THE OTHER DOUGLAS AND THE ILL-FATED JOURNEY TO BRITISH COLUMBIA

It was in 1832 when David Douglas began to feel a compelling urge to return to his native Scotland. Even with this increased pounding of his Scottish blood, the botanist in David Douglas remained in the fore. He had a dream! It was to return to Scotland via Siberia where he would continue his tireless calling of observing, recording, and collecting botanical specimens.

This vision is best described in Douglas' own words:

"What a glorious prospect! Thus not only the plants but a series of observations may be produced, the work of the same individual on both continents with the same instruments under similar circumstances and in corresponding latitudes."

Douglas submitted his proposal to the Russian authorities in Sitka and received the following reply from Baron Wrangel, Governor of the Russian Territories in America:

"I am delighted to learn of your intended journey to our region. Let me assure you, Sir, that never has a visit given me more pleasure and that you will be received with open arms at Sitka."

Encouraged by this response and in spite of some dire warnings from Hudson's Bay Company staff, Douglas made plans to begin his incredible journey.
In the spring of 1833, he began his journey. Leaving Fort Vancouver by Express boat, he journeyed up the Columbia River to Fort Okanagan. There, he joined a Hudson's Bay Company brigade heading northward.

Making observations and collecting botanical specimens on the way, Douglas and the brigade travelled along the shores of Okanagan Lake, across country to the Thompson River, reaching Fort Kamloops.

Fort Kamloops was originally established by the United States-owned Astoria Fur Company in 1812. A year later it was sold to the Northwest Fur Company which, in turn, merged with the Hudson's Bay Company in 1821.

When David Douglas reached Fort Kamloops in 1833, it was headed by a fellow Scot, Samuel Black, whom Douglas had met when Black was an HBC employee at Fort Walla Walla. The brigade planned to lay over at Fort Kamloops for a few days to rest their horses. This was welcome news to Douglas, as it would give Black and him an opportunity for some nostalgic discussion of their far-off bonnie homeland.

During these discussions, Douglas apparently made some derogatory remarks about the Hudson's Bay Company. There was no more loyal servant to "the Company" than Chief Trader Black, who immediately took offense. One thing lead to another with the result that Douglas was challenged to a duel. The time was set for the next morning and both retired spoiling for a fight.

Whether a good night's sleep had the effect of calming Douglas' hot temper or he simply had second thoughts, Douglas declined the invitation to duel in the morning.

Horses rested, the brigade headed northward again, through the Cariboo country to Fort Alexandria. Here the brigade transferred their freight to boats to continue northward up the Fraser River. Douglas continued on horseback, collecting and observing, to a point where the Quesnel River meets the Fraser River, at which point he re-joined the brigade.

Northward up the Fraser River to Fort George; up the Nechako River and Stuart River, the brigade finally reached the capital of New Caledonia -- Fort St. James on June 6, 1833. Douglas had now arrived at the Fort founded by Simon Fraser in 1806 -- the second permanent settlement in what is now British Columbia. He had travelled some 1,150 arduous miles from Fort Vancouver on the Columbia River.

Now Douglas began to plan the next step of his journey -- westward across the northern wilderness to Sitka in Russian America. He found that an exploratory party was about to leave Fort St. James to attempt to reach the Pacific Ocean via Simpson's River (now Skeena River).

Concern now began to haunt Douglas. The exploratory party had doubts that they would ever see the Pacific. Further, Douglas began to realize that no HBC post existed in the wild country between Fort St. James and Sitka.

Disillusioned, Douglas decided to return to Fort Vancouver -- dashing his Siberian dream. Borrowing a small birch bark canoe, he, with one companion and his dog, Billy, proceeded down the Stuart and Nechako rivers to Fort George on the Fraser River.

Now comes an incredible tale: twenty miles down the Fraser River from Fort George is the Fort George Canyon. Douglas had seen this awesome cauldron when he accompanied the brigade upstream a few days earlier. Further, he had access
to the diary of Alexander Mackenzie, who wisely portaged the Canyon during his cross-Canada journey of 1793. Admittedly, Simon Fraser had shot the rapids in 1808, but this party had larger and sturdier canoes.

Perhaps he was still in a depressed state of mind from seeing his Siberian vision crushed, but Douglas and his companion decided to run the canyon in their small canoe. Scarcely had they entered the canyon when the canoe was "smashed to atoms." All were thrown into the seething rapids and Douglas later recorded that he was dragged downstream for one hour and forty minutes before he finally managed to reach shore. Dazed, he wandered back upstream where he found his companion and his dog, Billy, half-dead but alive.

Douglas had clung to his instruments during the whole time that he was in the water. Tragically, however, he lost all his notes, his diary, and a collection of over 400 specimens.

Chagrined, he returned upstream to Fort George where he obtained another canoe. Carefully portaging the Fort George Canyon, David Douglas returned to Fort Alexandria. From there he proceeded overland to Fort Kamloops -- thence southward, along Okanagan Lake to Fort Okanagan where he again obtained a canoe. He proceeded to Fort Walla Walla, ultimately reaching Fort Vancouver in August of 1833.

David Douglas was now worn out in body and broken in spirit. He wrote:

"This disastrous occurrence has much broken my strength and spirit."

Douglas never regained his old vigour -- all because of an ill-fated journey in 1833 and the shattering of a Siberian dream.

Paper presented at the inaugural meeting of the WF&CA David Douglas Club in December of 1984 by W. Young, President, Canadian Forestry Association of British Columbia and FHABC member.

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FOR SALE OR SWAP (?)

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Following Hec Richmond's continuing history of forest entomology is part three of three of a reprinting of "Stewards of the People's Wealth: The Founding of British Columbia's Forest Branch." This article was written by Forest History Association of B.C. member Thomas Roach of Ottawa and is reproduced here with the author's permission and that of the Forest History Society, Inc., publishers of the Journal of Forest History in which the article first appeared.

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RECENT PUBLICATIONS


Gold, Wilmer. 1985. Logging as it was, a pictorial history of logging on Vancouver Island. Morriss Publishing, Victoria, B.C. 255 p. $34.95


ANNUAL GENERAL MEETING

The third annual general meeting of the Forest History Association of British Columbia will be held in the fall of the year. This is a slight break with tradition but will enable some of our members to attend who have, due to other commitments, previously been unable to attend a late spring meeting. A specific time and place have not yet been decided upon but an announcement will be made in a future issue of this newsletter.

This newsletter is the official organ of the Forest History Association of British Columbia and is distributed thrice yearly at no charge to members of the Association, libraries, and to certain institutions. Items on forest history topics, descriptions of current projects, requests for information, book reviews, letters, comments, and suggestions are welcome. Please address all correspondence including changes of address to the Editor: John Parminter, c/o Protection Branch, Ministry of Forests, 1450 Government Street, Victoria, B.C. V8W 3E7.

Membership in the Association is $5.00 yearly. Should you wish to join or obtain further information please write to the Treasurer: Mr. Edo Nyland, 8793 Forest Park Drive, Sidney, B.C. V8L 4E8
The earliest outbreak and attempted control of a defoliating insect in my memory occurred while I was yet a very small boy in Vernon. It centered about a very widespread outbreak of the Douglas-fir tussock moth. Like so many of its periodic outbreaks during subsequent years, this insect aroused much concern among the citizens of Vernon.

The tussock moth larva feeds on the needles of Douglas-fir and, when mature, it crawls away in search of a suitable location in which to spin its cocoon - such as the walls and window sills of houses. Adults appear in late summer and the females lay from 200 to 300 eggs in the cocoon from which they emerged. The eggs hatch the following spring. Thus, the destruction of one of these cocoons represents the elimination of several hundred larvae of the next year.

Since all the Douglas-fir trees within the city were in danger, and as no one knew anything about control of this pest, the City Fathers called an emergency session to seek inspirational guidance which might lead to some degree of control. After deep concentration there dawned a possibility - they would pay a bounty to school children for the collection of these hairy capsules plastered over the walls and sills of the houses. This proved to be a bonanza for the kids who foresook their customary games of no-bbies and soccer for the collection of tussock moth cocoons.

All went well as more and more of these hairy things poured across the desk of the City Clerk - until a crisis arose. The children began coming down with a serious skin rash which was suspected to be an infectious ailment. That is, until the City Clerk also developed the rash and the truth emerged - it was due to an adverse reaction to the microscopic hairs which comprised the cocoons. The City Clerk threatened to resign if he had to handle any more of these hairy things. The bounty ceased. A new method of handling the situation was imperative.

Again an emergency session was held as the City Fathers sought new inspiration or help from above. At last a dim light appeared at the end of a long dark tunnel. They would enlist the services of Vernon's steam roller and destroy the pest with jets of live steam.

The old steam roller was a huge affair, somewhat smaller than a railway locomotive but weighing many tons just the same. Its sole purpose in life was to roll and compress the gravel on the roads since pavement in the interior was unheard of at that time. Across the front was the main roller, a cylinder about six feet long and five feet in diameter. At the rear were the two drive wheels some six feet in diameter with steel rims about 18 inches wide. It would roll a swath about seven feet wide, puffing and panting along the streets at a speed of about two miles an hour, pausing every short time while the operator shovelled more coal to keep the boiler going. It was an event to follow behind and watch this monstrosity at work.

For the destruction of cocoons it was decided to run two steam hose lines from the boiler and, with two helpers handling them, blast the walls and sills with live steam. This would destroy the cocoons and at the same time steam clean the houses. This system worked quite well so long as the jets of steam did not hit the glass of the windows, especially plate glass - in such cases, as occasionally happened, the glass would split and crumble as if hit by a baseball.
This unique and imaginative method of pest control continued through the season, but how effective it really was, I never heard. I know of no other use or advancement of this method of pest control, due to the fact that not many people own a steam roller, and furthermore it involve certain practical difficulties in general use, especially in mountainous forested country.

The earliest attempt at large-scale applied control of a forest pest in British Columbia was in 1929 when a dust of calcium arsenite was applied against the western hemlock looper in Stanley Park and the Vancouver watershed. A total of 1,600 acres (800 at each location) was dusted at a rate of approximately 3.5 pounds of calcium arsenite per acre. It is interesting to note that in 1930 there was no public outcry against the use of an arsenical poison on the Vancouver watershed. The only complaints recorded came from residents of North Vancouver who objected to the noise of aircraft flying over their homes so early in the morning.

The most devastating outbreak of a defoliator in the province occurred in the early 1940's when the hemlock looper destroyed hundreds of acres of mature timber on southern Vancouver Island and the Lower Mainland. Although the looper was the primary cause of this mortality, studies showed that in most instances the eventual death resulted from an invasion of bark beetles and wood borers (Tetropium sp.) into this weakened, defoliated timber. Douglas-fir has an amazing ability to recover from almost total defoliation and had the subsequent attack by these secondary insects not occurred, mortality probably would have been minimal.

It was during this outbreak, from 1943 - 1946, that DDT was used for the first time in British Columbia as a forest spray. In the Nitinat and Sarita valleys this chemical was applied at a rate of one pound per acre over a total of 12,500 acres. This was also where the first field investigation took place (in cooperation with the Insect Pathology Research Institute at Sault Ste. Marie) on the influence of a native virus disease on the eventual control of the insect. This disease swept through the population and within days brought a dramatic end to the entire outbreak, completely confusing the results or benefits of the spray application of DDT. The disastrous effects of this insecticide on all aquatic life were not appreciated or suspected at the time so no investigation was made of any possible side effects.

The most extensive chemical control ever undertaken in the province was conducted in the Port Hardy region against the black-headed budworm in 1957. It was a joint venture of the Federal Government and the forest industry and was administered by the late Stan Hepher. A total of 156,000 acres of forest was sprayed with an application of DDT at a rate of one pound per U.S. gallon per acre. Although the benefits of this program were questionable, since the budworm disappeared simultaneously in the sprayed and unsprayed areas, two significant by-products emerged from the undertaking.

The first was positive evidence of the extremely destructive properties of DDT on all aquatic life in the sprayed regions - the mortality of salmon smolts in the Keogh River was of disastrous proportions. As a forest spray, DDT proved to be totally unacceptable in British Columbia and this experience has been widely quoted and was used, in part, as evidence against its use and contributed to the chemical's eventual legislated demise.
The second was the initiation of an annual forest spraying conference in Ottawa, arising from demands by the forest industry in British Columbia for the development of more suitable insecticides for use in forest protection. The first such meeting was held in Ottawa in 1957 and they have continued on an annual basis ever since, now operating under the title of "Forest Pest Control Forum." This assembly annually brings together those interested in or involved with forest spraying in Canada, including representatives of fisheries, wildlife, the forest industry, and provincial and federal government agencies.

In an effort to promote research into acceptable alternatives to toxic chemicals in forest pest control, the bacterial insecticide Bacillus thuringiensis was used for the first time in Canada in 1960 as a forest spray against the black-headed budworm on the Queen Charlotte Islands. This material was in its infancy as a control agent and, while the results were not particularly satisfactory, they were sufficiently positive to indicate potential as a forest spray.

Spraying of the forest by helicopter in British Columbia was first attempted in the Windermere country in 1948 when DDT was applied over an area of 11,500 acres against the false hemlock looper. Results were uncertain as, like the black-headed budworm, the looper disappeared in both sprayed and unsprayed areas simultaneously.

The only helicopter in the province available for this work was owned by Mr. Carl Jaeger of Penticton, who was trying to develop a crop spraying business. After the season's work with us on the Windermere project, he went to Vancouver and he later told me that he credited us with having convinced him to move, initiating the company now called Okanagan Helicopters Ltd.

Spray programs through the following years were designed in hopes of finding one or more suitable insecticides as alternatives to DDT. In this research, other government agencies became very much involved in a cooperative approach to the problem, including particularly Federal Fisheries and the fish and wildlife interests.

With this as an objective, control of the green striped looper was undertaken in the Queen Charlotte (Graham Island) using the insecticide phosphamidon. Although extremely toxic to mammals and bird life, it appeared to be harmless to fish and all aquatic life and thus if properly and carefully used it could be a potential candidate for forest use.

This project was sponsored and directed by COFI with myself as entomologist. It involved several facets of investigation: effectiveness of the insecticide in the dosage used; its possible effects on small mammals and birds resident in the forest zone of application; and its effect on aquatic life. Research personnel included two from the Fish and Wildlife Branch; two entomologists from the Pacific Forest Research Centre in Victoria; one from the Department of Fisheries; and one from COFI. The date was 1964.

The bird population was assessed by recording the number and location of bird songs heard during a two-hour period immediately following daybreak, daily over a period of 10 or 12 days before and for a like period after the spray application. The effect on small mammals was studied through the use of 200 white mice, half of which were in individual wire cages placed throughout the spray zone in the immediate path of the aircraft, while an equal number were located outside the spray zone. They were put on location as close as possible to the hour of the spray application and left there for two full days following completion of the spraying.
The bill gave the personnel of the branch wide powers to formulate regulations governing woods activities. This was particularly so in matters connected with log scaling and fire protection. In practice, the branch was able to use these powers to alter the loggers’ methods of cutting and waste disposal so as to increase utilization of the resource and enhance natural regeneration. The Forest Act therefore proved to be more powerful than was apparent at first sight.30

When the bill was unveiled in the provincial legislature in January 1912, it was greeted with favorable comments from industry spokesmen.31 A. C. Flumerfelt, a member of the commission, made it the topic of a laudatory address to the Vancouver Canadian Club.32 As might be expected from his business background and audience, Flumerfelt emphasized the potential increases in the value of timber holdings following from the proposed improvements in fire protection.

In the legislature, however, Ross and his premier, now Sir Richard McBride, found themselves under attack from the miniscule, two-member Liberal opposition. Liberal leader Harlan Brewster first criticized the 1905 amendments extending the life of the ST licenses, claiming they had represented a dramatic shift in government policy favoring speculation in timberlands. He then denounced the bill itself as nothing more than a rehash of ideas his party had proposed some years before.33

But Ross had gone further with his bill than Brewster suggested. Instead of defending government ownership of the resource on the grounds that royalties provided needed income, he pointed out that the “perpetuation of the timber supply requires an investment stretching over generations and that sort of investment has hitherto been too long for private owners.” The bill therefore represented a “sane, business-like policy of conservation, free from sentimental extravagance.” It would also take “the many practical difficulties, impediments, and risks” of the industry into ac-

count.34 Ross’s defense—and the bill itself—thus encapsulated the conservation ideals of the day. Instead of simply maintaining static forest reserves, the bill called for an active and intelligent system of government regulation and management designed to protect and preserve the resource, as well as encourage a growing forest industry.

The government, Ross continued, would be asked to invest in the forests of the province by funding the Forest Branch generously. “The epoch of reckless devastation of the natural resources,” Ross announced, was coming to an end. Forest conservation, rigorously pursued by the new Forest Branch, would protect British Columbia’s providential resource endowment for “all posterity.”35

The forest bill was a bold move on the part of Ross and his associates. Lumber production across the continent had leveled off, and the Pacific Coast was well into a particularly deep slump. In other provinces loggers and millowners were lobbying for fewer controls on their activities and attempting to limit the role of professional foresters in the management of forest reserves.36 Yet there were special considera-

\[\text{\textsuperscript{30}}\text{Ross, 1912 Speech, p. 22.}\]
\[\text{\textsuperscript{31}}\text{Ibid., p. 24.}\]
tions in the British Columbia situation. In part, 
Ross’s success was due to the support of the power-
ful timbermen’s lobbies, which stood to benefit not 
only from better fire protection but from a provincial 
agency that promised to represent their economic 
points of view and encourage an increase in the 
utilization of the resource. In addition, license hold-
ers saw that their holdings would increase in value, 
since the bill stipulated that no new ST licenses 
would be issued (while leaving those already issued 
untouched).

Minister of Lands Ross had left the task of answer-
ing Brewster’s jibes to his premier. Sir Richard 
claimed that economic conditions in 1905 had made 
it impossible to auction timberland—a highly debat-
able argument. As to the speculators, McBride 
claimed, “In reality there were few people that were 
not speculators in one sense or another.” Publicly, 
the premier was not criticized for these statements, 
but things must have been different in private be-
cause he later softened his approach, conceding that 
his government had been “severely taken to task” as 
a result of the amendments of 1905. Nevertheless, he 
suggested, the controversy had resulted in formation 
of the Royal Commission, which had done a tremen-
dous job in laying the basis for the current bill—a 
measure that transcended partisan politics and on 
which every member could speak and be heard.37 
The premier implied that the careless audacity of the 
1905 amendments had in fact helped the cause of 
conservation.

During the debates, the only other criticism of the 
bill came, paradoxically, from members representing 
rural constituencies. Most of these were from ridings 
in the interior and were concerned that some farm-
ers would find themselves burdened with a long fire 
season and with regulations enforced by an un-
sympathetic fire warden.38 These were important 
concerns in a province where the majority of farmers 
were still clearing their land. Ultimately Ross left the 
hiring of fire wardens to the Forest Board and 
promised both the legislature and his chief forester 
that only the best-trained men would be picked for 
service with the branch.

The Forest Act received the royal assent from the 
lieutenant governor on February 27, 1912. Its suc-
cessful passage with virtually no substantive amend-
ments left Ross free to complete negotiations with 
the principal staff who would lead the new branch. 
H. R. MacMillan took the position of acting chief 
forester, and R. E. Benedict of the U. S. Forest 
Service moved north to become chief of operations, 
thus continuing the American influence within the 
new provincial organization. Other members of the 
team were Martin Grainger, who continued his civil 
service career by becoming chief of office; J. Lafon, 
chief of management; and H. K. Robinson, in charge 
of surveys.39

By June 1912 MacMillan and his staff had set up 
shop in temporary offices in Victoria and had estab-
lished eleven regional offices around the province, 
each with its district forester and a technical assis-
tant in charge of cruising, reconnaissance, and silvi-
cultural matters. Rangers or “forest guards” in the 
districts handled forest protection, patrol, improve-
ments, and fire fighting. Guided by the recommenda-
tions of Overton Price, the new Forest Branch 
launched a full-scale forest protection system that 
was modern in every sense of the word. During the 
next several years the branch achieved all that Ross 
had hoped for. The government’s new forests pleased 
the Ministry of Finance as well. In spite of a de-
creasing annual cut, the value of the royalties col-
lected by the agency increased, largely reflecting 
improvements in the efficiency of the scalers hired 
by the agency.40

In the manner in which it was created, in the 
policies that guided it, and in the way it behaved 
toward all users of the provincial forests, the B. C. 
Forest Branch was a credit to the conservation move-
ment. As a product of that ferment of ideas often 
called the progressive movement, the branch was

37Vancouver News-Advertiser, February 7, 1912, pp. 2, 5, 7, 13, 
and February 8, 1912, pp. 5-6.
38Ibid., February 10, 1912, p. 7.
39British Columbia Gazette, June 20, 1912, p. 5381.
40Report of the Forest Branch, 1913 (Victoria, 1913), pp. 18-19.
something of a latecomer, and herein lies part of its success. The Dominion of Canada, the provinces of Ontario and Quebec, and, of course, the United States all had established similar organizations by the time the Forest Branch was founded. W. R. Ross was therefore able to learn from the experiences of others, identify and avoid the mistakes they made, and hire some of the young foresters they had trained.

The act that created the Forest Branch reveals maturity in approach in a number of ways. For one, it gave the branch control over all forest activities in the province, bringing together sections from a wide range of forestry legislation. Passage of the Forest Act was indeed in large part a process of consolidation. An examination of the bill suggests that much of Martin Grainger’s effort in the summer of 1911 was spent searching through provincial legislative records to identify all matters relating to forestry. As a result, B. C. foresters were spared the battles for consolidation of powers such as those upon which Gifford Pinchot, Elihu Stewart, Judson Clark, and Bernhard Fernow spent so much time and energy. Unlike his predecessors elsewhere, H. R. MacMillan was able to concentrate on the job he was hired to do from the moment he assumed office as B. C.’s chief forester.

The branch owed its existence to the circumstances of the times, to the persuasive ideas of the conservation movement, and to the successful example provided by the U. S. Forest Service. But as Overton Price realized, it was men who mattered the most. Writing just before his death in 1914, Price praised Ross for recognizing that the time and the circumstances were ripe for a bold initiative. MacMillan and the other members of the Forest Board, moreover, had performed in an exemplary way, utilizing the powers provided by the Forest Act. Lastly, because it depended so closely on the ideas of Pinchot and Price, the Forest Branch shows that government involvement in forestry, as advocated by these two men, must have had some considerable support within the British Columbia industry between 1909 and 1912. The four associations, each representing different sectors of the British Columbia forest industry, could have waged an effective war on the forestry bill. Yet, the associations acquiesced in both the Royal Commission’s

In spite of a decreasing annual cut, the value of royalties collected by the Forest Branch increased, largely reflecting improvements in the efficiency of scalers hired by the agency.

Final Report and in the resulting legislation. As important as the efforts of Ross and Grainger in bridging differences between the associations was the example set by the U. S. Forest Service. British Columbia lumbermen could see for themselves that the federal agency could assist their southern counterparts in many ways and that government oversight of use and management of forests was not anathema to the industry. Thus they agreed that the new Forest Branch would be beneficial to the industry—even in times of decreasing demand and falling prices. In 1914, when the branch successfully tied royalty rates to lumber prices and still later when it accepted industry representatives on the Forest Board, this faith was justified.

In the following years the branch deepened its commitment to preserving the B. C. forests by advancing programs in fire protection, insect and disease control, forest reconnaissance, efficient forest use, public education, and collection and dissemination of statistical information on silviculture, forest conditions, forest use, and markets for wood products. An amalgam of advanced forestry concepts from across the continent, the British Columbia Forest Branch epitomized early twentieth-century trends in the conservation of North American forests.


*Overton W. Price, “Progress in British Columbia,” American Forestry 20 (April 1914): 273-78. Price left Judson F. Clark off his list, although the consulting forester’s recommendations had influenced the Royal Commission.

**MacMillan was surprised at the good reception and cooperation he had received from the industry. See Rodgers, *Fernow,* p. 519.


**See Whitford and Craig, *Forests of British Columbia,* pp. 115-53, and reports of the Forest Branch for 1914, 1915, and later years.

BRITISH COLUMBIA’S FOREST BRANCH 23