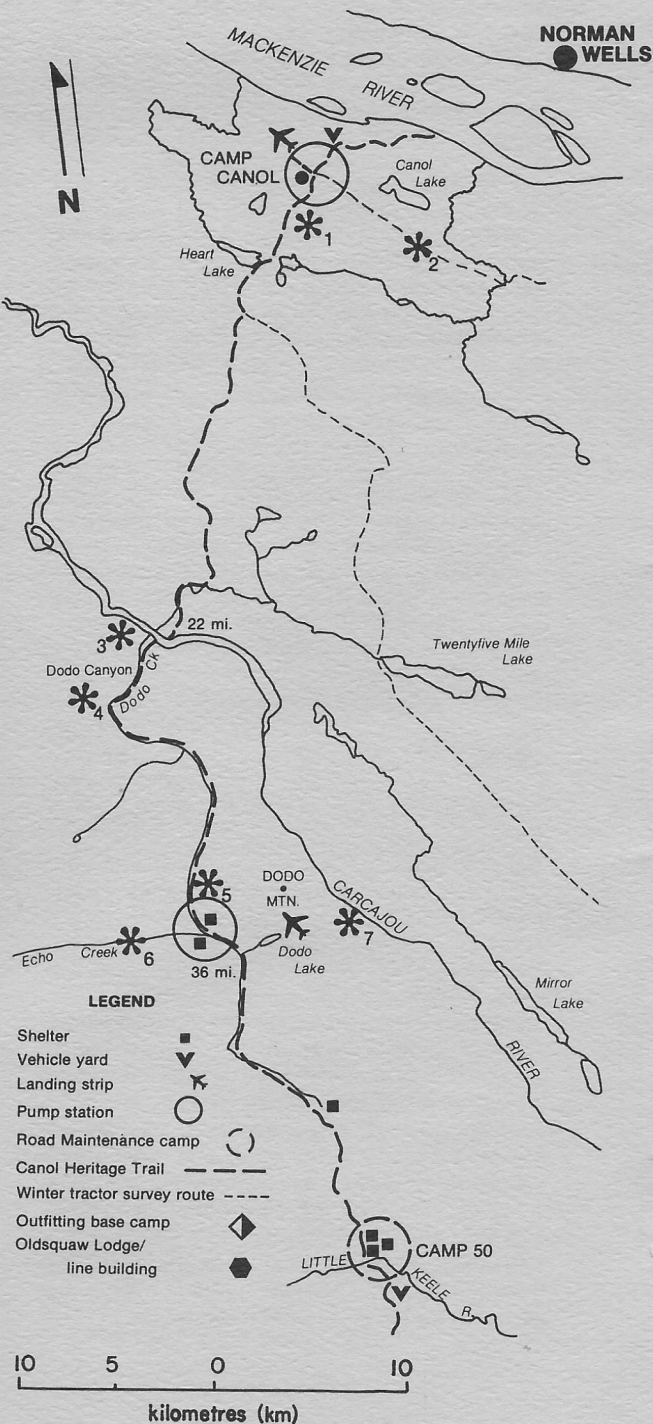
TRAIL DESCRIPTIONS

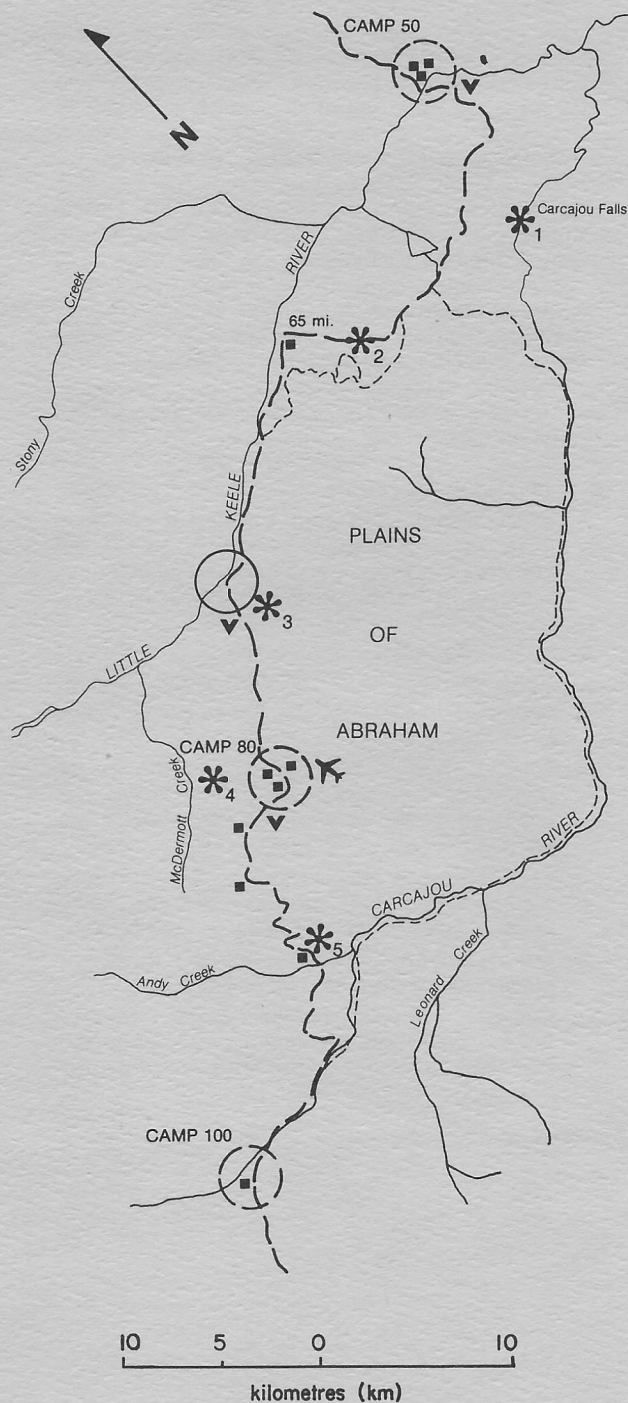
Camp Canol - Camp 50

From Camp Canol the road crosses the broad, gently rolling muskeg terrain of the Mackenzie Plains (approximately 37 km), crosses the Carcajou River, and enters Dodo Canyon where the roadbed has long been washed out by river action. It then climbs into tundra for a short distance and descends through an open spruce forest to Camp 50 located at the mouth of the Little Keele River. Along the road on the Mackenzie Plains the vegetation consists of dense shrub growth limiting visibility for the hiker. Wildlife is abundant with wolves, foxes, moose and caribou common inhabitants. Most lakes and streams are home for beavers, muskrats and grayling. Black bears, and to a lesser degree grizzlies, are found in this portion of the trail. Due to the limited visibility, sightings of wildlife are relatively few, yet they can often be unexpected - so beware!

* POINTS OF INTEREST

1. Camp Canol - the once bustling town which acted as the central service area for the construction project and serviced 30,000 men, was demolished and is now only a few delapidated buildings.
2. 40 km of roadbed, abandoned when the Dodo route was established, an interesting side trip.
3. Beaver dam blocking the road near Carcajou River crossing.
4. Dodo Canyon - spectacular cliffs and rock pinnacles, important sheep habitat, salt flats at the head of the canyon, telephone poles still standing here.
5. Pump Station No. 2 (Mile 36.5) - contains wanigans, quansat huts, pumphouse, cook-house, insulated waterlines and surge tank.
6. Echo Canyon - 150 m walls, very narrow in places, two waterfalls.
7. Carcajou Canyon - parallels Dodo Canyon a few km from road, presents an interesting side trip with excellent opportunities for photography and wildlife viewing.





Camp 50 - Camp 100

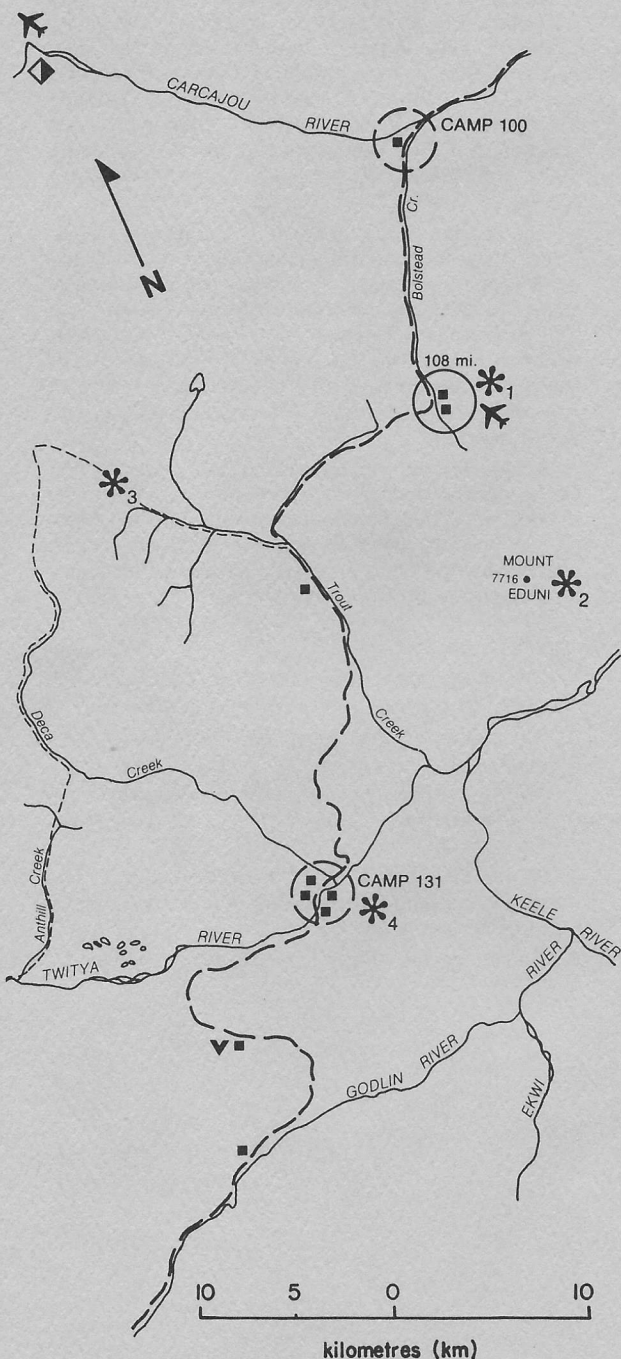
Eight km from Camp 50 the road snakes along the edge of Joker's Ridge, across the side of Blue Mountain and then descends again into the valley of the Little Keele River. The road leaves the valley at Pump Station No. 3 making a steep climb onto the Plains of Abraham, one of the major plateaux along the Canol Road. After 16 km of tundra landscape it then descends less steeply to Camp 100 in the Carcajou River valley's subalpine spruce forest.

This is often noted as one of the most scenic and interesting portions of the trail due to the diversity of landscapes, broad expansive vistas, unusual plant life of the plateau and intriguing landforms. Of historical significance is the Plains of Abraham, which is one of the few places where remnants of the three components of the CANOL Project can be seen at one glance: the road, pipeline and telephone line.

Wolves, foxes and moose can be found in the valley bottoms. Sheep are found at higher elevations. A number of animals inhabit the tundra of the plateau such as ground squirrels, voles, ptarmigan, caribou and grizzly bears. Pikas are also common on the rocky slopes.

* POINTS OF INTEREST

1. Carcajou Falls - accessible from the road 5 km south of Camp 50; an interesting side trip.
2. Rock Glaciers - in valley below mile 63.
3. Pump Station No. 3 (mile 74.5) - still has a pumphouse, surge tank, several quansat huts, a few wanigans, several trucks and road equipment.
4. Camp 80 - has a wanigan, large garage and wash house, garbage dump, a few trucks and a large snowblower.
5. Cairn - above mile 90, dating from 1943.



Camp 100 - Godlin River

In this section of the trail the road follows Bolstead Creek through a steep-sided alpine valley to Pump Station No. 4 and then over Devil's Pass to the deeply incised valley of Trout Creek. From here it cuts across to Camp 131, follows the broad river valley of the Twitya River and then winds its way to the Godlin River. There are a number of oil spills around Pump Station No. 4 and in Devil's Pass, illustrating their long-term impact on the environment. Hotsprings in the area provide a welcome soak for travellers and are an unusual and interesting natural feature.

Red squirrels, porcupines, chipmunks and pikas abound along this part of the trail. Dall's sheep, caribou, grizzlies and wolverine are also found, although in less abundance. The golden eagle and ptarmigan are commonly seen here too.

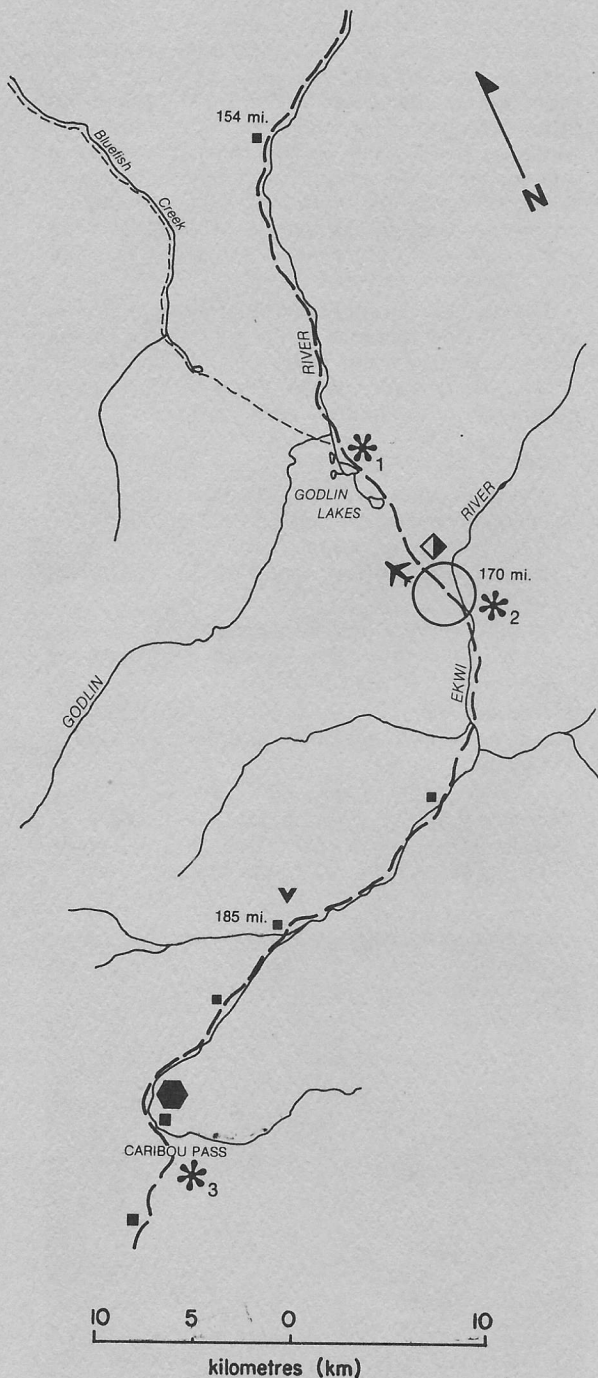
* POINTS OF INTEREST

1. Pump Station No. 4 (mile 108) - historical remains consist of pumphouse, 7 quansat huts, a few wanigans, garage, generator shed, wash house, gas station, truck hulks and barrel dump.
2. Mount Eduni - one of the highest mountains (2,352 m) in the region (approx. 8 km up valley from Pump Station No. 4).
3. Winter Tractor Road - leaves the main road near the mouth of Trout Creek re-entering at Godlin Lakes.
4. Lymnaea Springs - a small warm mineral spring with a large limestone apron and home to an unusual species of snail. Located on the south facing slope near the mouth of Deca Creek.



Plains of Abraham

(Photo: G.P. Kershaw)



Godlin River - Caribou Pass

In this section the Canol Road passes through broad, steep-sided valleys that are very scenic and contain a number of spectacular landforms. The road follows the Godlin River reaching Godlin Lakes and then continues through a broad valley to the Ekwi River. Running along the Ekwi River for some time the road passes the mouth of Bull Cook Canyon and enters Caribou Pass. Throughout this route there are interesting landforms such as numerous rock glaciers, limestone cliffs, folded rock layers, rock pinnacles and extensive evidence of glaciation. Once again remnant oil spills can be found along the route.

Grizzlies, caribou, moose, Dall's sheep, wolves and foxes are all common in this area especially near Godlin Lakes. The Godlin Lakes area is the focus of much activity as it is an outfitting base camp for trophy hunting.

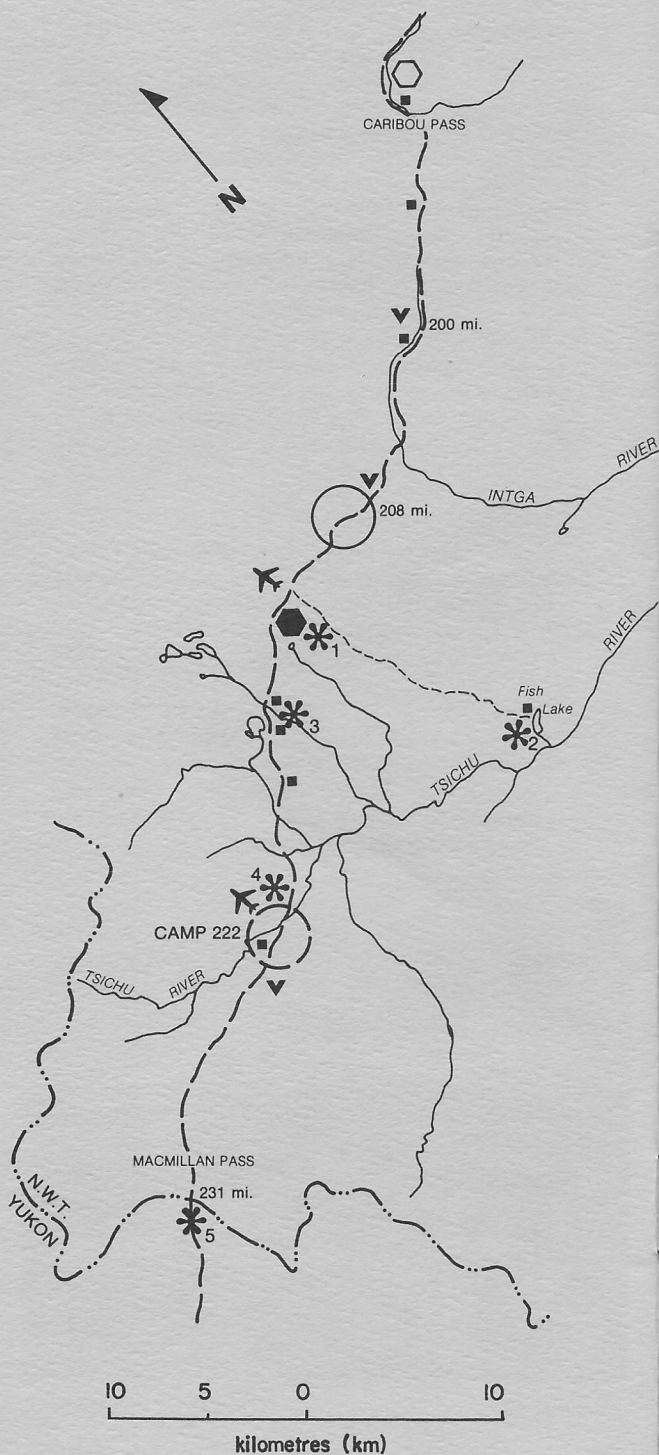
* POINTS OF INTEREST

1. Godlin Lakes - very scenic broad valley surrounded by rugged mountains, good fishing in the lakes, numerous interesting landforms in the vicinity, prime grizzly bear habitat, site of considerable mineral exploration activity in the 1970's.
2. Pump Station No. 5 (mile 170) - pumphouse, several quansat huts, few wanigans, large surge tank, numerous vehicle hulks.
3. Caribou Pass - a high alpine tundra valley that is home to one of the most northeasterly marmot colonies in Canada.



Canol road

(Photo: G.P. Kershaw)



Caribou Pass - Macmillan Pass

From Caribou Pass the trail heads south along the Intga River through high alpine tundra and then rises steeply onto the second major plateau, the Mackenzie Mountain Barrens. The road provides an excellent vantage point as it winds across this wet, ice rich terrain. The 'Barrens' are anything but bare, representing one of the most biologically productive areas along the Canol Road. The road then descends into the tall shrubs of the Tsichu River Valley. It continues gradually downward to the Tsichu River at Camp 222 and then climbs again to cross the Continental Divide at Macmillan pass on the Yukon border. On the Yukon side the road is well maintained and open to normal traffic.

Glacial and permafrost features abound along this trail from cirques and small glaciers to patterned ground and peat plateaux. The lush alpine vegetation offers prime habitat to grizzly bears, marmots, pikas, and ground squirrels. Moose, woodland caribou, wolves, foxes, wolverines, and ermine are also commonly seen. Willow and Rock ptarmigan can often be seen forming large flocks along the Tsichu River valley in winter.

* POINTS OF INTEREST

1. Oldsquaw Lodge (mile 212) - a two storey log building on the Barrens operated by a wildlife biologist and naturalist offering accommodation and guided hikes to a small number of visitors each year.
2. Fish Lake - tractor trail (mile 210) leads to the lake marking the end of the 1943 winter tractor train reconnaissance survey.
3. Historical location (mile 217) - where the north and south sections of the road met on December 31, 1943.
4. Camp 222 - little remains of the original camp which was 'cleaned up' during mining operations in the area; old garage and truck dump remaining.
5. Historical location (mile 231.8, Yukon) - where the north and south sections of the pipeline met on February 16, 1944.