R 234C
HERRICK RIVER RECONNAISSANCE
1928
Herrick River Reconnaissance
- 1928 -

Introduction.

The reconnaissance of the Herrick River was carried out during the period July 19th to August 10th, under very adverse weather conditions. During the twenty-one days spent in the field rain was experienced for eleven days with the result that poor visibility was found for field work. Under these conditions it was found necessary to discontinue the reconnaissance, east of, and taking in the main body of timber on the Herrick. This point is located on the divide south of Dayton Creek, approximately fifty miles east of the McGregor River.

At the point where the reconnaissance ends, the Herrick watershed continues to its source through what appears to be a steep sparsely timbered valley flanked by high barren mountains. Trappers report a further small stand of merchantable timber on North Pass Creek near the source of the Herrick. The best route in which to examine this timber would be in from Upling on the Canadian National Railway; thence via the Clearwater, the Upper McGregor Valley and South Pass Creek.
The headwaters of Fontonika, Spakwaniko and Captain Creeks were not investigated. The latter was only viewed from a distance and appears to be a shallow valley and is reported to carry very little merchantable timber. Fontonika and Spakwaniko creeks course in wider deeper valleys and will carry some timber values.

**Route Followed.**

Official Reference Maps Nos. 36 and 36-A were used to plot the location of all timbered areas. Boundaries of timber were ascertained from compass readings taken from high vantage points or points geographically described on the base maps. Contents of types were found by strip and sample plot cruising and notes taken on the height, density and general condition of timber.

For this project the assistance of one canoe man packer was secured through the District Office, Prince George. A 33 ft. cottonwood dugout and out-board engine were hired from Aleza Lake and the reconnaissance started from Hansard Siding. Route followed from Hansard via the Fraser and McGregor Rivers to the Herrick; thence via the Herrick for approximately 30 miles to the "Falls" and head of navigable water. At this point the canoe was cached and the remainder of the trip made with packs to the divide south and east of Dayton Creek.
James Creek (Bad River) six miles up stream from its junction with the Herrick River. It was along the reaches of this stream that Alexander McKenzie wrecked his birchbark canoe when entering the Pacific Slope on his memorable journey of exploration from Fort Chipewyan to Bella Coola in 1793.
Wet muskeg - East of outlet of James Creek - Herrick River Watershed.

North slope and westerly extremity of the Deziako Mountains that form the divide between the McGregor and Herrick Rivers. From Herrick River - one mile east of James Creek.
Description of Area.

Location.

The Herrick forms the north fork and main tributary stream of the McGregor River and finds its source from glaciers and snowfields of the Rocky Mountains just west of the 120th Med. The valley is bounded on the north by the Arctic Divide and on the south by the Deziako Mountains and flowing a westerly course for approximately sixty-five miles enters the McGregor approximately thirty-eight miles east of the Fraser.

Description of Watershed.

Heading up stream from the confluence with the McGregor the Herrick has an average width at moderate stages of water of 200 feet and is found to be navigable for approximately thirty miles to where a 60 ft. falls are encountered. Beyond this point many canyons and cascades occur. Along the lower reaches, the valley floor averaging 2800 ft. in elevation is narrow, having an irregular width of approximately 1200 feet in Cottonwood Flats, which break away from moderately steep and broken sidehill slopes to high barren divides.

Along the above described reaches four main feeders enter the Herrick from the north through narrow side valleys in order named as follows:-

(1) Captain Creek.
(2) James Creek (Bad River).
(3) Fontoniko or Moose Pass Creek.
(4) Spakwaniko Creek
All the above named streams will have an approximate length of fifteen miles and width of from 20 to 40 ft. Only one tributary enters from the south, namely Gargill Creek, which flows west from the Deziako Mountains and enters the Herrick one mile east of its junction with the McGregor.

East of the "Falls" - ref. map attached - the topographic features are similar to those encountered on the lower Herrick with but one chief difference, namely, that sidehill slopes are more broken, but less steep and slope direct from water courses to main divides. Three miles east of the "Falls" the Herrick forks, Dayton Creek, with an average width of 120 feet, flows in through numerous canyons from the north east, with the main river valley, average width 150 feet, bearing south east; thence north east to its source in the Rocky Mountains.

**Climate.**

Runs to extremes with only a brief transition between seasons. Annual precipitation approximately 50 inches, which includes a heavy snowfall of approximately 6 feet during the winter season, which is usually severe.

Spring and Summer Seasons May 1st to September.

Fall and Winter Seasons Sept. 15th to April 30th.

Unusually heavy floods succeed the spring break-up in May with periodic stages of high water, caused by the release of snow-water from the main divides, occurring until the "Fall" season.
Head of navigable water. 60 ft. falls on Herrick River, thirty miles up stream from the confluence of the Herrick and McGregor Rivers.

Looking south west down Dayton Creek to the Desiako Mountain divide. Taken four miles up stream from the Herrick.
Canyon and "falls" on Dayton Creek nine miles up stream from the Herrick.

Spruce - balsam along Dayton Creek - twelve miles up stream from the Herrick.
Agriculture.

The only lands topographically suitable for tillage are situated between the "Falls" and the McGregor. These lands comprise scattered open wet muskegs and narrow fringes of heavily wooded bottomland covered with cottonwood and spruce. It would not be practicable to farm this land due to periodic stages of high water when it is subject to flood.

Forest Description.

Forest cover is very similar in composition to growth on the lower McGregor, - ref. Forest Surveys R.##234. The timber will carry a lower average volume. Stands vary between 6 M.B.M. and 20 M.B.M. per acre with an approximate average volume of 11 M.B.M. Spruce and balsam are the principal tree species, with islands of cottonwood interspersed with spruce found on river flats. Large areas of non-commercial cover in balsam, spruce are found throughout merchantable timber stands, in timbered muskegs and where sites are too steep at the higher elevations. Merchantable timber will run to approximately 60% spruce, 30% balsam and under 5% cottonwood.

Reproduction as an understory to merchantable timber was found to be dense in balsam and spruce averaging ten feet high.

Ground cover is of moderate density in salmon and blueberry bush, alder, willow, snowbrush etc. Windfall moderate.
The mountain divide between Herrick River and Dayton Creek.

Timber sidehill on Dayton Creek slope of divide to Herrick River.
Cottonwood canoe - length 33', beam 3' 3".
Type of canoe used by boatmen on the McGregor River.
Occurrence, distribution and quality of timber.

A stand type of spruce - balsam was found growing throughout the entire watershed. A few scattered stands of cottonwood intermixed with spruce occur along bottom land of the river reaches, giving way to spruce - balsam on lower sidehill slopes and sub-alpine balsam to barrens at the higher elevations.

The quality of the spruce is good, sound and free from defect. This species will run from a short to medium height class and is generally free of limbs for the first log, with three merchantable logs to the tree. Average D.B.H. will approximate 15 inches with maximum diameter growth of 34 inches. Balsam was found to be of poor quality, short straight, but limby and heavily infected with heart-rot. Average diameter 14 inches, max. diameter growth 24".

The main body of merchantable timber forming one unbroken stand occurs east of the "Falls" on the divide between Dayton Creek and the Upper Herrick.

Timber Estimates.

<table>
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<th>Location</th>
<th>Merch.</th>
<th>Cotton.</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
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<td>Acres</td>
<td>Spruce</td>
<td>Balsam</td>
</tr>
<tr>
<td>Under 10 M.B.M.</td>
<td>5400</td>
<td>30200</td>
<td>12300</td>
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<tr>
<td>Lower Herrick</td>
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<td></td>
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<tr>
<td>Over 10 M.B.M.</td>
<td>10500</td>
<td>69300</td>
<td>32300</td>
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<tr>
<td>Lower Herrick</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Over 10 M.B.M.</td>
<td>18400</td>
<td>121400</td>
<td>64800</td>
</tr>
<tr>
<td>Upper Herrick</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>34300</td>
<td>220900</td>
<td>109400</td>
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</table>
Note: The 60 ft. falls located 4 miles west of Dayton Creek has been used as a division between the Upper and Lower Herrick River.

A 20% cull has been made for heart-rot defect in balsam. The above estimates do not include possible timber quantities at the headwaters of Fontoniko and Spakwaniko Creeks and also exclude estimates of alienated timber on licences located at the Forks of the Herrick and McGregor Rivers as follows: T.Ls 8665 to 8672 inclusive and T.L.8674. For estimates please refer to Forest Inventory.

Logging.

The timber quantities embodied in this report should be considered inaccessible under present day standards. When the watershed is logged, the main body of timber on Dayton Creek can be most economically taken out via the river. Except under improved logging methods, no other means of transporting logs would be practicable due to the swampy nature of the land and the irregularity of surface features for road construction.

Protection.

This tributary stream of the McGregor has a low fire hazard. The chief cause of fire is from periodic lightning storms occurring during the summer season, which, evidently due to the heavy run off from snowfields at high altitudes and from patches of snow that remain in the vali-
ley throughout the year, seldom spread to any size before dying out. The valley is seldom visited during the fire season and then only by trappers with winter supplies taken in by canoe, which is the best means of access. No trails, other than those on trap lines are in existence.

Recommendation to Management.

That the above described area be included as part of the proposed McGregor Forest.

A. E. Collins,
Jr. Forester.