

## GENERAL DESCRIPTION OF THE HAZELTON MAP SHEET AREA, 93 M

The area covered by the Hazelton map sheet is located in west-central coastal British Columbia. The physiography varies from level and gently rolling terrain in the southeast to rugged mountains in the north and west. Elevations range from less than 1000 feet along the Skeena River to 8200 feet at Brian Boru Peak in the Rocher Déboulé Range.

The area has two major drainage systems. The Kispiox, Babine, Suskwa, and Bulkley rivers are the main tributaries of the Skeena River, which drains westward to the Pacific Ocean at Prince Rupert. The Driftwood River and Takla Lake in the northeast are tributary to the Fraser River, which drains to the Pacific at Vancouver.

A northern extension of the Nechako Plateau occupies extensive areas adjacent to the Babine and Driftwood-Takla drainage systems. The plateau has low relief and expanses of rolling terrain. Elevations are between 2500 and 5000 feet. Glaciation has created the most noticeable topographic features; many drumlins, eskers, and meltwater channels occur and depressions are occupied by numerous lakes. The plateau is bounded in the extreme northeast by the Hogem Ranges of the Omineca Mountains.

In the north and west, the transition from the Nechako Plateau to the rugged Skeena Mountains is fairly abrupt. Several ranges, such as the Babine, Atna, Sicintine, and Bait, have serrate peaks of 6000 to 7000 feet, and rise above valleys 2000 to 4000 feet in elevation. Scenic mountain landscapes have been formed by intense alpine glaciation, and cirques, tarns, remnant glaciers, and hanging valleys are prominent features.

The Hazelton Mountains, in the southwest, are also scenic and rugged. Relief exceeds 7000 feet between the Skeena River and the peaks of the Rocher Déboulé Range and provides dramatic mountain scenery from Highway 16 in the lower Skeena and Bulkley valleys.

The Nass Basin, which is located west of the Skeena River, encircles the moderately rugged Kispiox Range, an isolated section of the Hazelton Mountains. Elevations are mainly below 2500 feet and the flat terrain is up to ten miles wide.

### CLIMATE

The climate of the area is predominantly continental. However, in the southwestern part of the area, the Pacific Ocean has a moderating effect on the climate of the Nass Basin and lower Skeena River valley. Winters are long and cold, particularly in the mountainous regions and on the Nechako Plateau. Occasionally temperatures are less than -30°F, but temperatures of 0°F to -10°F are more common. Mean daily temperatures for January, which is the coldest month, are 10°F at Babine Lake and 16°F at Hazelton. Except for short, infrequent periods of 80°F temperatures, summers are only moderately warm. Overnight temperatures of 45°F are typical and frost may occur in any month of the year.

Annual precipitation is about 20 inches at the lower elevations and about 40 inches on the windward side of the Babine and Bait ranges. From November to March, most precipitation falls as snow. Annual snowfall in the lower Skeena Valley is as low as 40 inches but increases to about 75 inches in the Bulkley Valley, 105 inches at Babine Lake, and over 150 inches at higher elevations.

### VEGETATION

The vegetation is generally coniferous forest. Species of the Subalpine Forest predominate on the Nechako Plateau and in the mountains, and Montane (dry) Forest occurs in the Bulkley and lower Skeena river valleys. At this latitude, Montane Forest is very similar in species composition to Subalpine Forest. White spruce, which is the main species in both forest regions, forms a rather monotonous cover in valleys and on mountain slopes. Alpine fir is commonly associated with spruce at high altitudes and dominates at the tree line, which is at about 5000 feet above sea level. Above the tree line, attractive alpine meadows and exposed bedrock prevail.

Along rivers and lakes black cottonwood is common, and aspen groves occur on the drier upland sites. Extensive stands of lodgepole pine dominate burned sites.

Species of the Coast Forest occur in the southwestern part of the area. Western hemlock in association with white spruce and western red cedar has limited distribution on moist sites at low elevations. The hemlock and cedar stands have a thick undergrowth of shrubs and ferns, which restricts recreation travel.

There are local concentrations of game animals, especially on low-elevation winter ranges. Moose are the most widely distributed animal of the region. They prefer recently burned regions and the deciduous growth of bottomlands, particularly on the Nechako Plateau. In winter, large concentrations are found along Babine Lake and the Babine River.

Scattered populations of mule deer occur along the main valleys and mountain goat are common at the high elevations in the more rugged mountains. A few caribou inhabit alpine regions in the extreme northeastern part of the area. Black bear are widely distributed, whereas grizzly bear are confined to the more remote regions.

In years of abundance, Willow (Ruffed), Franklin, and Blue grouse provide good upland game bird hunting. No significant concentrations of waterfowl occur, but a variety of fur-bearing animals, including beaver, martin, mink, fisher, muskrat, weasel, and fox, prevail along the major drainages.

The fish resource is one of the most important features of the area. Coho, chinook (spring), sockeye, pink, and chum salmon as well as steelhead make spectacular migrations up the Skeena River and its tributaries. The spawning beds are important to the commercial fishing industry of the Pacific Coast. In addition to the attraction of observing the salmon runs, chinook and coho salmon and steelhead provide excellent sport fishing opportunities.

Kamloops (rainbow) trout inhabit most of the lakes that have natural stream outlets. Great Lakes char are found in the deeper lakes, Dolly Varden are common to most streams and lakes, and kokanee, a landlocked salmon, inhabit lakes of the Nechako Plateau. Small lakes along Highway 16 have been stocked with cutthroat trout.

### SETTLEMENT AND LAND USE

When Europeans discovered the area, Indian settlement was well established. The Tsimshian peoples occupied the Nass and Skeena valleys, whereas the Carrier Indians occupied the Bulkley Valley and Plateau regions to the east. The Tsimshians, like the Haidas of the Queen Charlotte Islands, are well known for their totem-pole carving and this section of British Columbia has produced some of the finest examples of this art.

European exploration of the area began about 1810 as a result of the expansion of the fur trade west of the Rocky Mountains. After the amalgamation of the North West Company with the Hudson's Bay Company in 1821, Fort Kilmars (Old Fort) was established on Babine Lake.

During the 1860's the Collins Overland Telegraph Company began the construction of a telegraph system linking North America to Europe. Successful completion of the Atlantic Cable ended the scheme, but by that time the line had already been laid through the Bulkley Valley to a point 15 miles north of Hazelton. The right of way had been cleared into the Yukon and became known as the Telegraph Trail.

In 1869 reports of gold on the Omineca River, east of the area, led to the introduction of steamer service up the Skeena River to Hazelton. Several farms were established along the Skeena, and Hazelton, located at the beginning of the trail to the Omineca gold fields, became an important supply center.

Settlement of the Bulkley Valley expanded steadily. By 1908 a wagon road had been constructed from Hazelton to Telkwa, south of the area, and by 1914 the Grand Trunk Pacific Railway line was completed. The demand for rail ties, poles, and other forest products stimulated logging, and early settlers gained a good cash income from the sale of hay for logging camp horses. Developments during World War II, such as extension of the highway from New Hazelton to Prince Rupert in 1944, brought increased settlement and economic development.

At present, the economy is based on mining and logging and elementary processing. Lumber is the most important wood product, although there is some pulpwood extraction, and cedar poles and pilings are produced near Hazelton. Mining activity, especially exploration, is increasing in spite of problems of access. Gold, silver, copper, lead, and zinc are the main minerals extracted. Agriculture is confined to the Skeena Valley downstream from Hazelton and to the Bulkley Valley. The main farming activities are cattle raising, dairying, and some fruit and vegetable production.

Settlement of the area is sparse and is mainly confined to the lower Skeena and Bulkley valleys. Several Indian communities are located along the major rivers. Hazelton, which has a population of about 500, is the largest community in the area.

### RECREATION CAPABILITY

Outdoor recreation in the area is mainly associated with the important fishery of the Skeena River system. The vicinity of Moricetown on the Bulkley River is a nationally significant tourist attraction. Moricetown Falls is an outstanding point from which to view the salmon runs in late summer and fall. Local Indians fish at the Falls and sports fishermen angle for chinook salmon in the river. The attractions of the region include a scenic setting of cascading water through deeply incised canyons and mountains. Canyons and rock features are spectacular at Hagwilget, Bulkley Canyon, and several other locations downstream from Moricetown.

Steelhead fishing in the area, especially in the Kispiox River, is world-renowned. Trophy-sized steelhead, weighing over 30 pounds, have been taken from the river on sporting tackle. Resident trout and Dolly Varden may also be caught. In Nilitkwa Lake and at the north end of Babine Lake, fly fishing for large Kamloops trout is excellent. Trolling for trout and char in Babine Lake is also popular.

Kispox and Gitamaks were the most prominent Indian settlements before the arrival of the white man. Totem poles and a community hall that shows unusual architectural influences are still standing at Kispox, whereas the former village of Gitamaks has been obscured by the modern town of Hazelton. Kitsequela and Hagwilget are also sites of early encampments and villages and there is evidence that Hagwilget was continuously occupied for at least 4000 years before the white man came. Temlaham, on the northwest bank of the Skeena River, is a sacred site prominent in the legends of both the Tsimshian and Haida Indians. 'Ksan, a reconstructed native village, with log houses, totem poles, festivals, and handicrafts, is located near Hazelton and is a main tourist attraction of the area.

Typical of the colorful history of the region is the story of Gunanoot, a resident of Kispox in the 1920's. He was a fugitive from the law for 13 years, and depended on the sympathy and help of local residents for survival. When he eventually gave himself up, the charges against him were dropped, but his escapades have become legendary.

Because of the fishing and historic attractions of the Skeena drainage system, recreational use of the main valleys is increasing rapidly. Sites that are suited to intensive development such as campsites and trailer parks, are not numerous because of canyons and steep terrain near the rivers. However, suitable sites for development can be found near Kispox and 'Ksan and at the mouths of some creeks entering the main rivers.

In the east, the Driftwood River has good opportunities for angling, canoeing, and wildlife observation and hunting. Poor drainage and floodplain conditions limit the potential for organized camping to three sites at or near the mouths of streams. Although other creeks and streams have moderate capability for angling, hunting, viewing, and extensive activities, they are chiefly important as corridors and potential access routes into scenic mountainous terrain.

In general, suitable lakes for recreation are confined to the southeastern part of the area. Capability for intensive, shore-based activities is excellent on Babine and Takla lakes. Both have attractive beaches, but cold water, exposure to frequent winds, and insect pests limit bathing potential. Because beaches are often associated with coarse-textured alluvial fans, they are well suited to organized camping in support of fishing and boat tripping, the most significant attractions of the larger lakes. Wind is a constant hazard to small pleasure craft and experienced guides are recommended for boaters not familiar with local conditions. Cottaging potential is high on Babine and Takla lakes, particularly near the fairly sheltered harbors of Hagan Arm on Babine Lake and at Tsaykut Bay on Takla Lake, and between White and Red Bluffs. The mouth of the Driftwood River is the northern terminus of a navigable waterway to Fort Saint James on Stuart Lake, 150 miles to the south.

Smaller lakes, such as Nilitkwa, Morrison, Natowite, and Nakinilerak, provide better boating opportunities because waves are much less than on the larger lakes. Nilitkwa Lake is particularly significant because of its local Indian history and its very high capability for sports fishing and canoeing.

The large river valleys and mountainous parts of the area are very scenic. The Rocher Déboulé Range, between the Bulkley and Skeena rivers, is a dramatic land mass and has been the scene of considerable mining activity. Numerous trails lead to old pits and structures at the higher elevations. Occasionally, mountain goats may be spotted from Highway 16. Sidina Mountain, Mount Thominson, and the Sicintine and Atna ranges offer opportunities for glacier and mountain viewing in attractive alpine settings. Exceptional views of glaciers and alpine scenery occur at the headwaters of the Nilitkwa River. Recreation capability in alpine regions is restricted by a short, cool recreation season, fragile soils, and vegetation that is easily damaged by intensive use.

At lower elevations, the Nass Basin and the uplands that are adjacent to the Driftwood and Babine rivers offer terrain of moderate relief suited to a wide range of extensive recreation activities. Potential for riding, hiking, hunting, and viewing is moderately good. Uplands of the Nechako Plateau, to the southeast, are for the most part monotonous and have low recreation capability.

Topography and snow conditions are favorable to ski hill development throughout the mountainous parts of the area, but ski areas have not been mapped because of the lack of specific climatic information.

Capability classification by (1966, 1970) D. R. Benn, S. LeBaron, W. C. Yeomans & Associates, Ltd. for the Canada Land Inventory, British Columbia Department of Agriculture.

## DESCRIPTION DU TERRITOIRE DE LA FEUILLE DE HAZELTON—93M

Le territoire qui représente la feuille de Hazelton est situé au centre-ouest de la Colombie-Britannique, dans la zone côtière. Le relief varie des terrains plats ou légèrement ondulés du sud-est aux montagnes escarpées du nord et de l'ouest. L'altitude se situe entre moins de 1 000 pi le long du fleuve Skeena et 8 200 à la crête du pic Brian Boru dans la chaîne Rocher Déboulé.

Le territoire comporte deux principaux réseaux hydrographiques. Les rivières Kispiox, Babine, Suskwa et Bulkley sont les plus importants tributaires du fleuve Skeena qui coule vers l'est pour se jeter dans l'océan Pacifique à Prince Rupert. La rivière Driftwood et le lac Takla au nord-est sont des affluents de fleuve Fraser qui se déverse aussi dans le Pacifique, à Vancouver.

Le prolongement septentrional du plateau Nechako couvre de vastes superficies adjacentes au réseau de la rivière Babine, et à celui de la rivière Driftwood et du lac Takla. Le plateau présente un faible relief et des étendues ondulées dont l'altitude va de 2 500 à 5 000 pi. Les caractéristiques topographiques les plus marquantes sont dues à la glaciation; les drumlins, les eskers et les gîtes des eaux de fusion sont nombreux, de même que les dépressions occupées par des lacs. Les chaînes Hogem des montagnes Omineca, bordent le plateau à l'extrême nord-est.

Au nord et à l'ouest, la transition entre le plateau Nechako et les anfractueuses montagnes Skeena est passablement abrupte. Plusieurs chaînes, comme celles des Babine, Atna, Sicintine et Bait, comprennent des pics dentelés s'élevant de 6 000 à 7 000 pi au-dessus de vallées dont l'altitude se situe entre 2 000 et 4 000 pi. Une glaciation alpine intense a façonné de magnifiques paysages de montagne, cirques, petits lacs de montagne, vestiges de glaciers et vallées suspendues.

Les montagnes Hazelton, dans le sud-ouest, sont également escarpées et offrent de splendides panoramas. Entre les pics de la chaîne Rocher Déboulé et le fleuve Skeena, la dénivellation dépasse 7 000 pi, et la vallée inférieure du Skeena et celle de la Bulkley forment un cadre enchanté à la route 16.

Le bassin du Nass situé à l'ouest du fleuve Skeena, entoure la chaîne Kispiox dont les montagnes sont modérément escarpées et forment un groupe isolé des montagnes Hazelton. L'altitude est en général inférieure à 2 500 pi et le terrain est plat sur une largeur allant jusqu'à dix milles.

### CLIMAT

Le climat du territoire est surtout continental. L'océan Pacifique tempère toutefois le climat du bassin du Nass et de la vallée inférieure du fleuve Skeena qui se trouvent dans le sud-ouest. Les hivers sont longs et rigoureux, tout particulièrement dans les régions montagneuses du plateau Nechako. La température descend parfois au-dessous de -30°F, mais habituellement elle se situe entre -10 et 0. La température diurne moyenne du janvier, le mois le plus froid, est de 10°F au lac Babine et à 16° à Hazelton. Les étés ne sont que modérément chauds et, bien que peu fréquentes, de courtes périodes de 80°F sont enregistrées. La température nocturne atteint normalement 45, mais le risque de gel existe tout temps de l'année.

Les précipitations annuelles sont d'environ 20 po à basse altitude et 40 dans les chaînes Babine et Bait, sur les versants exposés aux vents. De novembre à mars, la majeure partie des précipitations tombent sous forme de neige. La chute de neige annuelle est d'au moins 40 po dans la vallée inférieure du Skeena, mais elle augmente graduellement pour atteindre environ 75 po dans la vallée Bulkley, 105 au lac Babine et plus de 150 à plus haute altitude.

### ÉCOLOGIE

La végétation est généralement celle des forêts conifères. Les essences de la forêt subalpine dominent sur le plateau Nechako et dans les montagnes, et celles de la forêt montane (sèche) croissent dans la vallée du Skeena inférieur et celle de la rivière Bulkley. A cette latitude, les essences de la forêt montane sont presque les mêmes que dans la forêt subalpine. L'épinette blanche domine dans les deux régions forestières et forme un couvert plutôt uniforme dans les vallées et sur les versants de montagne. A haute altitude, le sapin concorde est habituellement associé à l'épinette et il domine à la limite de la végétation arborecente, située à environ 5 000 pi. Au-delà de la limite, on trouve surtout de belles prairies alpines et des affleurements rocheux.

Le peuplier de l'Ouest est commun le long des rivières et des lacs, et des peuplements de peuplier faux-tremble croissent sur les hautes terres sèches. De grands peuplements de pin de Murray dominent le regain des terrains incendiés.

Les essences de la forêt côtier habitent le sud-ouest du territoire. La pruche de l'Ouest, associée à l'épinette blanche et au thuya géant, est peu répandue et croît sur les terrains humides situés à faible altitude. Les peuplements de pruche et de thuya présentent un sous-bois épais d'arbustes et de fougères qui restreint les excursions.

On trouve des concentrations éparses de gros gibier surtout dans les zones d'hiver de basse altitude. L'original est la plus répandue des espèces de la région. Il préfère les terrains récemment incendiés et la forêt décidue des terres d'alluvion, sur le plateau Nechako en particulier. En hiver, de grandes concentrations fréquentent les abords du lac et de la rivière Babine.

Des populations isolées de cerf mulot se trouvent dans les principales vallées; et la chevre de montagne vit à haute altitude dans les montagnes escarpées. Quelques caribous habitent les zones alpines de l'extrême nord-est du territoire. L'ours noir se rencontre un peu partout mais le grizzli ne fréquente que les régions reculées.

La gélinoise huppée, le tétras sombre et le tétras des savanes sont les espèces de gibier à plumes des terres sèches; la chasse est bonne dans les années d'abondance. Le territoire n'abrite pas de concentrations importantes de sauvagine mais, par contre, une variété d'animaux à fourrure; castor, martre, vison, pékan, rat musqué, belette et renard, habitent les abords des principaux cours d'eau.

L'abondance du poisson constitue l'une des plus importantes caractéristiques du territoire. Le saumon coho, chinook, narka, keta, le saumon rose et la truite arc-en-ciel offrent un spectacle impressionnant lorsqu'ils remontent le fleuve Skeena et ses tributaires. Les frâches sont importantes pour la pêche commerciale de la côte du Pacifique. Outre l'observation de la remonte du saumon, les possibilités de pêche sportive au saumon chinook et coho et à la truite arc-en-ciel sont excellentes.

La truite arc-en-ciel habite la plupart des lacs qui se déversent par des cours d'eau naturels. On trouve le touladi dans les lacs profonds et le Dolly Varden dans la plupart des cours d'eau et des lacs. Le saumon kokani, qui ne descend pas à la mer, habite les lacs du plateau Nechako. De petits lacs situés le long de la route 16 ont été enserrés de truites fardées.

### PEUPLEMENT ET UTILISATION DE LA TERRE

Lorsque les Européens découvrirent le territoire, les Indiens y formaient déjà des communautés bien établies. La nation des Tsimshians occupait les vallées du Nass et du Skeena et, à l'est, les Carriers habitaient la vallée de la Bulkley et les Plateaux. Comme les Haidas des îles Reine-Charlotte, les Tsimshians sont renommés pour leurs mât totémiques sculptés. C'est dans cette partie de la Colombie-Britannique qu'ont été créées les plus beaux spécimens de cet art.

Les Européens commencèrent leur exploration du territoire vers 1810 par suite de la traite des fourrures à l'ouest des Rocheuses. Après la fusion de la Compagnie du Nord-Ouest et de la Compagnie de la Baie d'Hudson en 1821, le fort Kilmars (Old Fort) fut construit sur le lac Babine.

Au cours des années 60 du siècle dernier, la Collins Overland Telegraph Company commença l'aménagement d'un système télégraphique qui devait relier l'Amérique du Nord à l'Europe. Les travaux furent abandonnés lorsqu'il réussit à poser un câble transatlantique, mais déjà la ligne télégraphique avait été installée à travers la vallée de la Bulkley jusqu'à 15 milles au nord de Hazelton. Le tracé, qui avait été défriché jusque dans le Yukon, devint par la suite connu sous le nom de "Telegraph Trail".

En 1869, on rapporta avoir découvert de l'or dans la rivière Omineca, à l'est du territoire, et un vapour fut mis en service sur le fleuve Skeena jusqu'à Hazelton. Plusieurs fermes furent établies le long du Skeena et, Hazelton située au point