RECONNAISSANCE

of

ADAMS RIVER

by

F.W. Beard.

1912

Now in R. 26 Memch Forest 1932
- R 40 Nickonlich Forest 1932
- R 41 Shuswap Forest 1932

Forest Surveys No. 500.
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Report On
Adams River Country
by
F. W. Beard.

Area Covered.

The district under examination included the valley of the Adams River to a point about 25 miles North of Adams Lake, and the irregular mass of hills and valleys lying between it and the Seymour Arm of the Shuswap Lake, an area of about 160,000 acres.

Topography.

The level of the country rises from 1367 feet, the elevation of Adams Lake, to 7300 feet.

The topography in general is rough and mountainous, and adjacent to Adams Lake the land rises to an elevation of 5000 ft. to 5500 feet on each side. At the lower levels the hillsides are very steep but become gentler as one goes higher until at 5700 feet the country becomes a plateau which extends to within four miles of the Seymour Arm of the Shuswap Lake.

A steep range separates the North Thompson and Adams River valleys, but the Squam and the Barriere, whose headwaters are separated only by a low divide, have formed a pass, through which a good wagon road
runs.

The plateau is cut up by several creeks, namely the North and East Forks of Scotch Creek, Blueberry Creek and several minor creeks which flow south. The volume of water in the Forks of Scotch Creek is sufficient to flume timber; the other creeks are not as large, but could be used in the spring months for this purpose. The water which drains into Adams Lake consists principally of the Adams River which flows into the head of the Lake. From the North the Mo-Mich River flows into Adams Lake on the East side, six miles below the head of the lake. This river is fed by Corjeune Creek which heads from the North between Adams River and North Seymour River.

The watershed of the eastern section of the tract explored is drained by Celesta Creek, which flows out of Hum-A-Milt Lake, which is fed by several creeks from the plateau to the south. The southern portion of the tract is drained by the East and North Forks of Scotch Creek which rise in the plateau district to the north, flow south into the railroad belt and empty into Scotch Creek, which flows into Shuswap Lake.

The geological formation of the tract covered was mainly a schist, this being in especial evidence on rock-slides. Traces of glaciation were
found everywhere.

Climate.

The climate in this section is characteristic of the climate of the interior of British Columbia. This district has a climate similar to Revelstoke, the annual temperature being a little over 40, the summer temperature high and the winter fairly severe. It lies within the second wet belt and the annual precipitation is about 20 inches, nearly one half of it in the form of snow. Early and late frosts are frequent except in the most favoured valleys, say at elevations not exceeding 2200 feet. Winters are too severe to permit the winter ranging of stock, except in very limited areas. The snow on top of the plateau will average 10 feet in depth during the winter months, while in the valleys it will average 8 feet in depth.

Conditions of Settlement.

The country is very difficult of access, and is practically uninhabited, with the exception of the shores of the Seymour Arm and of the Shuswap Lake. The Adams River Lumber Co. transport their supplies with a stern-wheel steamboat to the head of Adams Lake, and from this point a road extends up the Adams River Valley for 30 miles. A road follows the valley of Celesta
Creek for sixteen miles to Hup-A-Milt Lake, from which point there is no further means of transportation, if we except a few Indian trails.

**Forest Species.**

The timber species found, with altitude range and cull deductions applied to each species, are as follows:

<table>
<thead>
<tr>
<th>Species</th>
<th>Range in Altitude</th>
<th>Cull</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas Fir</td>
<td>2000 - 4500</td>
<td>15%</td>
</tr>
<tr>
<td>Cedar</td>
<td>2000 - 4000</td>
<td>25%</td>
</tr>
<tr>
<td>Engelmann Spruce</td>
<td>2000 - 5000</td>
<td>10%</td>
</tr>
<tr>
<td>Balsam Fir</td>
<td>5000 - 7000</td>
<td>15%</td>
</tr>
</tbody>
</table>

**Forest Types.**

The forest growth may be divided into three qualities:

**Quality 1.** - consists of Cedar and Engelmann Spruce and occupies the land along creek beds where the moisture is plentiful and extends to an elevation of 5000 feet in favored localities. In this type Cedar is the predominating species with an admixture of Spruce and some Fir, and the trees of all three species will average 70 to 80 feet in height. The timber does not run in even stands, but varies considerably with the locality. The reproduction is very abundant, but consists chiefly of Spruce and Fir,
as the Cedar does not do well under a heavy canopy.

This type is to be found along the bottoms of the following creeks and lakes, viz., North and East Forks of Scotch Creeks, Cayenne Creek, Mo-Mich River and Mo-Mich Lakes, tributaries of these lakes, viz., North and East Forks of Scotch Creeks, Cayenne Creek, Mo-Mich River and Mo-Mich Lakes, tributaries of these lakes, Stuk-un-ap-tun and Hum-a-Milt Lakes, also a small plateau between Adams Lake and the North Forks of Scotch Creek. Where this type occurs the soil in general is good, consisting chiefly of a sandy clay with a four inch average covering of decaying needles, turfs and moss.

**Quality 2.** - consists of Douglas Fir, Cedar and Birch, Fir being the predominating species, Cedar second in percentage of species with Birch in mixture. The type is found generally on the slopes and occasionally on the ridges, very seldom attaining an elevation over 5,000 ft. The height of the stand averages between 40 and 50 ft.

This quality takes in the old burns where the originals are left standing and is generally classed in the types as 0 - 5,000 ft. B.M. A great percent. of this
type will average 3,000 ft. B.M. to the acre, so it is fit for the timber only, a good example of this quality is along the West slope of Adams Lake, this slope has all been burned over, leaving only scattered original individuals of the stand.

The soil is rocky clay covered with three or four inches of humus. The boulders are very evident and rock slides are of frequent occurrence.

Douglas Fir takes the place of the Yellow Pine to a great extent on rocky slopes, as the latter species is not found east of Barrier Lake.

Quality 3. - is found at elevations of 5,000 ft. to 7,000 ft. It is commonly known as the Alpine type, and stands on high exposed ridges where the soil is very thin and high winds and low temperatures prevail.

The trees are never over 10 inches in diameter and the bole is usually very short and scrubby.

Although the stand is comparatively open, the reproduction is very scanty. What there is seems to get a good start and thrives well for two or three years, after which the rate of growth drops off. Quality 3 cannot be considered merchantable.

Quantity of Timber.

The merchantable timber has a total acreage of 8,000 acres and averages about 5,000 ft. per acre.
It is distributed as follows:

<table>
<thead>
<tr>
<th>Location</th>
<th>Feet</th>
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<tbody>
<tr>
<td>North Fork of Scotch Creek</td>
<td>4,800,000</td>
</tr>
<tr>
<td>East &quot; &quot; &quot; &quot;</td>
<td>6,400,000</td>
</tr>
<tr>
<td>Mo-Mich River</td>
<td>3,000,000</td>
</tr>
<tr>
<td>Cayenne Creek (up 5 miles)</td>
<td>3,800,000</td>
</tr>
<tr>
<td>Hum-A-Milt Lake &amp; Tributaries</td>
<td>9,000,000</td>
</tr>
<tr>
<td>Blueberry Creek</td>
<td>2,400,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39,400,000</strong></td>
</tr>
</tbody>
</table>

**Location of Merchantable Timber.**

As will be seen from the table above, the timber is close to the various rivers and lakes, and in sufficient quantity on each to make logging easy.

The Adams River Lumber Co. have been operating in the Adams River Valley for six or seven years, using the Adams River for transportation to Adams Lake. The method used is simply to cut the trees down and skid them to the river with horses.

The Arrow Lakes Lumber Co. have logged the Celesta Creek Valley and have left the forest in a very good condition, considering the percentage of culls that occur in that locality.

The land surrounding the Mo-Mich Lake, Cayenne Creek, and Hum-A-Milt Lake is mostly taken up with timber limits.
Burned over Land.

As in other localities of the Rocky Mts. region, forest fires have caused great destruction in this district. Evidence of over a dozen fires have been obtained from studies of stumps of old trees and age of the second growth, the oldest dating back 50 to 60 years. 140,000 acres, or 83\(\frac{1}{2}\)% of the total area examined, have either been completely or partially burned by fire. At 5000 feet per acre this means a loss in timber of 700,000,000 ft. worth to the Government about $700,000 and to the community about $10,000,000.

The reproduction varies in age according to the date at which a particular area was fire swept. At the low elevations it has sprung up in great abundance, but at higher altitudes the country has been left bare, the low reproducing power of the Balsam Fir accounting for the fact.

Spruce, Cedar and Fir seem to stand the attack of the fire fairly well, because of their occurrence in moist situations, and where they occur regeneration is sure to follow a fire. Fir seems to be the most prolific, but on old burnt areas Birch is reproducing in great numbers.
Fire Protection.

It is very important that trails and roads be constructed, not only to open up the country, but also for fire protection purposes. A trail should be made along the ridge east of Adams Lake, northward as far as the No-Mich River, and thence east, keeping to the top of the ridge until the road leading down to Celesta Creek is reached. This trail would be an ideal one from the fire protection point of view as a great stretch of country may be seen in either direction from it. The present patrol is carried on along the lakes, from which the view is necessarily much more limited than it would be from a ridge trail. A further advantage of the ridge trail patrol is that the ranger will always be above the fire, and can thus get at it more quickly.

A trail could easily be constructed from the Forks of the Barriere River to East Barriere Lake, and from this point over the divide into the Adams Lake country. It would then be possible to station a fire patrol on the Squam Valley road, which is connected with the road in the Barriere River Valley.

Further it would be beneficial to construct a pack-trail from the North Thompson River to Tum-Tum
Lake, from which point a trail five miles long would be necessary to connect with Adams River road, and another useful trail could be constructed from Tum-Tum Lake eastward to the headwaters of the North Seymour River following the line of the Gold Range.

Forest Reserves.

At present the greater part of the suitable for agriculture is timbered, and most of the timber is owned privately. The slopes from the valleys are much too precipitous, and the plateaus above too high to be made use of for any kind of farming. It would be advisable therefore to place the whole area under a Forest Reserve, and as the timber of the valleys was logged off the land could be released and opened for preemption.

Agricultural Land.

Land suitable for agriculture is confined to the river valleys and lake sides, and would cover some 12,000 acres. Another 12,000 acres on the high plateau is fit for summer grazing but four months is all that could be depended on and trails would have to be constructed to it from the valleys. Furthermore hay must be grown in the district for winter feed.
before the grazing of cattle or sheep in any quantities would be profitable, on account of the high cost of importation from outside.

The eastern slope of the lake will furnish approximately 1,200 acres of fruit land of which the elevation varies from 1,365 feet to 2,200 feet. The soil there consists of a sandy clay with some boulders and the slope averages from 3 to 6 degrees.

After the timber is once cleared off the area the soil will become very dry, but, as the creeks occur at equal and frequent intervals, the land could be easily irrigated.

In the valley of the Adams River itself a plain of a mile to a mile and a half wide extends for six miles up from the head of the lake. This land is especially adapted for agricultural purposes, not only for fruit growing but for all kinds of mixed farming. These 4,000 acres have a good, firm, sandy-clay soil. During dry seasons the land would have to be irrigated, but there are several small creeks running into the river, which are probably sufficient for all requirements. The timber has all been logged and the debris burnt off clean, so that the cost of putting the land under cultivation
would be very small.

Above the 6 mile plain the valley narrows down to \( \frac{1}{4} \) to \( \frac{1}{2} \) mile in width and is about 20 miles in length, another 3,000 acres. This land lies very low and appears to be adapted for hay growing only. The land surrounding the Mo-Mich Lake, Cayenne Creek and Hum-A.-Milt Lake will produce 3,500 acres of agricultural land, and, in all probability, more will be found available after the timber is cleared off. The soil consists of a clay loam, water is plentiful and from all reports the area seems to be favored with a mild winter.

As has been previously stated, a large portion of these agricultural lands are now covered with merchantable timber, which must be removed before the land can be opened to settlement.
FOREST RECONNAISSANCE
ADAMS LAKE

SCALE: 1 MILE = 1

LEGEND:

- Mature Timber
- Immature Timber
- Clean Plowed
- Lost
- Agricultural Land
- Roads
- Trails
- Contour Intervals 50'