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VANCOUVER'S ISLAND.

SURVEY OF THE DISTRICTS

OF

NANAIMO AND COWICHAN VALLEY.



LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.

FOR HER MAJESTY'S STATIONERY OFFICE.

AND

PUBLISHED BY GROOMBRIDGE AND SONS, 5, PATERNOSTER ROW.

—
1859.

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THE EMIGRATION COMMISSIONERS have been directed to print, with a view to make public, the following Reports of survey of land around the Nanaimo River, and in the Cowichan Valley in Vancouver's Island, which have recently been received from the Governor, by the Secretary of State for the Colonies.

The Surveys were made under the directions of Mr. Pemberton the Colonial Surveyor, and extend over the three districts of Mountain, Cedar, and Cranberry, round the Nanaimo, comprising together about 30,000 acres,—and over the five districts of Shawnigan, Cowichan, Comiakén, Quamicham, and Somenos in the Cowichan Valley,—comprising together about 57,600 acres.

Each district, unless where broken by the coast, contains 16 square blocks of 1,000 acres each, and each block is again subdivided into 100-acre sections.

Mr. Pemberton expresses his dissent from certain remarks of Mr. Wells who surveyed the Cowichan district respecting the insecurity of Cowichan Harbour (page 13); and, from his estimate of the number of the Indian population in the district (page 14). Mr. Pemberton states that the harbour appeared to him to be well sheltered by islands off its entrance,—and he considered the number of Indians to be under-estimated at 1,100 souls, as large bodies were absent at the herring fisheries when Mr. Wells made his report.

By order of the Commissioners,

S. WALCOTT,
Secretary.

Government Emigration Board,
8, Park Street, Westminster, S.W.
October 1859.

70356

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SURVEY AT NANAIMO.

REPORT OF ENGINEER IN CHARGE OF SURVEY.

To Joseph D. Pemberton, Esq., Colonial Surveyor, &c. &c.

Sir,—I have the honour to report, for your information, some observations made whilst engaged in the survey around Nanaimo, comprising the Mountain, Cedar, and Cranberry districts.

These districts are situated immediately around and abutting upon the Nanaimo district, which is bounded on the east by Nanaimo Harbour, and has a large mining town, containing about 200 inhabitants, chiefly labourers at work in the coal mines, who afford a ready market for all kinds of farm produce; the harbour is of large size, and well sheltered at every point from wind, with good anchorage and every natural advantage. The distance from Victoria is about 70 miles, and the average passage (for 18 months) of a schooner of 20 tons, trading between the two places, was two days, which included her discharge and loading at either place.

General observations.
Nanaimo Harbour.
Colville-town.
As a market.
Distance from Victoria.

Fish, chiefly salmon, are very abundant in the harbour and up the Nanaimo or Quaquamqua River. In the fall of the year the salmon ascend the river in large shoals, when they may be readily speared, or shot, or caught in nets in any quantity; they are very rich and fat, and equal in all respects to the finest salmon of England. Halibut and cod are caught on the sand banks not far from Nanaimo.

Fish.

The general character of this district is broken and undulating, but often perfectly flat, especially up the River Millstone and about Diver Lake, where the timber is for the most part open, and the fern, which is of three distinct kinds, grows to an unusual height.

Mountain district.—
Natural features.

The timber is chiefly pine, of the species known as Douglas and white, with some spruce, and is generally of large size; occasional patches of saalal (which bears an exceedingly nice berry), and poor ground occur, but they are the exception. The mean height would, probably, be 60 or 70 feet above the sea. The richest land, however, lies

Timber.

Millstone
River.

along the banks of the Millstone River, which winds for the greater part through pretty plains covered with rich fern and grass; and at an average distance of a quarter of a mile to the north is a continuous bluff from 70 to 120 feet in height, and sloping gradually from the top to the north-east.

The greater part of this district is occupied by Wakesiah, or, according to the Indians, Tai-took-tan Mountain, which is only remarkable for the fine quality and large growth of the timber at the base of it.

Water.

This district is well watered by fine streams, some of them being tributaries of the Millstone, and everywhere are indications of water obtainable by sinking wells.

It was not thought advisable to survey the south-eastern part of the district, as the soil is poor and stony, and little fitted for agricultural purposes; but the grazing is excellent, and the timber, both large and small, of the best possible quality; trees, adapted either for spars or fence poles, being abundant even a considerable distance up the spur of the above-mentioned mountain, which is probably above 1,100 feet above the level of the sea.

Coal.

There is every probability that the south-east part of this district, though unfitted for any purpose but grazing, is rich in coal, as the coal crops out in a seam 72 inches thick on Chase River, a distance of only a quarter of a mile from the eastern boundary of the district, and this assumption is strengthened from the broken and "faulty" appearance of the surrounding country.

Area of
district.

The whole district contains 16,000 acres, and is bounded on the east by the Nanaimo district, and on the south-east by the Cranberry district. It is distant from Colviletown, in the Nanaimo district, one and a half miles, to which there is an excellent waggon road.

Access to
north-east
part.

The north-eastern part of the district is accessible by the exit passage from Nanaimo Harbour, being only a quarter of a mile inland.

Climate.

The climate very nearly resembles that of Victoria, the general character of the summer being warm with little or no rain, but heavy dews, and that of the winter mild, with an average of ten days snow; the frosts, though not severe, are of longer continuance. Rain falls in large quantities in the spring of the year, and it is generally thought that the average exceeds that of England. No fevers or epidemics of any kind are known among the white population.

Indians.
Indian
labour.

The Indians, though numerous, are perfectly peaceful, and are made use of by the whites as ploughmen, servants, voyagers, in fact, labourers of all kinds of work. Their pay

and rations amount to little, and, if kindly treated and properly superintended, the results of their labour are profitable to the employer.

Game is abundant, consisting of elk, deer, bear, grouse, Game. partridge, wild fowl, crane, and pigeons.

CRANBERRY DISTRICT.

This district contains 15,500 acres, and is bounded on the Content. north by the Nanaimo district, and on the east by the Cedar Bounds. district, and to the north is within a quarter of a mile of the head of the Nanaimo Harbour, and through it flows nearly the whole navigable portion of the Nanaimo or Quamquamqua River.

A large portion of the north-west part is fitted only for grazing purposes, as the soil is very shallow, and rests on the sandstone rock; many of the bottoms, however, are fertile, and produce rich vegetation. North-west part.

The same applies to the south-west and westerly parts. South-west and west parts.

This district takes its name from the berry which is abundant in the swamps and around the lakes.

The north-easterly and easterly parts lying along the banks of the Nanaimo River are those best suited for farming purposes. Origin of name.

The soil is sandy, but covered with the most luxuriant vegetation; fern, wild fruit bushes and trees, among which may be noted the crab apple and cherry, are everywhere found; the woods are for the most part open and free from brush and fallen timber, and present quite a tropical appearance. North-easterly and easterly parts. Soil.

The principal timber is the cedar, pine, maple, and poplar, all of which grow to a gigantic size; the pines rising to the height of 100 feet, without a branch, and having many distinct and separate tops; the branches of the cedars grow to the very ground. Some of these trees measured 27 feet in circumference, and are all perfectly sound; the maple and poplar trees are very tall and straight, and average 10 feet in circumference. Timber.

The banks are low and accessible to boats and canoes; and for a distance of 60 yards on either side there are indications of floods; the banks occasionally rise to a height of 25 feet above the level of the river. Nanaimo or Quamquamqua River.

The river is navigable for about nine miles for flat-bottomed boats and canoes, of a light draught of water, with perfect safety; the current is rapid and always descending, the tide running in but a short distance, even at springs, which, however, always back up, and consequently increase Navigability.

the depth of water in the river for a distance of about five miles from the mouth.

Capability
of improve-
ment.

Much improvement in the depth of water and diminution of the force of the current might doubtless be effected by the judicious outlay of a small sum of money, in removing the fallen trees and drift wood, which not only form shoals in the river, but actually choke up the channel, in places rendering the navigation both difficult and dangerous.

Effect of
snows.

The melting of the snows likewise affects the river, generally during the night; the greatest rise, however, observed from this cause was one foot in a night. The river appears to offer considerable advantages to the settler, for floating down spars (one cargo of which would more than pay the price of the land,)—as well as a highway for sending his produce to market.

Gold.

Some excellent “prospects” were obtained along the river at many points.

Delta
plains.

These plains contain 900 or 1,000 acres; the south portion consists of rich vegetable soil of great depth, with a subsoil of muddy clay or loam, the deposit of ages. The north portion is apparently subject at long intervals to floods, but it is nevertheless admirably suited for a stock or grazing farm, or rather farms, bearing a long rich grass, which the Indians annually cut and sell to the settlers at Colviletown.

CEDAR DISTRICT.

Area.
Bounds.

Cedar district contains about 11,000 acres. It is bounded on the north by Northumberland Channel, on the east by the Haro Strait, and on the west by Cranberry district.

General
description.

Nearly the whole of this district, except the extreme northern sections and southern sections, is available for cultivation, with little labour. The north-eastern part on the strait is composed of open land, with a few scattered pines and maple. The soil is very fertile, and of a good depth, with a clay subsoil, and abounds with springs of beautiful water, especially along the coast, which probably are caused by the drainage from the large lakes in the interior. These lakes, with the exception of the Trois-bras, have no known outlet.

Springs.

Trois-bras
Lake.

This lake is beautifully situated in a vast natural basin, and its borders are open, and gradually sloping to the water's edge, presenting everywhere fine sites for building. The south-eastern part of this district is also filled with large lakes, though the land generally is poor or rocky around

them; but the timber, consisting of pine, cedar, and maple, is all of the largest and finest kind. The lakes are full of trout, and the surrounding country abounds with all kinds of game before mentioned.

In the south-west corner of the district are two small ^{Small} plains of the richest possible description. The northern one ^{plains.} is situated on a small, rapid river, which falls into the Nanaimo River about half a mile below.

I have, &c.,

B. W. PEARSE.

Land Office, Victoria,
 Van Couver Island,
 June 11, 1859.

GENERAL REPORT

OF THE

SURVEY of the Districts SHAWNIGAN, COWICHAN,
COMIAKEN, QUAMICHAM, and SOMENOS.

To Joseph D. Pemberton, Esq., Colonial Surveyor, &c.

Cowichan
surveys.

SIR,—In closing my returns of surveys in the Cowichan Valley, I would respectfully submit the following summary of the capabilities of the country laid out.

The character of each district has already been reported to you upon the completion of each survey.

Valley.
Extent.

The valley may be fairly considered as about 15 miles wide upon the sea coast, but narrows rapidly as we ascend the river, insomuch that upon the westerly limit of the survey (11 miles from the coast) it has only a width of about six miles. It is well watered by the Cowichan River and its numerous tributaries.

Well
watered.Mountains.
Formation.

High ranges of mountains, believed to be of secondary formation, with calcareous freestone or carbonate of lime, form almost impassible barriers towards the north and south, and the whole subsidence of land between these mountains is evidently a deposit borne down by the waters.

Depres-
sion.Free from
rocks.

The surface throughout is either uniformly level or in gentle swells, and until the mountain sides are attained scarcely any rocks or boulders are to be found.

Soils.
Their
nature.

The distinctive nature of the soils throughout the Cowichan Valley is calcareous, seemingly formed by the composition of limestone rock, for while the other principles occur in different degrees, the properties of the carbonate of lime almost invariably predominate. There is usually a good depth of 2 or 3 feet resting upon a sufficiently retentive subsoil of blue clay or gravel.

Calca-
reous.
Deep soils.
Subsoil.Earths.
Composi-
tion of
earths.Absorb and
retain
moisture.
Colour.
Absorb and
retain heat.

The earths, chiefly light, very porous, and composed of due proportions of clay, sand, carbonate of lime, and vegetable remains, are well constituted for absorbing and retaining moisture; and the general colour, from brown to black, with the entire absence of chalky or white earths, would likewise indicate a favourable soil for receiving and retaining heat. Samples taken from the "Somenos rains" were found by

experiment to absorb water sufficient to increase the column of soil from one-eighth to one-fifth its whole bulk. Test.

The low grounds shown upon the plans of survey, are good, and would be easily brought into a state fit for cultivation. The only exceptions are those lying immediately at the foot of Mount Prevost and Quamichan Mountains, where the soil resting on massive rock, has been converted into a spongy wet pabulum, bearing sub-aquatic plants and good for nothing. Low grounds.
Easily improved.
Marshes.

Much of the river bottom is a clay loam of a brown colour, and an excellent soil for wheat, beans, turnips, and red clover. The alluvial deposits of the valley is, however, far from being all of a clayey nature; in many parts, chiefly on the southerly side, the mould rests upon a gravelly and even a sandy deposit. This is likewise a rich soil, as may be seen from the abundant crops of potatoes (among the most exhausting plants), raised by the Indians upon the same patches of land for a series of years. River Bottom.
Character.
Grains eligible for river land.
Mould upon sandy and gravelly deposit.

The plain lands have soils, either gavelly, or sandy and gravelly loams, eligible for barley, oats, rye, buckwheat, beans, peas, and the root and leaf crops, potatoes, turnips, carrots, with the usual garden vegetables. The humidity of the atmosphere may prove a barrier to the culture of Indian corn. I am unable to say, but believe, that this grain will one day form a staple, as it will assuredly be a profitable commodity both of consumption and export. Rich soil.
Rain lands.
Nature.
Grains eligible for plain lands.
Indian corn.

Wheat may likewise be successfully raised upon most of the soils in their natural state, and, by proper tillage, upon *all*; and I am firmly persuaded, that under a common judicious system of farming, as good returns can be obtained from these lands as in any part of the continent of America. Wheat.

The climate, it may be noted, is one especially adapted to the pursuits of agriculture,—not being subject to the heats and droughts of California, or to the colds of the other British American provinces and the eastern United States. Climate adapted to agriculture.
Fruit.

The loamy soils everywhere possessing a depth of two or three feet, and containing a large proportion of the calcareous principle, are especially eligible for fruit culture. The river lands would be easily fitted to bear varieties of the plum and the pear; and the oak plains around the Somenos and Quamicham lakes, with a sandy clay subsoil so dry that it could be worked immediately after a rain of several hours, are exceedingly well adapted for garden or orchard purposes. On this land, I am confident, that apples, pears, plums, cherries, and all our hardy fruits, may be grown to perfection. It is believed that the filbert and the hardy grape vine would likewise be easily and successfully cultivated. Descriptions of fruit on river lands.
Descriptions of fruit on plain lands.
Filbert and grape vine.

Native
fruits for
culture.

Straw-
berry.

Plants.

Enumera-
tion of
varieties.

Varieties
of plants.

Fern and
grasses.

Woods
economic.

Facilities
for com-
merce in
wood.

List of
trees and
shrubs.

Minerals.

Lime.

Ores of
iron.

Water pri-
vileges for
mills and
machinery.

Of suffi-
cient
extent.

Among the native fruits, the blackberry, mulberry, rasp-
berry, strawberry, gooseberry, currant, and high bush
cranberry, would require little pains or culture to produce
luxuriantly. The strawberry, it may be mentioned, grows
on the plain lands nearly of the same size as the garden
fruit.

The varieties and species of plants are very numerous,—
a few only were noted growing in the plain and meadow
lands, among which are the following:—Wild pea (five to
six seeded), wild bean, ground nut, clover (species of white
clover), field strawberry, wild oats, cut grass, wild timothy,
reed meadow grass, long spear grass, sweet grass, high
ostrich fern, cowslip, crowfoot, winter cress, partridge berry,
wild sunflower, marigold, wild lettuce, nettles, wild angelica,
wild lily (white and yellow), broad-leaved rush, and reed
rush. The fern attains an enormous height of from six to
eight feet, and the grasses have all a most vigorous growth.

The chief economic woods met with are the pine and the
oak. The pine attains a large size in places, but many
other parts of the island afford far better inducements for
the cutting and exporting of lumber than can be had in the
Cowichan Valley.

The following are some of the trees and shrubs:—

Oak, red or swamp maple, alder, trailing arbutus, bois
de flêche, crab apple, hazel nut, willow, balsam, poplar, pitch
pine, and various other species, balsam fir, cedar, barberry,
wild red cherry, wild blackberry, yellow plum, choke cherry,
black and red raspberry, white raspberry, prickly purple
raspberry, swamp rose, prickly gooseberry, swamp goose-
berry, currants, bear berries, red elder, mooseberry, snow-
berry, blueberry, bilberry, cranberry, whortleberry, red and
white mulberry.

It is believed that the country surveyed will prove rich in
the economic minerals, sufficiently so to justify the Govern-
ment in causing an investigation to be made at the proper
time. Lime and freestones are abundant, with granular
marble, and both the bog and mountain ores of iron. Indica-
tions of gold were remarked by the party upon the southerly
slope of Mount Prevost, but no value was attached to these.

Water privileges, for the purposes of mills and machinery,
are not frequent along the coast, although the region abounds
with large rivers and small streams. Several good falls
exist a short distance above the mouth of the Mill Creek in
the Shawnigan district, and this creek has likewise facilities
for mills at various other points. Other streams afford a
sufficient extent of water privileges to answer the require-

ments of a large population, but these are all inland, at a distance of several miles from the coast.

The salmon is abundant, both upon the coast and in the rivers, and with the herring fisheries will unquestionably prove a lucrative branch of employment to a proportion of the future population. Codfish and numerous other kinds kinds are also taken in quantities by the Indians.

In traversing the country several descriptions of game were met with,—among which were the elk, deer, grouse, partridge; wild pigeon, ducks, and wild geese; from my own observations and from the supplies constantly brought to us by the Indians, it was inferred that the country is plentifully stocked with most kinds of game.

The Cowichan Bay is exposed to raking winds from the east and south-east, and is a somewhat insecure harbour.

The small bay running up in the 6-range of the Cowichan district would form a very secure anchorage and harbour for a certain amount of small and even of large craft, and a reservation of the sections upon this harbour might be advisable.

Access to the Cowichan Valley by water is at all times easy, the distance from Victoria being only about 35 miles. By land the communication will be somewhat more difficult. Passing a road from Victoria by the head of the Saanich Inlet, and along its westerly side, the distance would probably be about 40 miles; but it would appear that no natural obstacles will be found to render the undertaking a very expensive one. On reaching the Cowichan Valley roads will be opened with the greatest ease, and at a small expenditure, the land being favourable.

Communication with the Fraser River and British Columbia would likewise be had in about half a day's sail; but the natural market for the products of the Cowichan region will undoubtedly be at Victoria, for which it will form a rich "back country."

The site for the Government reservations requires the consideration of the department. The land is sufficiently favourable at almost any locality on the southerly side of the Cowichan Bay, though the shoal waters will be an obstacle to cheap landings or wharves.

The whole area of the tract surveyed is 57,658 acres, of which about 45,000 acres of plain and prairie lands may be set down as superior agricultural districts, the remaining 12,600 acres being either open or thickly wooded land, partly arable; will likewise ultimately be chiefly occupied. There is thence a sufficient extent of good land laid out in

Fisheries.

Abundant.

Wild game.

Varieties.

Harbour

insecure.

Small

harbour.

Access.

Communi-
cation with
market.

Roads.

Facilities
in Co-
wichean
Valley.Communi-
cation with
British
Columbia.Victoria,
the natural
market.Govern-
ment
reserves.Shoal
waters.Whole
area sur-
veyed.

this valley to provide farms for a population of from 500 to 600 families, at an average of about 100 acres each.

Indian population. Along the rivers there are nine Indian villages, as follows:—three Clemclemaluts, two Comiaken, one Taitka, one Quamicham, one Somenos, and one Kokesailah. The number of families, after careful investigation, has been set down at 250, and the whole population at about 1,000 to 1,100 souls. The Indians have shown throughout a perfectly friendly disposition, and a strong desire to see the white men settled among them. Their services may prove of utility to the early settler by way of cheap labour.

Friendly disposed.

I have &c.,

(Signed) OLIVER WELLS.

L O N D O N :

Printed by GEORGE E. EYRE and WILLIAM SPOTTISWOODE,
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For Her Majesty's Stationery Office.