REPORT
on
RECONNAISSANCE OF
Proposed
BABINE PROVINCIAL FOREST
- 1925 -

K. Carlisle

Correspondence File #065081
REPORT ON EXTENSIVE RECONNAISSANCE
OF
PROPOSED BABINE LAKE PROVINCIAL FOREST

Methods Used and Route Followed:

On October 8, 1925, a two-man party, consisting of a Jr. Forester and Ranger, commenced this reconnaissance, and realizing that winter was closing in and a large area had to be covered, every effort was made not to lose any time and only a very hasty survey was made.

Most of the observations and mapping were carried on from mountain tops, using triangulations with staff compass. Also notes and elevations were recorded as the party progressed along trails and down the lakes. Owing to the late fall weather, it was impossible to get any results with a camera and often the work was held
up on account of fog and snowstorms.

The crew started from
Smithers and followed the old Cronim Road through
to the Cronim Mine; thence returning and follow-
ing the new Indian road through to Babine Lake.
A boat was hired at New Halifax to carry the crew to
the mouth of Fulton River. They then packed
through to Topley and took the train to Barn's
Lake. Horses were used from here to Taltapin Mt.,
and on the return journey five inches of snow was
encountered making further work in the hills im-
practical. The work, however, was carried on
along the wagon roads and railroads, and consider-
able information gathered from local Rangers and
other reliable sources of information.

The map should be of great
value in planning any intensive work on this area,
but the estimates are necessarily based on very
little information.
Location:

The proposed Babine Lake Provincial Forest lies to the north-east of the Canadian National Railway, between Eudako and Moricetown. It is bounded on the north by the 55th parallel of latitude; on the east by Babine Lake, Sutherland River, Ormond Lake, and Shovel Nose Creek; and on the south and west by the valley of the Bulkley River. Detailed description for a temporary boundary for the purpose of gazetting may be found in the memorandum attached to this report.

Estimates:

Estimates include all the timber within the area described, and the areas have been segregated on the basis of density of stand as being 0-5 M.B.M. per acre, 5-10 M.B.M. per acre, or 10 plus M.B.M. per acre. It may be noticed that on each timbered area on the map there is a square giving the following information: - density, area in acres, type, number
of ties per acre, and M.B.M. of saw-timber exclusive of ties.

### Summary of Areas

<table>
<thead>
<tr>
<th></th>
<th>Acres</th>
<th>M.B.M.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mature Timber (0-5 M. per acre)</td>
<td>71,400</td>
<td>6%</td>
</tr>
<tr>
<td>(5-10 M. per acre)</td>
<td>428,400</td>
<td>35</td>
</tr>
<tr>
<td>(10 &amp; over)</td>
<td>117,500</td>
<td>10</td>
</tr>
<tr>
<td>Non-merchantable Mature Stands</td>
<td>126,600</td>
<td>10</td>
</tr>
<tr>
<td>Immature Stands</td>
<td>57,000</td>
<td>5</td>
</tr>
<tr>
<td>Logged</td>
<td>2,000</td>
<td>--</td>
</tr>
<tr>
<td>Burnt prior to 1922</td>
<td>146,600</td>
<td>12</td>
</tr>
<tr>
<td>New Burn (1922-1925)</td>
<td>205,900</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>1,249,350</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Summary of Merchantable Timber

<table>
<thead>
<tr>
<th>Density</th>
<th>Area in Acres</th>
<th>Jack Pines Ties</th>
<th>Saw-Timber M.B.M.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>71,400</td>
<td>1,071,000</td>
<td>214,200</td>
</tr>
<tr>
<td>5-10</td>
<td>4,600</td>
<td>180,000</td>
<td>22,500</td>
</tr>
<tr>
<td></td>
<td>54,700</td>
<td>1,362,000</td>
<td>22,500</td>
</tr>
<tr>
<td></td>
<td>46,800</td>
<td>1,638,000</td>
<td>22,500</td>
</tr>
<tr>
<td>Density</td>
<td>Area 10 Acres</td>
<td>Jack Pine Ties</td>
<td>Saw-Timber Ties</td>
</tr>
<tr>
<td>---------</td>
<td>---------------</td>
<td>-----------------</td>
<td>------------------</td>
</tr>
<tr>
<td>8-10 (cont’d)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9,000</td>
<td>630,000</td>
<td>45,000</td>
<td></td>
</tr>
<tr>
<td>114,000</td>
<td>2,367,600</td>
<td>467,200</td>
<td></td>
</tr>
<tr>
<td>17,500</td>
<td>---</td>
<td>103,000</td>
<td></td>
</tr>
<tr>
<td>21,100</td>
<td>422,000</td>
<td>84,400</td>
<td></td>
</tr>
<tr>
<td>29,900</td>
<td>564,300</td>
<td>62,700</td>
<td></td>
</tr>
<tr>
<td>16,000</td>
<td>644,000</td>
<td>48,800</td>
<td></td>
</tr>
<tr>
<td>15,500</td>
<td>---</td>
<td>106,500</td>
<td></td>
</tr>
<tr>
<td>12,600</td>
<td>630,000</td>
<td>50,400</td>
<td></td>
</tr>
<tr>
<td>11,200</td>
<td>448,000</td>
<td>52,000</td>
<td></td>
</tr>
<tr>
<td>85,000</td>
<td>255,000</td>
<td>252,000</td>
<td></td>
</tr>
<tr>
<td>3,500</td>
<td>250,000</td>
<td>47,500</td>
<td></td>
</tr>
<tr>
<td>436,400</td>
<td>10,016,800</td>
<td>1,541,800</td>
<td></td>
</tr>
</tbody>
</table>

| 10 plus | | | |
| 33,000 | 3,500,000 | 532,000 |
| 18,600 | 2,170,000 | 66,800 |
| 3,000 | 300,000 | 18,000 |
| 25,800 | 3,086,000 | 126,000 |
| 19,900 | 1,728,000 | --- |
| 24,800 | 1,936,000 | --- |
| 2,600 | --- | 50,000 |
| 117,500 | 11,828,000 | 833,800 |

| Total | 627,300 | 22,639,800 | 2,189,300 |
From the above figures, there is an average of 38 ties per acre and an additional 3.7 M.B.M. per acre of other species than Pine. Spruce and Balsam stands grow on the higher slopes but not in very dense stands, and there are areas of Spruce swamp which do not grow to merchantable size. In the lower slopes, pure stands of Pine are scattered throughout mixed stands of Spruce, Pine and Balsam. The Pine for the most part average an age of 125 years, and a large proportion of the standing trees are just under tie size but in ten or fifteen years will be large enough to be cut for ties. Tie cutting is opening up the stands, and this is very necessary in the pure Pine stands to avoid suppression through over-density of stocking. There is also plenty of stock left to produce a new crop of ties in another decade or two.
Reproduction:

For the most part this country was all burned within the last century and a half, and has resulted in Jack Pine as the dominating species throughout the area. Under the Pine stands which have Spruce in mixture the reproduction is principally Spruce and Balsam, with Pine, and in the pure Pine stands there is little or no small reproduction. On the burns, the Jack Pine is coming up everywhere, with the exception of comparatively small areas where burning has been frequent or there is a very light soil.

On the whole, the area may be said to be in a productive state at present, excepting the barren areas over 4,500 ft. in elevation and capable of producing ties in large quantities in the near future.

The soil is in general sandy clay and loam with a gravel or rock subsoil, and suitable for forest growth only, on account of
it's small depth and rock and gravel outcrops.

**Climate:**

The country is typical of the northern interior, and has hot, dry summers with long, cold winters and early frosts. The growing season is limited, not lasting over five months. Snow begins to fall late in October and lasts until May. Generally the snow is light and dry and does not pack well, and it seldom exceeds two feet in depth on the lower slopes.

**Agriculture:**

Farming and stock raising are being carried on in the Bulkley Valley with some success, and the possibilities in the future are fair providing a suitable market may be developed. The climate is such, however, that only the very best and most productive of the land can be used economically, and for this
reason it is very desirable to develop the forests on all questionable land and absolute forest land, so that the people may have an alternative employment when crops are poor or times are hard. Isolated patches of agricultural land, such as are in the valley of the Fulton River, can best be administered as forest land for some time and should be considered as such.

**Management:**

The area referred to in this report has already yielded considerable revenue in stumpage from the cutting, and has also provided work to a large number of people in that industry. For the most part this has been carried on in the Bulkley Valley within seven miles of the railway, but the demand for ties has made the contractors go farther back each year. There are plenty of ties in the country, but the question of transportation is theprob-
lem and this factor is the most important in the calculation of the stumpage value. It is, therefore, very desirable to protect and increase the tie stands which are at present being operated on. Tie cutting as carried on in this district is a form of selective cutting and leaves a good crop of seedlings and poles which should grow to tie-sized trees in a comparatively short time. In most cases, it is opening up an over-stocked stand and, therefore, increasing the yield. Cutting should, therefore, be carried on in the more advanced stands before the larger trees get too large for good tie cutting.

In the stands where there is also Spruce and Balsam, the removal of the Pine increases the chances of a good stand of Spruce and Balsam sawtimber. Therefore, the removal of the Pine cannot be considered as a detriment but rather as an aid to increased production on these areas. The conclusion may,
therefore, be drawn that increased cutting of ties is desirable on all areas and that the reproduction on tie areas is very favorable providing it is possible to protect these areas from fire.

Protection:

Owing to the tie cutting being carried on, there is a certain amount of slash left on the ground and this no doubt increases the fire hazard. At the same time, it is questionable just how much money it is advisable to spend on slash disposal. The greatest source of fires is in the Bulkley Valley along the railroad, and these may be stopped by fire-lines just back of the agricultural land, which would protect the tie stands on which operators are now working. Slash on the ground increases the fire hazard and should be destroyed if economically possible, but the hazard is very high whether there is slash or
not, so it may be advisable to concentrate more on fire-lines than in slash disposal.

On the proposed forest there are a number of high peaks which could be used to advantage as lookouts. The best of these is Black Mt., which covers the whole of the forest and also the Bulkley Valley. In order to use this, only four miles of trail and eleven miles of telephone line needs to be constructed and the cost would not be excessive.

Forest Surveys:

No intensive cruise has been made on this area, with the exception of those which have been necessary for timber sales. It would, therefore, be advisable to make an intensive cruise of areas where the operations are contemplated in the near future, which would give sufficient information for appraisals and also the information required in reserve surveys. From this a plan could be laid out so that the
more advanced stand of ties would be cut first. For the remainder of the area a very small percentage cruise could be made, obtaining enough information for the contemplated work on Provincial Forests.

Primary controls are established by surveys and traverses over the area and mountain peaks have been located by triangulations. Also, Babine Lake has been surveyed and may be used. There are also several trails shown on the map which may also be used as controls and can be surveyed at very little cost.

The facilities for transportation in this country are fairly good, and there is a good road along the railway and also spur roads running back into the timbered areas. A boat could be used to advantage on the Lake, and for some parts pack horses would be necessary but can only be used to a limited degree.

The summer season is a good one for cruising in this area, and more especially
the late summer up to the middle of October. Reports say that flies are extremely bad and are considered a menace to work in the summer. Winter work, however, may be carried on, but the light, dry snow is a hindrance which is hard to overcome. The cost of covering this area in the manner suggested would probably be in the neighborhood of $15,000.00, and would require two parties; one of ten men on the intensive work, and another of about nine men on the extensive or light cruise. The whole could be controlled by one chief of party, assisted by an assistant-chief in charge of each separate party.

Respectfully Submitted

K. Caricilo

A. Foresta
The tentative boundary of the proposed Babine
Lake Provincial Forest is as follows:
Commencing at mile post 116 on the 56th parallel;
  thence south to the N.E. Cor. of Lot 1049;
  thence south to the S.E. Cor. of Lot 1049;
  thence east to the N.E. Cor. of Lot 1048;
  thence south to the N.E. Cor. of Lot 146;
  thence east to the N.E. Cor. of Lot 4272;
  thence south to the S.E. Cor. of Lot 4274;
  thence east to the S.E. Cor. of Lot 4277;
  thence south to the S.E. Cor. of Lot 28;
  thence east to the N.E. Cor. of Lot 23;
  thence south to the North boundary of Lot 5830;
  thence east to the N.E. Cor. of Lot 5830;
  thence south to the N.W. Cor. of Lot 1162;
  thence east to the West boundary of Lot 3326;
  thence north to the N.W. Cor. of Lot 3552;
  thence east to the S.W. Cor. of Lot 3561;
  thence north to the N.W. Cor. of Lot 3561;
  thence east to the S.W. Cor. of Lot 4092;
  thence north to the N.W. Cor. of Lot 4092;
  thence east to the N.E. Cor. of Lot 4095;
  thence south to the North boundary of Lot 2633;
  thence east to the N.E. Cor. of Lot 2633;
thence south to the N.W. Cor. of Lot 2632;
  thence east to the N.E. Cor. of Lot 2632;
  thence south to the S.E. Cor. of Lot 2632;
  thence east to the N.E. Cor. of Lot 2633;
  thence south to the E.W. Cor. of Lot 2631;
  thence east to the N.E. Cor. of Lot 2631;
  thence south to the S.E. Cor. of Lot 2631;
  thence east to the N.E. Cor. of Lot 2152;
  thence south to the S.E. Cor. of Lot 2152;
  thence east to the E.E. Cor. of Lot 6625;
  thence south to the E.W. Cor. of Lot 6626;
  thence east to the N.E. Cor. of Lot 6626;
  thence south to the S.E. Cor. of Lot 4212;
  thence west to the N.W. Cor. of Lot 4214;
  thence south to the S.W. Cor. of Lot 4209;
  thence east to the S.W. Cor. of Lot 4198;
  thence north to the N.W. Cor. of Lot 4198;
  thence east to the S.W. Cor. of Lot 4202;
  thence north to the N.W. Cor. of Lot 4202;
  thence east to the E.E. Cor. of Lot 4201;
  thence south to the North boundary of Lot 3512;
thence east to the S.E. Cor. of Lot 4194;
thence south to the S.W. Cor. of Lot 4193;
thence east to the S.E. Cor. of Lot 4193;
thence north to the N.E. Cor. of Lot 4193;
thence east to the N.E. Cor. of Lot 4199;
thence south to the N.W. Cor. of Lot 3536;
thence east to the N.E. Cor. of Lot 3551;
thence south to the N.E. Cor. of Lot 2129;
thence east to the N.E. Cor. of Lot 6698;
thence south to the N.W. Cor. of Lot 4090;
thence east to the N.E. Cor. of Lot 4090;
thence south to the S.E. Cor. of Lot 4090;
thence east to the N.E. Cor. of Lot 3543;
thence south to the N.W. Cor. of Lot 4257;
thence east to the N.E. Cor. of Lot 4257;
thence south to the S.E. Cor. of Lot 4257;
thence east to the N.E. Cor. of Lot 4258;
thence south to the N.W. Cor. of Lot 6614;
thence east to the N.E. Cor. of Lot 6614;
thence south to the S.E. Cor. of Lot 6614;
thence east to the N.E. Cor. of Lot 6612;
thence south to the S.E. Cor. of Lot 6611;
thence east to the N.E. Cor. of Lot 6607;
thence south to the N.W. Cor. of Lot 6608;
thence east to the N.E. Cor. of Lot 6608;
thence south to the S.E. Cor. of Lot 6609;
thence east to the N.E. Cor. of Lot 6609;
thence south to the S.E. Cor. of Lot 2507;
thence east to the S.E. Cor. of Lot 6701;
thence south to the N.W. Cor. of Lot 4179;
thence east to the N.E. Cor. of Lot 4179;
thence south to the S.E. Cor. of Lot 4178;
thence east to the N.E. Cor. of Lot 4178;
thence south to the S.W. Cor. of Lot 4178;
thence east to the N.E. Cor. of Lot 4178;
thence south to the S.W. Cor. of Lot 6679;
thence east to the N.E. Cor. of Lot 4162;
thence south to the S.E. Cor. of Lot 4162;
thence east to the N.E. Cor. of Lot 4158;
thence south to the S.E. Cor. of Lot 4158;
thence east to the N.E. Cor. of Lot 4153;
thence south to the centre of Lot 4150;
thence east to the N.E. Cor. of Lot 4149;
thence south to the S.E. Cor. of Lot 4149;
thence east to the centre of Lot 3586;
thence north to the North boundary of Lot 3586;
thence east to the centre of Lot 3586;
thence south to the South boundary of Lot 3586;
thence west to the N.E. Cor. of Lot 3584;
thence south to the S.E. Cor. of Lot 3584;
thence west to the N.W. Cor. of Lot 3581;
thence south to the S.W. Cor. of Lot 3579;
thence east to the S.E. Cor. of Lot 3812;
thence north to the N.W. Cor. of Lot 3814;
thence east to the N.E. Cor. of Lot 3816;
thence south to the S.E. Cor. of Lot 3816;
thence east to the N.E. Cor. of Lot 6407;
thence south to the S.E. Cor. of Lot 6407;
thence east to the N.E. Cor. of Lot 3739;
thence south to the N.W. Cor. of Lot 6410;
thence east to the N.E. Cor. of Lot 6410;
thence south to the N.W. Cor. of Lot 6404;
thence east to the N.E. Cor. of Lot 4084;
thence north to the N.W. Cor. of Lot 6479;
thence east to the N.E. Cor. of Lot 3257;
thence north to the centre of Lot 3249;
thence east to the N.E. Cor. of Lot 6331;
thence south to the N.W. Cor. of Lot 6330;
thence east to the N.E. Cor. of Lot 6330;
thence south to the N.W. Cor. of Lot 1173;
thence east to the N.E. Cor. of Lot 1172;
thence north to the N.W. Cor. of Lot 3650;
thence east to the N.E. Cor. of Lot 3650;
thence north to the S.W. Cor. of Lot 3224;
thence east to Ormond Creek;
thence in a north-easterly direction
following Ormond Creek to Ormond Lake
and around Ormond Lake on the south
side to the south boundary of Lot 3208;
thence west to the S.W. Cor. of Lot 3209;
thence north to the N.W. Cor. of Lot 3209;
thence in a north-westerly direction to
the S.E. Cor. of Lot 5025;
thence north to the South boundary of Lot 5024;
thence west to the S.W. Cor. of Lot 5024;
thence north to the South boundary of Lot 4957;
thence west to the S.W. Cor. of Lot 4957;
thence north to the S.E. Cor. of Lot 1872;
thence west to the S.W. Cor. of Lot 5156A;
thence north to the South boundary of Lot 5156;
thence west to the S.W. Cor. of Lot 5156;
thence north to the S.E. Cor. of Lot 677;
thence west to the S.W. Cor. of Lot 676;
thence north to the S.E. Cor. of Lot 674;
thence west to the S.W. Cor. of Lot 674;
thence north to the S.E. Cor. of Lot 675;
thence west two miles more or less to the
shores of Babine Lake;
thence following the south shore of Babine
Lake to the fifty-fifth parallel of
latitude;
thence west along the fifty-fifth parallel of
latitude to the point of commencement.

All comprised in Range 5, Coast District.
thence west to the S.W. Cor. of Lot 5025;  
thence north to the S.E. Cor. of Lot 5026;  
thence west to the S.W. Cor. of Lot 5026;  
thence north to the N.W. Cor. of Lot 5026;  
thence east to the N.E. Cor. of Lot 5028;  
thence north to the N.W. Cor. of Lot 5029;  
thence east to the S.W. Cor. of Lot 5030;  
thence north to the N.W. Cor. of Lot 5030;  
thence east to the S.W. Cor. of Lot 5031;  
thence north to the N.W. Cor. of Lot 5031;  
thence west to the S.W. Cor. of Lot 3210;  
thence north to the S.E. Cor. of Lot 4973;  
thence west to the S.W. Cor. of Lot 4973;  
thence north to the S.E. Cor. of Lot 4972;  
thence west to the S.W. Cor. of Lot 4972;  
thence north to the N.W. Cor. of Lot 5033;  
thence west to the S.W. Cor. of Lot 4970;  
thence north to the S.E. Cor. of Lot 4964;  
thence west to the S.W. Cor. of Lot 4964;  
thence north to the S.E. Cor. of Lot 4962;  
thence north to the S.E. Cor. of Lot 4960;  
thence west to the S.W. Cor. of Lot 4959;
LEGEND

TIMBER LAND
- 0-5 MBF
- 5-10
- 10+

AGRICULTURAL

BURNED

POLE STANDS  Young trees over 25' high

REPRODUCTION  Under 25' feet

TENTATIVE RESERVE BDY.

PROPOSED

BABINE LAKE PROVINCIAL FOREST

Scale 3 Miles = 1 Inch.
Scattered patches green P.1 covering 10% of Area

Total Burn 274,800 Acres

Old Burn

Patches of poplar and P.1 reproduction

R-3-B Reproduction

10 M + 124.6 Acres
P.1 Ties 94-58
Ties 175 per A.
Logs 7 M.

Proposed

Sicai Forest