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## REPLANTING EFFORTS BY THE PREDECESSOR COMPANIES OF MacMILLAN BLOEDEL DURING THE INTERWAR PERIOD

by Sen Wang, Ph.D.
Canadian Forest Service
Victoria, B.C.
Part Two of Two

### **REPLANTING ACTIVITIES**

Initially, Bloedel, Stewart & Welch's efforts were tentative and nominal, but the company went into reforestation on a more significant scale starting from 1941 onwards. By around the end of World War II, BS & W had planted almost two million trees, or 70 percent of the entire reforestation work carried out by the private forest industry in the province. This success was largely attributed to the adoption of a reforestation policy.

Recycled paper



In one of the company's timber statistics reports, prompt restocking of logged-off lands was listed as one of five common practices during the 1940s.<sup>1</sup> The top management of the company was very proud of this policy. In his letter to the Honourable Wells Gray, B.C. Minister of Lands, dated May 17, 1943, Mr. S.G. Smith, Vice-President of BS & W communicated their determination to develop timber areas and grow trees as well as cut them.<sup>2</sup> In those days, Bloedel's were well known for their slogan "Here Today and Here Tomorrow." An advertisement that appeared in *The Vancouver Sun*, dated Jan. 5, 1944, ran like the following:

"Here Today and Here Tomorrow," as it is sometimes applied to the timber industry, may be forever banned from the thoughts of the people of this province. Tomorrow carries the promise of new forests, new wealth and permanence. But the full maturing of tomorrow's promise must be secured today. The proper steps in the preservation and development of the forests should claim the intelligent interest of every citizen and requires the good will and understanding of us all. Over the years, Bloedel's have helped to enrich our community life through the conversion of the frozen assets of the forests into usable assets for our way of living.

Bloedel's realise their responsibility in the picture and are constantly planning and thinking in an effort to assist themselves and those who depend on them to achieve permanence and prosperity - today and for the generation to come.<sup>3</sup>

While Bloedel, Stewart & Welch was implementing its slogan "Here Today and Here Tomorrow" by expanding its replanting program, the MacMillan Export Company Limited and its subsidiaries employed a somewhat different method. They approached government nurseries to obtain seedlings and began planting logged-over areas that were not regenerating naturally. So, replanting activities by the MacMillan Export Company Limited arose from their efforts to facilitate natural reproduction because the company felt that its first duty was to bring about natural reproduction to the greatest possible extent by modifying logging methods.

In order to achieve a high rate of natural regeneration, the company adopted the patch system of logging. The principle was to clear-cut patches of about 130 to 300 acres, each surrounded on two to four sides by mature timber which was not logged until five to eight years had elapsed. Topography, the type of logging machinery used and several other factors were considered in determining the size of the patch.

<sup>&</sup>lt;sup>1</sup> MB Corporate Archives Box 26-7, Timber Statistics for Bloedel, Stewart & Welch, October 1949.

<sup>&</sup>lt;sup>2</sup> MB Corporate Archives Box 26-3.

<sup>&</sup>lt;sup>3</sup> MB Corporate Archives Box 101-10. The Vancouver Sun carried, on July 8, 1946, another statement by Bloedel's as follows: "To urge all forest owners and forest operators to develop and adopt forest practices designed to insure continuous production of timber on all areas as harvested, irrespective of ownership." So reads the second clause of a far-seeing forest policy statement promulgated by the men of the Forest Industries of North America who think beyond today. We are actively supporting this wise policy.

The patch logging system was attributable to the Alberni Pacific Lumber Company Limited. From the inception of its use in 1937, this system aimed to produce better regeneration thanks to the limited size of logging sites, which were surrounded by green timber on at least two sides, with the standing timber acting as seed trees. In order to achieve the greatest degree of fire protection and natural reproduction, selective logging was found to be impracticable. On the other hand, clearcutting over large areas failed to leave enough seed trees to serve the needs of natural regeneration.

During the period from 1937 to the end of World War II, the Alberni Pacific Lumber Company Limited logged about 12,000 acres in the Ash River valley using the patch logging system. APL entered into an agreement with the Forest Branch to establish 1,200 sample plots to study the progress of natural seeding but the Forest Branch was compelled to cut its help because of the war. Consequently, the study results were incomplete when H.R. MacMillan wrote the paper *The New Forest.* Nevertheless, APL began to plant Douglas-fir in 1941 in the Ash River valley. Replanting took place on one site within three years after logging, and the young growth, spaced 6 feet apart, were about one foot tall by 1945. The provincial Forest Service provided seedlings free of charge and APL's planting costs were less than \$10.00 per acre.

The young trees performed very well and, at the time of checking, the success rate was extremely high. It was believed that the patch logging system was used on up to 300 acres in the Ash River valley. Given the belief that replanting was necessary on less than one-third of the logged over areas, and based on a requirement of over 1,000 trees per acre, a total of up to 100,000 seedlings were probably utilised in the replanting activities.

Details of the story were contained in a report prepared by APL staff on August 28, 1945.<sup>5</sup> The first part of the report is as follows:

Tree planting, Project 2, A.P.L. Co. Ltd.

Spring planting, 1945, on an area in Lot 73, 7 miles above Camp I on Branch "C" of the Ash River Line. Area logged and burned in 1942, except for 15 acres logged and burned in 1939 and reburned in 1942.

Reasons for planting:

- 1) distance from seed trees;
- 2) reburn of a portion; and
- 3) recommendation of Silburn in his 1944 report as area not likely to restock naturally.

<sup>&</sup>lt;sup>4</sup> As a major species in the area, Douglas-fir requires sunlight, therefore seedlings will not appear and grow except in considerable openings in the forest. Also the understorey in this forest consists chiefly of suppressed hemlock, which if released by selective removal of the Douglas-fir would not make the next best crop that can be produced.

<sup>&</sup>lt;sup>5</sup> MB Corporate Archives Box 413-33.

Time of planting: March 6 - April 18, 1945

Area planted: 103 acres

Trees planted (ordered): 100,000

Species: Douglas-fir

Labour cost: 1697 hours @ 72 cents = \$1,221.84

Labour cost per acre: about \$12.00

In addition, one foreman, T. Bowen, supervised the work. On May 31st, over 90% of seedlings planted were alive and thriving.

According to Mr. Gilmour, the Alberni Pacific Lumber Company Limited carried out a planting program in the spring of 1941, again, in connection with the patch logging system.<sup>6</sup> The patch system was believed, at that time, to result in the following benefits:

- greatly improved natural reproduction arises from the large numbers of seed trees standing for some years within seeding reach of practically the whole area of the logged patch
- 2) the small areas logged at one time on each hillside or stream reduce erosion and protect fishing streams
- areas of green timber left between cuttings provide shelter and food for game and other birds and animals
- 4) where slash is to be burned, burning it only in small areas at one time reduces the soil destruction caused by the greater heat of very large fires and keeps fire more easily under control, thus reducing risk of fire damage to timber, logging equipment, and to young forest

During 1937 to 1942 inclusive, approximately 9,240 acres were patch-logged by the Alberni Pacific Lumber Company Limited. A study, completed in 1944, indicated that around half of the logged area was already satisfactorily restocked according to the then Forest Branch standards, bearing in mind the fact that the areas logged in 1941 and 1942 had not had time to show nearly full results. The Alberni Pacific Lumber Company Limited found that only about one-third of the total area might require planting.

Natural regeneration was poor in some spots, due to patches being too large in some years of logging, bad seed years, seed being destroyed by rodents, and some young growth having been killed in slash fires. Also the last patches cut in each larger area could not seed properly because they were bounded by few or no seed trees.

<sup>&</sup>lt;sup>6</sup> MB Corporate Archives Box 413-33.

H.R. MacMillan believed that modifications such as the patch logging system would encourage satisfactory restocking of cutover areas and minimise the need to replant the blanks resulting from causes beyond the loggers' control. He further recommended that, as filling the blanks would cost about \$3.50 per acre for the area logged (according to Alberni Pacific Lumber Company Limited experience) the replanting cost ought to be viewed as an operating expense. He felt strongly that it would be in the public interest to plant the blanks while the logging organisation and crew were still in the neighbourhood.

H.R. MacMillan did not mean to ask the government to provide for all the costs of replanting. Instead, he suggested that while the logger should be responsible for the cost of planting blanks up to about eight years after logging to bring the restocking up to a standard acceptable to the Forest Service – say 75 or 80 percent restocked. The government should, in MacMillan's opinion, furnish young trees free and supervise planting methods to ensure good results. By the way, at that time, labour represented most of the replanting cost.

MacMillan did recognise that planting was a sure and quick way to establish a new crop where conditions permitted. But patch logging was suggested as the best method for those loggers who wished to combine fire protection and flexibility in operation with avoidance of planting the whole cutover area. MacMillan demonstrated foresight in the forthcoming role of reforestation as early as 1945. To quote him:

We are rapidly nearing the day when there may not be enough productive employment for all our people. If productive employment is not planned, large sums of public money are likely to be expended in unproductive employment. Planting a forest crop on the idle portions of our best and most accessible forest land is definitely productive employment; therefore we should prepare now for that planting programme. Preparing requires that we do in advance at least two things: examine the land to determine what areas should be planted and in what order, and establish nurseries so that the seedlings may be ready.

MacMillan classified cutover land into two categories: the first group of lands were those on which good growing conditions, accessibility, and cheap planting promised to yield a good return in employment, industrial prosperity, and government revenues. The second class were those lands on which planting expenditures would produce proportionately poorer results, lands which often partially restocked naturally, and where the cost of planting the scattered blanks would be excessive, or the land was of low site quality. It was MacMillan's logic to defer reforesting this second-class land until the first-class land had been brought into production.

This philosophy of MacMillan's generated considerable influence over the prevailing sentiment towards reforestation.

During his H.R. MacMillan Lectureship in Forestry, G.L. Ainscough, Vice President & Chief Forester of MacMillan Bloedel Limited, told UBC forestry students in March 1981 that MB had been a responsible caretaker of the resource since the 1930s by citing the following example:

In British Columbia MacMillan Bloedel Limited (MB) established its first plantation in 1938 using a snowed-out engineering crew and some surplus seedlings from the B.C. Forest Service. Trees were planted according to the standard of the day at 1.85 metre spacing on a logged and burned section of a timber lease, which had reverted to the Crown. It was later returned to company jurisdiction as part of a Tree Farm Licence awarded in 1955. By the end of 1979 MB had planted more than 124,000 ha, or 16.2 percent of the total area of plantation in the province and nearly 25 percent of the total for the Coast region. ...Also in 1938 the Company introduced to coastal British Columbia patch logging and seed tree systems on its private lands to enhance regeneration by natural seeding, MB was actively experimenting in commercial thinnings in the 1940s.

Just to mention in passing, immediately following the end of World War II the Powell River Company (later to become part of MB) started silvicultural treatments such as thinning and established a small plantation of exotic tree species. However, the company's executive, Mr. H.S. Foley, recognised the importance of tree planting in the early 1940s. Actually, he was a close observer of the tree farm movement in the United States, and he announced that Canada's forest future should lie in the creation of forest farmers for tree growing.<sup>7</sup>

#### CONCLUSION

The predecessor companies of MacMillan Bloedel played a leading role in the replanting activities among B.C.'s forest industries during the 1930s and 1940s. With a serious commitment to the concept of sustained yield, they were actively engaged in reforestation through tree planting as well as facilitating natural regeneration. In collaboration with the government, the companies spearheaded the campaign of establishing industrial forests and demonstrated a high degree of willingness to take good care of the resource base in the interests of the communities across the province.



#### FRED MULHOLLAND BIOGRAPHY BEING PREPARED

A number of FHABC members— most notably Gerry Burch, Lehel Porpaczy and Harry Smith—are collaborating on a work about the life and career of Fred D. Mulholland. Mulholland was head of the B.C. Forest Branch's Forest Surveys Division for many years, a Charter Member of the ABCPF, Chief Forester of the Canadian Western Lumber Company and acted as an advisor to Chief Justice Sloan during the third Royal Commission on forestry in B.C.

If you have personal knowledge of Mulholland, or information to contribute, please contact Gerry Burch in Vancouver at 604-738-4959.

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<sup>&</sup>lt;sup>7</sup> MB Corporate Archives Box 1-1 and 1-22.

#### FHABC AGM SLATED FOR SATURDAY, JUNE 16

The FHABC will pay a return visit to Port Alberni and the McLean Mill National Historic Site for our 2001 annual general meeting. We held our 1989 AGM in Port Alberni, just prior to major reconstruction work at the McLean Mill, now owned by the City of Port Alberni and operated by the Western Vancouver Island Industrial Heritage Society. For details, see their web site at

http://www.alberniheritage.com/mclean mill national historic site.html

We will start out at the Echo '67 Centre at 4255 Wallace Street, Port Alberni (see + on the map at the bottom of this page) and then proceed to the McLean Mill site. The schedule is as follows:

10:30 – 11:00 AM Gather in the Fir Room, Echo '67 Centre

11:00 – Noon Business meeting

Noon – 1:15/1:30 PM Lunch in the Fir Room

(will be catered in at a modest charge per person)

1:15/1:30 PM Relocate to the McLean Mill site

At 2:00 PM there will be a stage show by the "Tin Pants Theatre" troupe and at 2:30 PM a sawmill demonstration. We hope to be able to take in both of these events and conclude with a tour of the overall site.

As usual, the AGM will likely end by 4:00 or 4:30 PM.

Please advise John Parminter **by June 14<sup>th</sup>** (work phone 250-356-6810, home phone 250-384-5642, e-mail jvparminter@telus.net) if you will be attending and how many will be in your party.



#### A WINTER'S TALE

by W. Hank Horn

The Smith's oldest son, James, was 5. They were proud of the fact that their son had the work ethic. From the time that he was old enough to express himself, Jimmy let his parents know that he wanted to go to work with his dad, a troubleshooter for the Tahsis Company.

He woke up early every day and went down to the boats that took the loggers to their worksite along the channel. He had his little lunch bucket with him in case the loggers ever relented and let him go along. It didn't happen and dad was equally unable to help his son with his aspiration.

About mid-December, the West Coast of Vancouver Island got its first snow. Jimmy woke up early, as usual, and at the sight of snow immediately pulled on his heavy clothes and gumboots, grabbed his dad's snow shovel, ran to the next-door neighbours' house and knocked on the door.

The neighbour lady, a logger's wife, looked at Jimmy bemusedly when he asked if he could shovel her walk.

Her reaction was "How much, Jimmy?"

The lad's face fell, he looked down and then said with a note of pleading "I'll give you my boots."



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Please submit newsletter material and send changes of address to the Editor: Mr. John Parminter, # 3 – 130 Niagara Street, Victoria, BC V8V 1E9. Phone (250) 384-5642 home or (250) 356-6810 office. E-mail: jvparminter@telus.net

Membership in the association is \$10 yearly, or \$45 for five years. Please send dues to the Treasurer: Mr. Edo Nyland, 8793 Forest Park Drive, Sidney, BC V8L 4E8. Phone (250) 656-9276. E-mail: edonon@islandnet.com

The President, Mr. Stan Chester, can be reached at 5686 Keith Road, West Vancouver, BC V7W 2N5. Phone (604) 921-9880. E-mail: 2schester@home.com

