

GENERAL DESCRIPTION OF THE NORTH BATTLEFORD MAP SHEET AREA, 73C

The area covered by the North Battleford map sheet comprises 5780 square miles between 52° and 53° north latitude and 108° and 110° west longitude in west-central Saskatchewan. The western limit of the area forms part of the Saskatchewan-Alberta provincial boundary. Generally, diversity occurs between the broad zones of natural vegetation, but there are no clearly defined boundaries. Within these large regions, the landscape tends to be uniform. The area has a wide range of interesting features, such as grasslands, forests, alkali lakes, fast-flowing rivers, flood-plains, deep-cut gullies, escarpments, and extensive sand dune complexes.

More than 80 percent of the area lies within the Alberta Plateau physiographic region, or Third Prairie Level. The rest of the area consists of a lowland corridor in the northeast, which is traversed by the North Saskatchewan and Battle rivers, and is an extension of the Saskatchewan Plains physiographic region, or Second Prairie Level.

Within the corridor the general elevation is between 1600 and 1900 feet above sea level. The terrain is level to gently rolling and the land types include alluvial, lacustrine, and till plains. The North Saskatchewan is a fast-flowing river in an old glacial drainage channel whose walls rise 50 to 200 feet above the stream level. It is subject to considerable seasonal variation in volume and sand bars and islands have developed in the channel, but their size and distribution often vary over fairly short periods. Battle River, flowing into the North Saskatchewan southeast of Battleford, is different in many of its characteristics. In its lower reaches, the river meanders slowly across a wide floodplain, on which oxbow lakes and meander scars are common.

Bordering the lowland is the Missouri Coteau. This escarpment, which belongs to and forms the edge of the Alberta Plateau physiographic region, is especially well-marked south of Battleford. Here, in the Eagle Hills, it rises abruptly for 200 to 400 feet from the lowland corridor. The small segment of the Missouri Coteau lying to the north of the North Saskatchewan River has a poorly defined escarpment.

Southward and westward from the Eagle Hills are undulating or gently rolling plains lying at 2100 to 2300 feet above sea level. Till, lacustrine, and outwash deposits are common throughout the region and, in the vicinity of Manito Lake, there are extensive dune sands. The highest elevations occur toward the west and southwest where, in the Neutral Hills, they range from 2300 to more than 2600 feet. In the Neutral Hills the rolling glacial till, glacioluvial deposits, and knob and kettle topography are typical.

Except for a few small streams flowing northward to the North Saskatchewan and for Eaglehill Creek flowing southward, this section of the Alberta Plateau is characterized by interstitial drainage. Surface runoff flows to hundreds of ponds and lakes, which generally dry out in summer. Manito, Muddy, and Whiteshore are the largest lakes formed by interstitial drainage. The lakes are shallow and susceptible to large fluctuations in water level. They are also saline and are surrounded by extensive alkali flats during summer.

CLIMATE

The area has a continental subhumid climate characterized by long cold winters, short warm summers, and low annual precipitation. January and July mean daily temperatures at North Battleford are -2°F and 65°F respectively. Absolute maxima of 98°F and absolute minima temperatures of -51°F have been recorded. The average annual precipitation at North Battleford is 14 inches, 10 inches of which falls as rain, mainly in the growing season. Annual precipitation is 12 to 14 inches, and average monthly temperatures are one or two degrees Fahrenheit higher in the southwest. The frost-free season is 90 days or longer except in the uplands of the west and in the north where it is shorter. The growing season is about 160 days in the north and 70 days in the rest of the area.

This transition from dry, warm climatic conditions in the south and west to the slightly cooler and more humid conditions of the north and northeast is accompanied by similar changes in natural vegetation and soils.

In the southern half of the area, the natural vegetation is mixed prairie and the soils are Dark Brown Chernozemic or grassland soils. Sloughs created from spring snowmelt are common in the mixed prairie zone. The slough-prairie plant complexes associated with sloughs include shrubs such as willow and occasionally aspen on the margins, and awned sedge, thatch grass, spike-rush, bulrush, reed grasses, and water-milfoil from the margins to the center of the sloughs. The extensive sand dune complex south of Manito Lake has an azonal variety of sedges and grasses, together with low-lying shrubs such as creeping juniper, bearberry, and clumps of trembling aspen in the depressions.

In the northern half of the area, mixed prairie vegetation is replaced by fescue prairie with occasional poplar bluffs and by aspen groves or park belt with scattered grasslands and poplar groves. A narrow zone of mixedwood lies in the northeast. The Black Chernozemic soils reflect these changes in climate and vegetation cover. The North Saskatchewan Valley with its steep, dissected walls and many islands provides a variety of habitat. The plant cover is complex and includes reeds, sedges, willows, highbush cranberry, saskatoon, choke-cherry, poplars, and other flora. The floodplain of the Battle River supports reeds and sedges, various berry bushes, willows, and poplars.

FISH AND WILDLIFE

Migratory waterfowl are a very important component of the wildlife. Large concentrations of geese and ducks use the many shallow water bodies and nearby grain fields as resting, congregating, or nesting places. Large nesting sites are located on the knot and kettle terrain of the Neutral Hills and in most parts of the Alberta Plateau physiographic region where sloughs occur. During the fall migration flocks of geese congregate on the larger, open bodies of water, which include Manito, Muddy, Tramping, and Ear lakes. Ducks show less preference for congregating in specific sites and are distributed more widely.

Upland game birds are widely distributed and there are significant concentrations along the Missouri Coteau, in the sand hills south of Manito Lake, in the valley of the North Saskatchewan. Hungarian Partridge, Sharp-tailed Grouse, and Ruffed Grouse are found in the Aspen Grove Section. In the south, capability for supporting ungulates is low to moderately low but concentrations of deer increase greatly in the better habitat provided in the aspen groove zone.

Sport fishing is poor over most of the area as most of the water bodies are too shallow or saline or both to support fish populations. Where water is suitable, the lakes support northern pike. The North Saskatchewan River is an exception and has moderate capability for pike, pickerel, goldeye, and sauger. Some stocking has been carried out in smaller lakes, such as Suffern Lake, which is southwest of Manito Lake where rainbow trout have been introduced.

SETTLEMENT AND LAND USE

By the late eighteenth century the North Saskatchewan River had been established as the main route to the northwest. Trading posts were established on the North Saskatchewan River and near the mouth of the Battle river by the XY, independent, and Hudson's Bay companies. The trading post for the Hudson's Bay Company operated from 1805 to 1885. Selected as the first seat of government for the North West Territories in 1876, as a post of the North West Mounted Police, and as a point on the Dominion Telegraph and proposed Pacific railway through the fertile belt, Battleford showed early signs of growth. The transfer of the territorial seat to Regina in 1883 and the building of the transcontinental railway through the southern prairies greatly reduced Battleford's importance.

Indian participation in the Riel Rebellion was concentrated in the area. Under Poundmaker, a Cree chief, the Indians approached Battleford on March 29, 1885 to possess the town; the citizens were forced to take refuge in the fort. The Stones or Assiniboines, from the Eagle Hills and other tribes joined Poundmaker and held the town until it was relieved by Colonel Otter on April 27. On May 2nd, Otter attacked Poundmaker at Cut Knife Hill, near Poundmaker's reserve west of Battleford, but was defeated. Following the defeat of Riel, Poundmaker surrendered to General Middleton at Battleford on May 26th.

Settlement in the area was delayed, partly because of the Indian and Métis unrest of the 1870s and 1880s and also because transportation overland by Red River cart or by steam vessel along the North Saskatchewan was slow. With the arrival of the railroad in the south, wagon and stage coach briefly supplied the Battleford District along the Swift Current-Battleford Trail. A small French settlement was established northwest of Battleford in 1900 and, in 1903, settlers from the British Isles founded the Barr settlement part of which was located in the northwest of the area. In 1905 the St. Joseph's German Catholic Colony occupied an extensive section in the southwest. Indian reserves include Red Pheasant, Mosquito, Poundmaker, and Little Pine.

In 1905 the Canadian Northern Railway arrived in the area but it was built on the north side of the North Saskatchewan River. Battleford was quickly superseded as the new railway settlement of North Battleford as the chief center of the northwest. The Grand Trunk and Canadian Pacific railways were built to Wilkie and the western sections in 1907-1908, but Battleford itself was not served directly from the south until 1911. By 1924 the railway network was fairly complete and most of the area was well-settled. The sandy soils near Manito Lake and the steep Missouri Coteau have always been poorly settled and, together with poorly drained lands in the lowland corridor, still carry considerable woodland cover.

Mixed cropping and crop-livestock farming are the most common type of agriculture in the area. In the southern prairie zone wheat accounts for more than three-quarters of the cropped acreage and coarse grains with some flax and seeded forage make up the rest. Partly because of droughty conditions and partly because of tradition, a two-year cropping rotation is common with more than forty percent of the cropland in summerfallow. Further north, in the Black soil zone three-year rotations are more common. Typically, wheat is followed by coarse grains in the second year and by summerfallow in the third year. Beef cattle are the most important element in livestock operations but herds are rarely large. The average herd is 20 to 25 head except in extensive nonarable regions. Farms are more than one section on the average and are larger in the south. Enlargement in the size of farms and reduction in the number of farms continues over the whole area.

Mineral exploration and some extraction has taken place in the area. In particular, oil and gas exploration has occurred in the west but with little success. One small field is located northwest of Manito Lake. An oil test well, in 1946, near Unity precipitated interest in the potash deposits of Saskatchewan. Interest in the sodium sulphate reserves associated with the 'alkali lakes' resulted in sodium sulphate recovery near the hamlet of Palo near Whiteshore Lake in the southeast. In 1946 the great sodium chloride deposits at Unity began to be marketed again. The solution mine and plant were intended to handle 200,000 tons of salt by 1970.

The chief trading centers include North Battleford, Unity, Wilkie, and Macklin and parts of the south, east, and west lie within the trading hinterlands of towns that lie outside the area. North Battleford, a city with a population of 12,500, is the largest center in northwestern settled Saskatchewan. Apart from its administrative, trading, and small industrial functions, it is a major entry point to the extensive northwestern recreational lands, which include The Battlefords Provincial Park, Meadow Lake Provincial Park, and other recreational regions.

RECREATION CAPABILITY

Except for the Eagle Hills and other sections of the Missouri Coteau, very few parts of the uplands, including the many lakes rate more than moderately low or low in their recreational capability. Because of such physical characteristics as shallowness, fluctuating levels, and high salt content, these lakes are considered as part of upland units and are important for their wildlife association. Many lakes are intermittent and large alkali flats are exposed during the summer. The recreation capability of the southern two-thirds is mainly based on the viewing or hunting of wetland and upland wildlife. High recreation capability Classes 3 and 4, occur on the lands adjacent to the North Saskatchewan River and on the Eagle Hills Escarpment.

The valley of the North Saskatchewan is well adapted to camping, hiking, canoeing, and angling along much of its length. Activities such as family boating, swimming, and water skiing may be restricted or impossible in some stretches because of fast water and treacherous currents. The valley sides are wooded in many parts and provide habitat for many and varied wildlife species, such as whitetailed deer, Ruffed and Sharp-tailed Grouse. The Battle River is different in many of its characteristics but its slow-moving waters, meandering course, and calm backwaters are suitable for canoeing, camping, and scenic viewing.

Facing northward and overlooking the floodplain corridor is the Eagle Hills Escarpment. This fairly well defined physiographic unit, part of the Missouri Coteau, is one of the most scenic parts of the area. The steep wooded slopes, small gullies, moraine features, and fairly high wildlife densities give it moderate capability for viewing, camping, hiking, riding, collecting, and hunting. Southeast of Battleford very steep sheltered slopes trap sufficient snow to provide adequate conditions for local skiing.

Many places and events that are significant in the history of western Canada are associated with the area. Some, such as the forts at the mouth of the Battle River, have been obliterated, whereas others, such as the site of the battle of Cut Knife Hill, are recorded by historic markers. Fort Battleford, one of the early forts of the North-West Mounted Police, has been reconstructed and helps to place in perspective the rich history that is part of this area.

Capability classification by J. H. Richards, Department of Geography, University of Saskatchewan, Saskatoon, 1973.

DESCRIPTION DU TERRITOIRE DE LA FEUILLE DE NORTH BATTLEFORD 73C

Le territoire qui représente la feuille de North Battleford occupe 5 780 milles carrés entre 52° et 53° de latitude nord et 108° et 110° de longitude ouest, dans le centre-ouest de la Saskatchewan. La limite occidentale du territoire forme une partie de la frontière entre l'Alberta et la Saskatchewan. Dans l'ensemble, la diversité des paysages est associée aux grandes zones de végétation indigène mais les limites ne sont pas clairement définies. A l'intérieur de ces grandes régions, les paysages naturels sont assez uniformes. Le territoire présente un certain nombre d'éléments dignes d'intérêt tels que prairies, forêts, lacs salets, rivières tumultueuses, plaines d'inondation, ravins profonds, escarpements et vastes régions de dunes.

Plus de 80% du territoire appartient à la région structurale du plateau de l'Alberta, ou troisième palier de la prairie. Le reste du territoire correspond à un couloir de basses terres que, dans le nord-est, traversent les rivières Saskatchewan-Nord et Battle. Ce couloir un prolongement de la région structurale des plaines de la Saskatchewan ou deuxième palier de la prairie.

Dans le couloir, l'altitude varie de 1 600 à 1 900 pi. La topographie varie d'une légèrement vallonnée et, au niveau du modèle, on se trouve en présence de plaines d'alluvions, de dépôts lacustres et de till. La Saskatchewan-Nord est une rivière à écoulement rapide qui occupe un ancien canal de drainage glaciaire dont les parois dominent de 50 à 200 pi le fond de la vallée. Les variations saisonnières du niveau des eaux sont considérables; des bancs de sable et des îles sont apparus dans le canal mais leurs dimensions et leur répartition varient souvent à l'intérieur d'un laps de temps assez court. La rivière Battle, qui se jette dans la rivière Saskatchewan-Nord au sud-est de Battleford, présente de nombreuses caractéristiques différentes. La rivière, dans la partie inférieure de son cours, meandre lentement à travers une large plaine d'inondation où les lacs-croissants et les concavités de méandres sont commun.

Le coteau du Missouri apparaît à la limite des basses terres. Cet escarpement, qui borde la région structurale du plateau de l'Alberta à laquelle il appartient, est particulièrement net au sud de Battleford. Ici, dans les collines Eagle, il s'élève de 200 à 400 pi au-dessus du couloir de basses terres. Le petit segment du coteau du Missouri au nord de la rivière Saskatchewan-Nord, est moins bien défini.

Au sud et à l'ouest des collines Eagle, il y a des plaines dont la topographie varie de ondulée à légèrement vallonnée et l'altitude, de 2 100 à 2 300 pi. Le till, les dépôts lacustres et les épandages sont communs à travers toute cette région et, dans le voisinage du lac Manito, il y a d'immenses dunes. Les points les plus élevés se trouvent à l'ouest et au sud-ouest où les collines Neutral atteignent une altitude variant de 2 300 à plus de 2 600 pi. Des dépôts de till glaciaire vallonnés ainsi que des dépôts fluvioglaciaires et une topographie à creux et à bosses caractérisent les collines Neutral.

Exception faite des rares petits cours d'eau qui coulent vers le nord jusqu'à la rivière Saskatchewan-Nord et du ruisseau Eaglehill en direction sud, ce secteur du plateau de l'Alberta s'égoutte à l'intérieur. Les eaux de drainage superficielles s'acheminent vers des centaines d'étangs et de lacs qui s'assèchent habituellement en été. Les lacs Manito, Muddy et Whiteshore sont les plus grands des lacs qui alimentent ces eaux. Les lacs sont peu profonds et le niveau des eaux peut y varier considérablement. Ce sont en outre des lacs salets entourés, en été, de vastes "salinas".

CLIMAT

Un climat continental subhumide caractérise le territoire: longs hivers froids, étés courts et chauds et précipitation annuelle faible. En janvier et en juillet, les températures quotidiennes moyennes atteignent respectivement -2°F et 65°F à North Battleford. On a déjà enregistré une température maximale absolue de 98 et une température minimale absolue de -51. La précipitation annuelle moyenne atteint 14 po à North Battleford; 10 po tombent sous forme de pluie, pendant la saison de végétation principalement. La précipitation annuelle varie de 12 à 14 po et les températures mensuelles moyennes sont plus élevées d'un ou deux degrés Fahrenheit dans le sud-est. La période sans gel dure 90 jours où davantage sauf dans le nord et sur les basplateaux de l'est où elle est plus courte. La saison de végétation est d'environ 160 jours dans le nord et de 70 dans le reste du territoire. Le passage d'un climat sec et chaud dans le sud et dans l'est à un climat légèrement plus frais et plus humide dans le nord et le nord-est s'accompagne de changements au niveau de la végétation indigène et des sols.

Dans la moitié méridionale du territoire, la végétation de prairie mixte correspond à un couvert de prairie mixte et les sols sont des chernozems brun foncé ou sols de prairie. Les marécages qui se forment à la fonte des neiges sont communs dans la zone de prairie mixte. Les plantes typiques des marécages de prairie comprennent des arbisseaux tels que le saule et, croissant parfois sur leurs bords, le peuplier faux-tremble; elles comprennent aussi le carex, l'herbe à chaume, l'éleocharide, le scirpe, les roseaux et le myriophylle verticillé, en allant des bords vers le centre des marécages. Dans les vastes secteurs de dunes situés au sud du lac Manito, il y a des carex et des graminées qui ne sont pas typiques de cette zone ainsi que des arbisseaux bas tels que le genévrier horizontal, l'arctostaphylos rasin-d'ours; dans les dépressions, il y a des bosquets de peuplier faux-tremble.

Dans la moitié septentrionale du territoire, la végétation de prairie mixte cède la place à une prairie à fétuques où croissent, ici et là, des bosquets de peuplier, et à des tremblaines ou des zones de prairie-parc renfermant des îlots de prairie et des forêts de peupliers. Une étroite zone de forêt mixte apparaît dans le nord-est. La présence de sols chernozémiques noirs traduit un changement de climat et de végétation. La vallée de la rivière Saskatchewan-Nord, avec ses parois escarpées et accidentées et ses nombreuses îles fournit une grande variété d'habitats. La couverture végétale est complexe et comprend des roseaux, des carex, des saules, de la virome trilobée, de l'amélanchier, du cerisier de Virginie, des peupliers et d'autres espèces. Dans la plaine d'inondation de la rivière Battle croissent des roseaux et des carex, différents arbustes fruitiers, des saules et des peupliers.

POISSON ET GIBIER

Les conditions de pêche sportive sont médiocres à travers la majeure partie du territoire car la plupart des nappes d'eau sont trop peu profondes ou trop salines pour le poisson. Lorsque les qualités de l'eau s'y prêtent, les lacs renferment du brochet. La rivière Saskatchewan-Nord est une exception et elle présente des possibilités modérées pour le brochet, le doré, la laquache et le doré noir. On a entrepris l'empoissonnement de lacs plus petits comme le lac Suffern, au sud-ouest du lac Manito; la truite arc-en-ciel était l'espèce introduite.

Les oiseaux migrateurs représentent une part importante de la faune. Des populations considérables d'oies et de canards utilisent les nombreuses nappes d'eau peu profondes et les champs de céréales voisins pour s'y reposer, s'y réunir ou y faire leur nid. De vastes secteurs sont utilisés pour la nidification dans les collines Neutral, là où le terrain est couvert de creux et de bosses, et dans presque toutes les parties de la région structurale du plateau de l'Alberta qui renferment des marécages. Pendant les migrations d'automne, des volées d'oies se réunissent sur les plus grandes nappes d'eau libre comme les lacs Manito, Muddy, Tramping et Ear. Les canards ont moins tendance à se réunir en des endroits définis et ils sont répartis sur une plus vaste étendue.

Le gibier à plumes des basplateaux est réparti sur une vaste étendue; on trouve des populations importantes en bordure du coteau du Missouri, dans les dunes situées au sud du lac Manito et dans la vallée de la Saskatchewan-Nord. Dans la section de la tremblaine, il y a de la perdrix européenne, de la gélinotte à queue fine et de la gélinotte huppée. Dans le sud, les possibilités d'accueillir des Ongulés varient de faibles à modérément faibles mais on trouve davantage de cerfs dans les habitats de meilleure qualité qu'offre la tremblaine.

PEUPLEMENT ET UTILISATION DE LA TERRE

Vers la fin du dix-huitième siècle, la rivière Saskatchewan-Nord était devenue la principale voie de communication vers le nord-ouest. Une compagnie indépendante, les XY, et la compagnie de la baie d'Hudson ont créé des postes de traite sur les bords de la rivière Saskatchewan-Nord et près de l'embouchure de la rivière Battle. Les activités du poste de traite de la compagnie de la baie d'Hudson se sont poursuivies de 1805 à 1885. Choisi en 1876 pour être le premier siège du gouvernement des Territoires du Nord-Ouest, pour devenir ensuite un poste de la Gendarmerie du Nord-Ouest et recevoir un embranchement de voie du télégraphe du Dominion et du chemin de fer du Pacifique qu'on projetait de construire à travers la zone fertile, Battleford a connu un développement précoce. Le transfert du siège du gouvernement territorial à Regina en 1883 et la construction du chemin de fer transcontinental à travers la partie méridionale des prairies ont considérablement réduit l'importance de Battleford.

C'est sur ce territoire que la participation des Indiens à la rébellion de Riel fut le plus marquée. Sous la conduite de Poundmaker, un chef cri, les Indiens se sont dirigés vers Battleford le 29 mars 1885 et ils se sont emparés de la ville; les habitants se sont réfugiés dans le fort. Les Stones ou Assiniboines venus des collines Eagle ainsi que d'autres tribus se sont joints à Poundmaker et ils sont restés maîtres de la ville jusqu'au moment de sa libération par le colonel Otter le 24 avril. Le 2 mai, Otter a attaqué Poundmaker sur la colline Cut Knife, près de la réserve de Poundmaker située à l'ouest de Battleford, mais il fut défait. Après la défaite de Riel, Poundmaker a rendu ses armes au général Middleton à Battleford, le 26 mai.

Le territoire a tardé à se peupler à cause, surtout, des troubles avec les Indiens et les Métis au cours des années 1870 et 1880 et aussi à cause de la lenteur des moyens