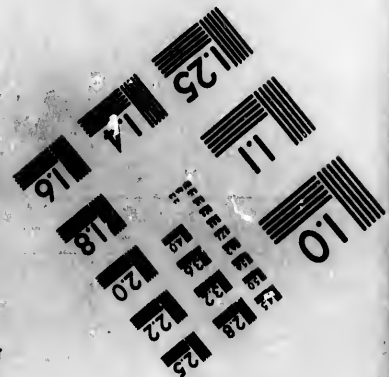
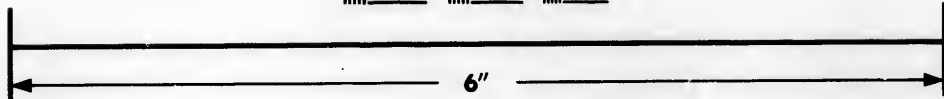
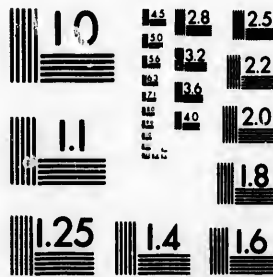


**IMAGE EVALUATION
TEST TARGET (MT-3)**



**Photographic
Sciences
Corporation**

23 WEST MAIN STREET
WEBSTER, N.Y. 14580
(716) 872-4503

**CIHM/ICMH
Microfiche
Series.**

**CIHM/ICMH
Collection de
microfiches.**



Canadian Institute for Historical Microreproductions / Institut canadien de microreproductions historiques

© 1984

Technical and Bibliographic Notes/Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- Coloured covers/
Couverture de couleur
- Covers damaged/
Couverture endommagée
- Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée
- Cover title missing/
Le titre de couverture manque
- Coloured maps/
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur
- Bound with other material/
Relié avec d'autres documents
- Tight binding may cause shadows or distortion
along interior margin/
La reliure serrée peut causer de l'ombre ou de la
distortion le long de la marge intérieure
- Blank leaves added during restoration may
appear within the text. Whenever possible, these
have been omitted from filming/
Il se peut que certaines pages blanches ajoutées
lors d'une restauration apparaissent dans le texte,
mais, lorsque cela était possible, ces pages n'ont
pas été filmées.
- Additional comments:/
Commentaires supplémentaires:

- Coloured pages/
Pages de couleur
- Pages damaged/
Pages endommagées
- Pages restored and/or laminated/
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
- Pages detached/
Pages détachées
- Showthrough/
Transparence
- Quality of print varies/
Qualité inégale de l'impression
- Includes supplementary material/
Comprend du matériel supplémentaire
- Only edition available/
Seule édition disponible
- Pages wholly or partially obscured by errata
slips, tissues, etc., have been refilmed to
ensure the best possible image/
Les pages totalement ou partiellement
obscurcies par un feuillet d'errata, une pelure,
etc., ont été filmées à nouveau de façon à
obtenir la meilleure image possible.

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	14X	18X	22X	26X	30X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12X	16X	20X	24X	28X	32X

The co
to the

The im
possibl
of the
filming

Original
beginn
the las
sion, o
other c
first pa
sion, a
or illus

The las
shall c
TINUED
whiche

Maps,
differ
entirely
beginn
right a
require
metho

The copy filmed here has been reproduced thanks to the generosity of:

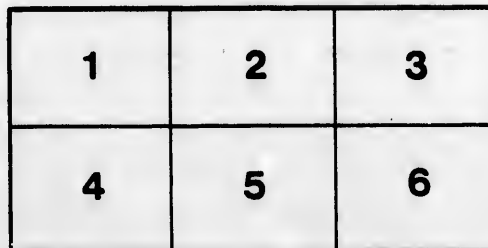
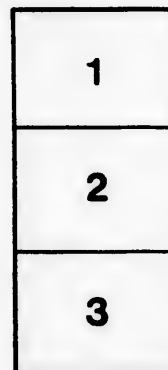
University of Alberta
Edmonton

The images appearing here are the best quality possible considering the condition and legibility of the original copy and in keeping with the filming contract specifications.

Original copies in printed paper covers are filmed beginning with the front cover and ending on the last page with a printed or illustrated impression, or the back cover when appropriate. All other original copies are filmed beginning on the first page with a printed or illustrated impression, and ending on the last page with a printed or illustrated impression.

The last recorded frame on each microfiche shall contain the symbol \rightarrow (meaning "CONTINUED"), or the symbol ∇ (meaning "END"), whichever applies.

Maps, plates, charts, etc., may be filmed at different reduction ratios. Those too large to be entirely included in one exposure are filmed beginning in the upper left hand corner, left to right and top to bottom, as many frames as required. The following diagrams illustrate the method:



L'exemplaire filmé fut reproduit grâce à la générosité de:

University of Alberta
Edmonton

Les images suivantes ont été reproduites avec le plus grand soin, compte tenu de la condition et de la netteté de l'exemplaire filmé, et en conformité avec les conditions du contrat de filmage.

Les exemplaires originaux dont la couverture en papier est imprimée sont filmés en commençant par le premier plat et en terminant soit par la dernière page qui comporte une empreinte d'impression ou d'illustration, soit par le second plat, selon le cas. Tous les autres exemplaires originaux sont filmés en commençant par la première page qui comporte une empreinte d'impression ou d'illustration et en terminant par la dernière page qui comporte une telle empreinte.

Un des symboles suivants apparaîtra sur la dernière image de chaque microfiche, selon le cas: le symbole \rightarrow signifie "A SUIVRE", le symbole ∇ signifie "FIN".

Les cartes, planches, tableaux, etc., peuvent être filmés à des taux de réduction différents. Lorsque le document est trop grand pour être reproduit en un seul cliché, il est filmé à partir de l'angle supérieur gauche, de gauche à droite, et de haut en bas, en prenant le nombre d'images nécessaire. Les diagrammes suivants illustrent la méthode.

ails
du
odifier
une
mage

rrata
to

pelure,
n à

32X

CANADIAN NORTH-WEST IRRIGATION COMPANY.

Irrigated lands in southern Alberta,
1899.

IRRIGATED LANDS

—IN—

SOUTHERN ALBERTA

—OFFER—

A PROMISING FIELD...

—AND—

GREAT OPPORTUNITY

—FOR—

INDUSTRIOUS AGRICULTURISTS.



The Canadian North-West Irrigation Company,

LETHBRIDGE, ALBERTA,

1899.



PRINTED AT "THE LETHBRIDGE NEWS" OFFICE,
LETHBRIDGE, ALBERTA.



Irrigated Lands...

--in--

Southern Alberta

WITH NOTES ON

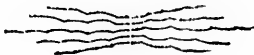
The Climate, Crops, Markets and Values,

Railroad Facilities, 

 Agricultural Opportunities,

—AND—

The Field for Employment of Labour.



Case

• •
• •

• •
• •

Canada

IRRIGATED LANDS IN SOUTHERN ALBERTA

The Lethbridge Plains, or that portion of them brought under cultivation by means of irrigation, are about 40 miles square, and immediately adjoin the town of Lethbridge, Alberta.

CLIMATE.

The climatic conditions are most favourable, the district being marked by an equable temperature, with freedom from rapid and extreme fluctuations in the growing season. The predominant feature is the great dryness and clearness. The absence of rainfall in the summer months accounts for the application of irrigation to agriculture, and a certainty of crops is assured by reliance on the steady, uniform and abundant supply of water in the St. Mary's River.

With the exception of that portion of British Columbia situated along the Pacific Coast, Southern Alberta enjoys the mildest climate in Canada. What might be termed "Winter" rarely sets in before the end of December, lasting about six weeks, during which period the snow, seldom exceeding a depth of four inches, often disappears two or three times, caused by the warm "Chinook" winds from the Pacific Coast, which are prevalent in Southern Alberta. As a consequence wagons are used during the entire year, and it is only occasional seasons that sleighs are necessary, even for a few weeks. In January and the early part of February the district is sometimes visited with short periods of sharp cold weather.

SOIL.

The soil of the plains is generally rich and deep, and varies from a rich sandy to a clay loam. All of it is

999417

thoroughly adapted to the growth of all classes of cereals, cultivated grasses and vegetables in great abundance.

IRRIGATION.

To the normal advantages of farming on new virgin soil, there are added many features of profit by a system of irrigation.

While the artificial application of water to growing crops increases the original cost of farming and adds to the labour of the farmer, it assures certainty of crops, and the quantity and quality of the product far more than compensates for the added cost and labour.

Irrigation provides a continual fertilizing agent without added expense. The alluvial deposit carried in suspension in the waters of the rivers in spring and early summer are deposited on the soil and constantly enrich and fertilize it, so that a process of renewal is constantly in operation. This accounts for the fact that in countries where irrigation has been practised for long periods, as in Colorado, wheat crop after wheat crop has been taken from the same soil with no material reduction in the yield and, consequently, no evidence of the exhaustion of the soil. The most striking demonstration of this fact is the Nile Valley in Egypt, where cultivation has been continued for centuries, the lands finding elements of renewing strength in the properties of the muddy waters of that great river.

Irrigation, where the source of supply, as in this instance, is a never-failing stream like the St. Mary's River, gives certainty of crop, protects against drouth, places the farmer in the position of regulating the rainfall. There is no agricultural region, even in districts of normal rainfall, where the possibility of resorting to irrigation would not be occasionally beneficial, for, even in such countries, drouth is not unknown. In the most favored agricultural districts of Manitoba and the older provinces, every experienced farmer knows that there are seasons when the rainfall is sufficient and is distributed at such proper times as to keep

the crop growing steadily, with no set-backs, resulting in a magnificent yield: while there are other seasons with too much, too little, or rain distributed at times when least required, producing light and damaged crops.

In the irrigated sections of Southern Alberta good crops should be assured annually, because there are no summer frosts, practically no rainfall, and the farmer can apply the water to his land as circumstances demand.

And, in the sense of regulating the elements, irrigation assures a larger yield and, in nearly all crops, a better quality.

The United States Census Report of 1890 shows the average production of wheat under irrigation in Montana and Colorado to have been 50 per cent. more than in the States of Illinois, Iowa and Indiana, which are recognized as being amongst the best wheat producers in the United States. The comparison is very instructive, and clearly indicates the great increase of production under irrigation—an increase fully justified by and handsomely remunerating the increased cost of labor. Similar comparison might be made of the quantities of other crops produced, and, perhaps, there would be found none more striking than potatoes, for the production of which, alike in quantity and quality, Greeley, Colorado, and several points in Utah, have gained world-wide reputations.

The quality and flavour of such fruits as melons, strawberries and apples, and vegetables like celery, tomatoes, &c., are very superior.

The farmer not familiar with irrigation and irrigation methods would be surprised at the simplicity of its application. The method usually employed in Western America, wherever irrigation is practised, is known as the "flooding system." The water is brought from the main canal to the highest point of the farm or land to be irrigated by a lateral ditch, from the end of which it is carried over the various fields in small distributing laterals. The last men-

tioned laterals are simply cut by a plow, or hoe, or spade, and the water is allowed to flow out of them and spread over the surface as far as it will go, and sink as deep as may be necessary to give the required moisture to the roots of the growing grain.

The simplicity and effectiveness of this system is immediately apparent, and it will be readily seen that one man can look after the distribution of water over quite a large area.

The main canal is, naturally, of sufficient capacity for the needs of the whole area to be irrigated by the canal system, the main lateral leading from it will be large enough for the special district it is intended to serve, and the distributing ditches would be made so that they can spread the water quickly over the ground to be irrigated. When the field, or any portion of it, is sufficiently watered, the cuts through which the water escapes from the ditches to the growing grain are closed by a shovelful of earth, and the water carried to another portion of the field, and that operation is repeated until the whole crop is irrigated, when, if thought desirable, the distributing ditches are levelled in with a plow. This is often necessary for the easier operation of the reaping machine.

The "furrow method" is also employed, though most frequently for root crops, as corn, potatoes or other vegetables, as well as in orchards, vineyards, and in small fruit gardens. The water is allowed to follow down the furrow made by the "shovel-plow" between the rows of vegetables, and, seeping downwards and sideways, rapidly reaches the roots to be benefitted.

FARMING SEASON.

The farming season in Southern Alberta may be reckoned as opening in March, though it is no unusual occurrence for plowing to be prosecuted in February. It will undoubtedly be found better to plow in the fall, so that the land may obtain the benefit of the Winter moisture. Win-

ter wheat will prove a successful crop, though Spring wheat is at present the universal crop.

No efforts have been made towards the cultivation of fruits, though it is a certainty that small fruits will thrive to perfection, and the constantly increasing demands of the increasingly populous towns in the mining regions adjacent to this section will have a tendency to stimulate production of all classes of fruits and vegetables.

STOCK RAISING.

Southern Alberta is looked upon as possessing the finest range for stock raising in America. The grasses are most nutritious, and cures on the stem, upon which cattle feed through the entire winter. At least 200,000 head of horned stock and large bands of horses are running at large both summer and winter, never having been under shelter of any kind.

Though the breeding of cattle is very profitable, still a new field for development will be opened up by the production of cultivated hay. The rancher will then be enabled to care for young and weak stock during periods of cold weather, and the spring markets which always pay higher prices can be supplied with steers at least three months earlier than good fat range stock can be taken from the new grass.

MARKETS.

By the completion of the Crow's Nest Pass branch of the Canadian Pacific Railway, Lethbridge is practically the "Gateway" town and distributing point to the important and rapidly developing mountain mining regions of East and West Kootenay, in British Columbia, some of the towns being Fernie, Cranbrook, Fort Steele, Ainsworth, Slocan City, New Denver, Sandon, Kaslo, Trail, Nelson and Rossland, and an idea of the rapidity of the development of the mining interests of these districts may be gathered from

the fact that Rossland, a town of about five years' existence, has a population of about 8,000.

These regions are forced to derive their principal supply of agricultural produce from the State of Washington, lying immediately to the south, notwithstanding the high tariff duties (referred to below) levied against farm products coming into Canada. The irrigated lands in the neighborhood of Lethbridge are the nearest and most favorably situated for supplying the constantly increasing demand of the mining districts named, and in addition to the protection offered by a high tariff, the freight rates on the Crow's Nest Pass branch are very low, thereby assuring the markets of South-Eastern British Columbia to the farmers of Southern Alberta.

The local market is also of some importance. Lethbridge with a population of over 2,000, imports largely in eggs, butter, flour, feed, pork, etc. Over \$10,000 in each year is paid for freight on pork alone, shipped mostly from the United States. The freight on flour shipped into Lethbridge from Manitoba, which supplies the entire consumption of Southern Alberta, runs from \$135 to \$140 per car-load. The importation of eggs amounts to about 120 cases monthly, while about 1,000 tons of native (wild) hay is consumed annually, at prices ranging from \$10 to \$14 per ton. There is practically an unlimited export market for cultivated hay, as will be seen from the following, which appeared in the Edmonton Bulletin, March 27th, 1899:

"50,000 tons of hay wanted annually for shipment to the Kootenay, and still the demand is increasing: but Alberta cannot supply, as Kootenay WILL NOT BUY NATIVE HAY. To secure this trade, which amounts to HALF A MILLION DOLLARS annually, we must be able to supply hay from cultivated grasses."

These few items will clearly demonstrate that a large and ready market is open for all the products raised on irrigated lands in Southern Alberta.

DUTIES ON AMERICAN PRODUCTS.

Hay.....	\$2 per ton	Oats	10c. per bushel.
Wheat....	12c. per bushel.	Barley, 30	on market value.
Potatoes ..	15c. per bushel.	Apples.....	36c. per barrel.
Eggs	3c. per dozen	Cabbage	25
Flour	60c. per barrel	Grain	20
Cheese	3c. per lb	Butter.....	4c. per lb.
Fresh Meats....	3c. per lb	Pork	2c. per lb.
Mutton & Lamb	35	Poultry and Game	20
Buckwheat Meal and		Oatmeal	20
Flour.....	20	Cornmeal.....	25
Beans	15c. per bushel.	Bran.....	20

TRANSPORTATION FACILITIES.

The irrigated lands of this Company are exceptionally well situated for transportation facilities.

The Canadian Pacific Railway enters Lethbridge from the east, with all-rail communication from Quebec, Montreal, Toronto, Winnipeg, etc. The Crow's Nest Pass branch enters the town from the west, placing the town in direct communication with the great Kootenay mining districts to the west, and with Calgary, Edmonton, and other northern points. The Alberta Railway & Coal Company's line enters from the south, giving direct communication with the United States through Montana.

The geographical situation is most advantageous, and will speedily prove of the greatest assistance to the agriculturist engaged in farming on the Lethbridge plains.

PRICE OF LANDS.

The Company will sell lands capable of irrigation at prices ranging from \$5 per acre upwards, on easy terms of payment, viz: In ten equal annual instalments, with interest at the rate of 6 per cent. per annum, to be paid with each instalment, on the principal amount outstanding. Purchasers will be allowed to pay in full at any time he

fore the expiration of the purchase period, at which time interest ceases and a deed issues to the purchaser.

In addition to the purchase price of the land, the owner or occupier will be required to pay an annual water rate of \$1.00 per acre during the irrigating season.

As an acre of irrigated land usually produces at least 50 per cent. more than an acre depending entirely on rainfall, this charge of \$1.00 per acre for what might be termed "crop insurance," is a profitable investment for the farmer and necessary to the Irrigation Company for the proper care and maintenance of the canal system.

In the irrigated portions of the United States, unimproved lands sell at from \$15.00 to \$50.00 per acre, upon which the annual water rate varies from \$1.00 to \$2.50 per acre.

SCHOOLS.

The North-West is provided with a School system as efficient as the older provinces of Canada, and gives educational facilities equal to those of the most thickly settled portions of the East. Four heads of families may form a School District, and the Government grants have been running from 65 to 75 per cent. of the Teacher's salary, leaving but a small amount to be raised by the settlers themselves.

TAXES.

The North-West Government has withdrawn the Municipal system, with its costly machinery, from farming communities and replaced it by a very simple and inexpensive law, known as "Local Improvement Ordinance," by which districts are organized containing not more than two townships, with an overseer duly elected by the people, who are taxed \$2.50 for each 160 acres owned or occupied. The tax may be commuted by two days' labor on road or other district improvements. This together with the School tax referred to elsewhere, are ALL the taxes imposed on farming

districts in the North-West, which may truly be said to be freer from taxes than any other portion of America.

SETTLERS' EFFECTS—DUTY FREE.

The household goods and other effects of settlers coming into Canada are free of duty. Item No. 707 of the Canadian Customs Tariff reads as follows: "Wearing apparel, household furniture, professional books, implements and tools of trade, occupation or employment, which the settler has had in actual use for at least six months before removal to Canada, musical instruments, domestic sewing machines, live stock, carts and other vehicles and agricultural implements in use by the settler for at least one year before his removal to Canada, not to include machinery or articles imported for use in any manufacturing establishment, or for sale; provided that any dutiable article entered as settlers' effects may not be so entered unless brought with the settler on his first arrival, and shall not be sold or otherwise disposed of without payment of duty, until after two years actual use in Canada; provided also that under regulations made by the Minister of Customs, live stock when imported into Manitoba, or the North-West by intending settlers, shall be free until otherwise ordered by the Governor in Council.

GENERAL INFORMATION.

The following items of information may be of service to the prospective settler.

A good house of two rooms and small kitchen, shingle roof, with doors and windows, can be put up for \$150, and upwards. As good a house as could be desired, including all material and labor can be built for \$250. This would represent a main building 16x24 feet, with 9 ft. wall, partitioned into two rooms, with a lean-to kitchen 10x16 feet. The walls of the main building would be sided and papered on the outside, and ceiled on the inside.

Good-surfaced common lumber costs \$17 per thousand feet. Best cedar shingles cost \$3 per thousand. Scantling, \$17 per thousand feet. Nails, per pound by the keg, 4c. A good team of horses, \$125 to \$150. A 3-inch Canadian waggon, from \$90 upwards. A set of double harness costs \$20 to \$35. Plows cost from \$24. Harrows, \$15. Shovels and Spades, 90c. each. Mowing Machines cost \$53. Binders, \$145, and Horse Rakes, \$30 each. All these prices are net cost at Lethbridge.

"Galt Coal," from the Lethbridge Collieries, is universally known throughout Manitoba and the North-West as an excellent domestic and steam-producing bituminous coal. The best grade of this fuel can be had at the mines for \$2.75 per ton.

The Alberta Railway & Coal Company now employ about 800 men, principally in connection with the operation of their mines at Lethbridge, and, as this Company works in harmony with the Canadian North-West Irrigation Company, opportunity is presented for employment to early settlers in the mines and on the railroad at such periods of the year when farming operations are at a standstill. It is also the policy of the Irrigation Company to endeavour to use the settlers for all work of repairs or extension of the canal system.

Irrigation sheds will be erected at Lethbridge, and at Sterling on the line of the Alberta Railway & Coal Company's Railway, about 20 miles south of Lethbridge.

For further information apply to

C. A. MAGRATH,

Superintendent,

THE CANADIAN NORTH-WEST IRRIGATION CO.,

Lethbridge, Alberta.

