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AN ANALYSIS OF FOREST TAXATION IN BRITISH COLUMBIA

by

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# An Analysis of Forest Taxation in British Columbia

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# An Analysis of Forest Taxation in British Columbia

## Chapter 1

### Introduction

The forests of British Columbia are to-day the most valuable natural resource that the province possesses. Seventy-six years ago when the first shipment of British Columbia Douglas fir was transported from New Westminster to Sydney, few people dreamed of the inestimable value these forests would some day represent. But since that time "green gold" has become worth much more to the province than the yellow metal. From small beginnings lumbering has become our major industry, now employing directly and indirectly about one-fifth of our population.

Just how important the forest industries are to British Columbia is clearly seen when a comparison with other industries is made. The average annual value of production in our four primary industries for the years 1927-1935 was:-

Forests-----\$63,308,300.

Mines----- 48,644,367.

Agriculture --- 47,054,521.

Fisheries----- 17,724,249.

On this basis, and assuming in the last analysis that

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1. Report of the Forest Branch, Department of Lands, 1937.  
pp. M 29 - M 31

all values depend on these four primary industries, then the forests appear the most important element in the provincial income dollar.

Forests -----	\$0.36
Mines -----	0.27
Agriculture -----	0.27
Fisheries -----	<u>0.10</u>

Total provincial income    \$1.00

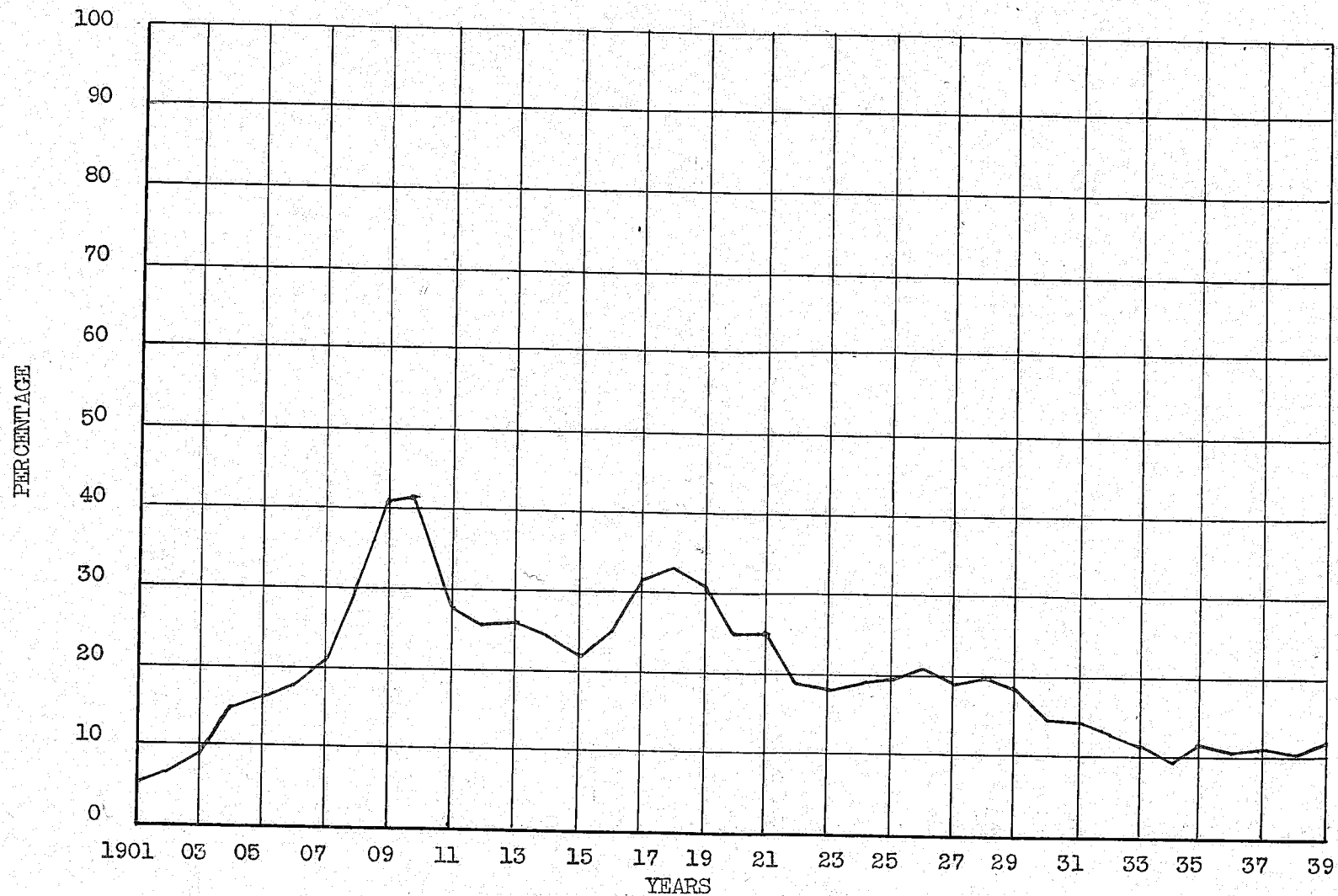
The taxation of the forest resources of the province is thus a very important part of British Columbia's annual income. In the last ten years the total revenue from this source has provided the provincial treasury on an average with some three million dollars <sup>2</sup>per annum. And this figure to-day represents about twelve per cent of the revenue side of the provincial budget.

The purpose of this thesis is to analyse the various taxes which constitute the forest revenues and as far as possible, find out the actual burden of each tax on the lumberman and how fair and equitable each is in its working.

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2. See Graph no. 1 for the relation of the forest revenues to the total provincial revenue. These percentages were calculated by comparing the totals from the Public Accounts and the Reports of the Forest Branch for the Respective Years.

FOREST REVENUES AS A PERCENTAGE OF THE TOTAL PROVINCIAL REVENUES.



N.B.-After 1909 the years are in fiscal years i.e.1938-39.

Attention, too, will be devoted to the effects of these taxes on the forests in general. It must be pointed out, however, that these taxes do not represent the whole burden of taxation on the forests, but merely the taxes which fall directly on the forests. In addition, corporate income taxes, gasoline taxes, motor taxes, and inheritance taxes, all affect the forest industries, but they are not treated in this study.

For the purpose of this thesis taxation has been considered in its broadest sense, and a general classification has been made at the outset in accordance with which the equity of the various taxes can be judged. The first main subdivision includes taxes or levies which correspond to the economic rent and depletion charges due to the Crown (the government, or the people as owners). The quantum of this rent is the yield of the forests less the legitimate costs of exploitation. Some approximation to this, leaving reasonable inducement for good management and reasonable incentives against wasteful exploitation, is what is equitable. Legitimate costs will include reforestation, if carried out by the operator; or if the state is to see to reforestation, its rent should include this item. Such a tax is really part of the public domain revenue.

In British Columbia three forest taxes (following the broad interpretation mentioned above) may be said to come under this heading.

- 1) A property tax.
- 2) A ground tax or rent.

3) A yield tax in the form of a royalty.

These taxes form by far the majority of the forest revenues, the only other item of any significance being "stumpage". This cannot in any sense of the word be deemed a tax, since it is the price charged by the government for selling Crown timber, and as such is equivalent to a sale price. It is a figure regulated by demand and supply, and not an ordinarily legislated figure like a tax.

The second main subdivision includes taxes or levies, the purpose of which is to make the industry meet its real costs. This is represented in British Columbia by the Protection Tax.<sup>3</sup> It is an insurance against destruction of forests by fires incidental to their exploitation and would be analagous to any tax levied to meet a special damage to roads, etc. The test of its equity is here cost.

With the exception of taxes for specific items, as the gasoline tax and the road tax, other taxation should be neither more nor less than is borne by net corporate incomes earned in other occupations. As such it is in all probability covered by the tax on corporate incomes.

All the above forest taxes are not, however, levied on every forest property of the province, but vary according to the different land tenures of British Columbia. In view of this fact, special consideration will be given to the rather complicated system under which the timber of the province has been disposed.

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3. The protection tax is not included in the forest revenues, but credited to the Forest Protection Fund, as will be explained in a later chapter.

CHAPTER 11

The Principles of Forest Taxation

In any analysis of forest taxation the first thing that it is essential to understand is the peculiar nature of the forest industry. It differs from most forms of business enterprise in that it takes a considerable time for the investment to mature. Trees take many decades to grow before they become financially marketable, during which time the cost of carrying taxes plus interest, in addition to the large element of risk involved through loss by fire, decay, wind and insects, all mount up. It has been estimated that this item of risk alone comes to one per cent or more per annum. When the forest owner reaches the position where he is receiving an annual income from the property then, of course, this situation does not apply. Even if an owner starts from this position the above factors are reflected in the extra price he pays for the mature timber.

Furthermore, the lumber industry differs from other extractive industries in the necessity of carrying a large stock of the raw material sufficient to last from ten to twenty years. Wood-working industries in most cases carry only a few month's stock, trusting to the lumberman for

1. Whitford, H.N. and Craid, R.D.: Forests of British Columbia  
(the Ottawa Commission of Conservation, publication, 1918)  
p. 155.

ssupplies, and this is also true of a majority of the iron and steel industries.

From a consideration of these facts certain conclusions are evident. The income of all forest owners is definitely not always regular, in fact it is very largely sporadic. This means that any tax which forces the owner to pay out large amounts to the government so long as the forest yields him nothing has an element of injustice in it. But he has the right to the land if not the use of the timber while it is maturing. The question then arises whether the forest should be considered and rated separately from the land upon which it stands. Like land that contains mineral wealth, forest lands have been endowed by the bounty of nature with a certain inherent value over and above that of the land itself. They are not the product of the sweat of man's brow, but a gift of nature, and as such seem to call for a separate valuation.

These considerations should be borne in mind when we look into the basic principles of forest taxation. By this term is meant the broad outline upon which a taxation policy for forests may be formulated. However, from this it must not be assumed that any one principle can be taken in its entirety and applied to a particular district or region. Taxation in any form, much less forest taxation, is never as simple as all that. One principle may have certain features that make its application inexpedient for some forests and another principle has to be partially employed to make up



these defects. As a result, a taxation system is nearly always made up of a combination of two or more principles, and this certainly holds true in the case of the forests of British Columbia.

The first thing that is self-evident before any taxation system is put into operation is that the government requires revenue. This indeed seems to be the crying need of the day. War expenditures, and the growing costs of education and public welfare demand increased amounts of revenue. The period of history in the nineteenth century, especially in the United States of America, when budget surpluses were the rule rather than the exception is a thing of the past. Naturally enough then, before any other considerations are taken into account, the forests must provide revenue for the government, sharing with the rest of the country's industries the cost of running our modern civilization. The danger in such a principle being given full control is that there will in all likelihood be a great tendency on the part of the state to bleed the forest dry. In such a situation a tax will be designed that is the most lucrative from a fiscal point of view, without regard to any unfortunate consequences it may have or to its unfairness.

In order, therefore, to prevent such an extreme situation from occurring, a tax system for forests must include other principles other than that of a revenue producer for the government. It should be designed so as to

provide continuous revenue to the state and yet at the same time require a just contribution from forest owners. A just contribution is assumed to be one in which the burden is equitably distributed amongst all peoples having an interest in the government of the country. Furthermore, the system must be workable and economical as Adam Smith pointed out over a hundred and fifty years ago. Finally, the systems must make the best use of the forests from the viewpoint of the public interest. Does the system discourage reforestation and encourage the cutting of immature timber? If it does, then it is not working for the interests of the common weal. Does it cause forest property to be placed on the delinquent tax rolls? Such a result is as bad as giving special exemptions to the forests. All this is, of course, an ideal, but nevertheless it is always advisable to aim higher than it is possible to attain, since then the final result will be less short of the mark than it otherwise would be.

So that a tax may be a good and continuous revenue producer it must be levied at set times and not at the convenience of the taxpayer. The unit of time has generally come to be accepted as the year, though payments may be made quarterly or semi-annually as the law so decrees. Having seen that for final purposes the tax must to a large extent be annual, the next thing is to determine upon what basis the tax will be levied. For any direct tax two bases suggest themselves.

1) Capital

2) Income

In the case of forests, capital for taxation purposes is the property, that is, the land plus the timber on it, while income is the return from this investment. The former can always be taxed, but the latter can only be taxed when there is an income to be taxed. As a result the idea of an annual property tax on forests seemed the best means of providing sure and certain revenues each year. This tax solves the government's problem, but is very often unjust and inequitable in its operation. Many problems tend to distort what might appear at first glance to be a fair and just tax into an extremely burdensome one. These will be fully discussed in relation to British Columbia in a later chapter.

The second basis, that of income has led to the development of the principle of the "severance tax"<sup>2</sup>. This term is a very composite one embracing several forms of taxes on income. It may be in the form of a gross income tax, a net income tax or a yield tax<sup>3</sup> on the quantity and quality of the natural resource that is being severed from its original resting place. Such a tax is a license or privilege tax, and as such differs radically in principle from the property tax. The justification for such a tax lies in

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2. So named because of the Louisiana Severance Act of 1920.

3. The theory of the yield tax and its application in British Columbia in the form of royalties will be discussed in a later chapter.

the fact that any natural resource is a natural gift and not a result of human endeavour. As a consequence the sovereign authority ought to participate in the "unearned resource" and so the tax becomes a "quid pro quo" levied in return for the ~~pr~~privilege of severing the particular natural resource. How burdensome such a tax will be depends on whether it is levied in addition to the property tax without a subsequent reduction in the latter, and naturally the rate of the severance tax.

It is instructive to note what Professor F. R. Fairchild, the leading forest tax economist of the United States, has to say concerning the additional levy of a severance tax.

"There is no justification for a severance tax, in addition to property or other adequate tax, in the case of forests, except possibly as a measure to be applied to forests destructively exploited without provision for restocking." 4

The destruction of a natural resource and the possible damage done to the surrounding district are important considerations. A forest is not necessarily a wasting asset like a mine, but may be so if wantonly cut. In such cases the effects on the productivity of all nearby land through denuding watersheds of their streams in these areas, may be serious indeed. Then again, disastrous climatic changes may

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4. Fairchild, F.R. and Associates: Forest Taxation in the United States. (Washington, U.S. Department of Agriculture, Miscellaneous Publication No. 218, 1935) p. 635 -- hereafter cited as Fairchild "Forest Taxation."

result from complete stripping of forests. Finally, there are the future generations to be considered. Have we to-day a right to completely waste a natural resource, which but for our wanton destruction could have supported our sons and grandsons? It hardly appears just that we should turn our country into another Sahara Desert, bringing about such a metamorphosis merely for the sake of present gain. These points are all very clearly summed up in an old Roman law maxim:-

"Sic utere tuo, ut non alienum laedas"<sup>5</sup>

No man has, therefore, a right to waste the forest for his own enrichment to the detriment of the present or any future generation

This brings us right up against the question of whether conservation is then a sound principle for a forest taxation policy. Such a principle could take two forms, first, a tax in the form of a protective ban, or second, a tax to encourage reforestation. The complete application of the former would in all probability, depending, of course, on the steepness of the tax, lead to a cessation of forest cutting. This would react much more severely on the government than on the forest owner for he could seek other avenues of employment for his capital, whereas the government would lose all the forest revenues. A tax of this nature would then be inexpedient. But this does not mean that part of the forest taxation system cannot be designed to include

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5. "You must so use your property as not to injure that of your neighbour."

this principle. Some form of small protection tax providing it does not hinder legitimate operations has much in its favour. Let us turn now to the second type, a tax which will encourage reforestation. Such a tax would be in the very best interests of sound forestry practice and of the future good of the state. But no tax has yet been designed to approximate anything very close to such an ideal situation. Legislation to provide rules for reforestation is nearly always necessary. So many men are interested only in the present and cannot be convinced that it is to their own future interests to plant seed trees. A minimum tax would, therefore, not accomplish reforestation and might even result in the opposite effect by offering a greater opportunity to quick wealth. The principle of conservation for a forest taxation scheme is sound and must be increasingly studied in order to preserve our present forest resources and provide for our future forest resources.

From this outline of the principles of forest taxation, the complexity of the nature of the tax problem is evident. So many things have to be achieved in any forest taxation system that it is impossible to find one miraculous elixir to solve all problems. Much has to be done in the way of trial and error, and often what is least harmful has to be accepted. But underlying all this, the principles already mentioned each attempt to seek a level compatible with one another.

CHAPTER 111

The Disposal of Timber In British Columbia

A. The Origin and Development of Canadian Timber Regulations

In the various exigencies of the nineteenth century, whether political, military, social or commercial, any policy of conservation with regard to natural resources was entirely precluded. The main idea in the minds of the rulers of Canada was that the quicker the forest was cut, just so much quicker would agricultural settlement proceed. And as this was deemed to be the best form of settlement for a prosperous Canada of the future, the forests were from this angle only a bar to progress. People beheld the spectacle of a frontier gradually moving westwards and of a forest land being cleared and transformed into farming land. This process seemed to them only natural. The lumberman was to be tolerated as a necessary evil because he paved the way for the settler.

This idea of clearing the land for the settler at times reached what seems in our day the height of ridiculousness. Both in Upper Canada and Lower Canada laws were passed directing the insertion of a clause in all cutting that a minimum of one thousand feet per acre must be felled each year! And lest the lack of a good market or transportation facilities deter cutting operations, it was quite common in these two original provinces of Canada to fell and burn timber in order to clear the land. As a consequence much fine timber was destroyed in this manner.

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L. Lawler, J: Historical Sketch of Canada's Timber Industry  
(Forestry Branch Circular, No. 15) p. 3.



With these ideas in view a distinctly Canadian system of leasing timber land to lumbermen for the purpose of cutting the timber thereon, was introduced. A certain specified time was allowed for clearing the land of timber, preparatory to the arrival of the settler. The fallacy in this principle of the lumberman playing the role of the frontiersman lay in the fact that the farmer could not push him into the interior indefinitely. Somewhere the timber lands would end. And, furthermore, all types of land are not suitable for cultivation. A classification of lands suitable for agriculture and those valuable only for their timber would have been a wiser course to have followed. For otherwise the lumbering industry under the frontier principle could only be a transitory industry, whereas we know to-day that both farming and lumbering can develop alongside each other.

However, in all fairness to the leasing system it must be admitted that it saved the land from being permanently alienated. As a result at the present time, less than seven per cent of the timber lands of Canada are privately owned, a very favourable figure in comparison with that of the United States of America. Only in Nova Scotia (where some seventy-five per cent of the land is privately owned) and in New Brunswick (where about fifty per cent is privately held) was this system not adopted until well on into the twentieth century.



In more recent years there has grown up the practice of disposing of timber under a timber sale contract, annually by public tenders or public auction. Under such a system only the timber is alienated, the land remaining under the control of the provincial authority of its location. The application of this method in British Columbia is specifically discussed in a later section of this chapter. For Canada generally it is worth noting that it has come into fairly general recognition by the several provinces as the most sound policy of timber disposal both from the standpoint of good forestry practice and the best interests of the people. Table no. 1. depicts the systems of timber disposal in use in Canada to-day, and it is to be noticed that the timber sale is employed by all authorities except Quebec, Nova Scotia and New Brunswick.

The right to dispose the forest lands has been since the time of Confederation one of the prerogatives of the several provinces. According to the British North America Act one of the exclusive powers given to the provincial legislatures was:

"The management and sale of the Public Lands belonging to the Province, and of the timber and wood thereon." <sup>2</sup>

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2. British North America Act 1867. 30 and 31 Victoria c. 3, sec. 92, subsec. 5.

Table No. 1

Forms of Timber Disposal in use in Canada to-day

PROVINCE	NATURE OF TENURE	BASIS OF COMPETITION
Nova Scotia	Annual renewable license	Non-competitive
New Brunswick	1. Sawmill licenses 2. Pulp or paper licenses 3. Crown timber licenses all annual & renewable	Public Auction
Quebec	1. Annual renewable license 2. Special license	Public Auction
Ontario	Annual renewable license	Competitive tender
Manitoba	1. Annual timber sale contract 2. Annual renewable license	Public Auction
Saskatchewan	1. Annual timber sale contract 2. Annual renewable license	Public tender.
Alberta	1. Annual renewable license 2. Annual permit berth 3. Timber sale	Public tender
British Columbia	1. 1 year renewable timber sale 2. 1 year hand-loggers' license (non-competitive)	1. Public tender 2. Open public auction

Source: Dickson, J. R: "Timber Disposal Regulations in Canada in relation to Forest Management". The Forestry Chronicle. Vol. X. pp. 31-42. - and Statutes of British Columbia.

This does not, however, include all the land in each province as certain lands were ceded to the Dominion government at the time of the Confederation and the succeeding admittances to the union of the other provinces. In British Columbia by the terms of the Act of Union, the province transferred to the federal government 10,976,000 acres known as the Railway Belt and extending twenty miles either side of the path for the Canadian Pacific Railway, up to the head of Burrard Inlet; and 3,468,000 acres in the Peace River in lieu of land in the Railway Belt which had previously been alienated by the province.<sup>3</sup> This land which contained some valuable timber together with coal resources was returned to the province in 1930.<sup>4</sup>

Apart from this the rest of the land of British Columbia comes under the authority of the provincial government as provided for in the British North America Act. The various forms of land tenure for disposal of timber lands that have developed in this province are rather complicated and must be explained in order to clearly understand the taxation of forests in British Columbia. Four main of types of tenure are to be found in our province to-day:-

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3. Order of Her Majesty in Council, Windsor, May 16, 1871.

4. Mulholland, F.D.: The Forest Resources of British Columbia. (Victoria, King's printer, 1937) p. 34.

- 1) Crown-granted lands.
- 2) Timber leases
- 3) Timber licenses
- 4) Timber sales.

Of these, only the last named is employed at the present time, although the tenures granted under the first three prior to their respective abolition are still in existence. In tables no. 2 and no. 3, the acreage and the volume of merchantable timber is given for the tenures under discussion. It is to be noted that the unalienated land includes timber sales and other provincial lands not disposed in any of the other types of tenure.

#### B. Crown-granted Lands.

In British Columbia the earliest form of land disposal was that of the crown-grant. This permanently alienated land sold in this manner, giving the new owner the land in fee simple. Such title, too, carried with it the rights to all the natural resources appurtenant to the land. Accordingly, much valuable timber was acquired at the same rates as ordinary land, without even the reservation of a royalty. As a Royal Commission in 1910 noted:

"In the early days of the Province timber lands seem to have had little or no value in the public estimation."<sup>5</sup>

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5. Final Report of the Royal Commission of Inquiry on Timber and Forestry 1909-1910, p. 11.

OWNERSHIP OF MERCHANTABLE TIMBER STANDS OF B.C. / 1937

Table No. 2

1. ACREAGE

Ownership Class	Accessible	per cent	Inaccessible	per cent	Total	per cent
Unalienated Crown timber	4,799,600	58.0	12,279,200	85.4	17,078,800	75.4
Timber Licenses and Leases	2,162,800	26.1	1,234,700	8.6	3,397,500	15.0
Crown Grants and Indian Reserves	1,313,100	15.9	866,400	6.0	2,179,500	9.6
TOTALS	8,275,500	100	14,380,300	100	22,655,800	100

Table No. 3

2. THOUSANDS OF BOARD-FEET

Ownership Class	Accessible	per cent	Inaccessible	Per cent	Total	per cent
Unalienated Crown timber	44,803,900	40.8	100,655,800	69.5	145,459,700	57.1
Timber Licenses and Leases	50,902,400	46.4	31,124,800	21.5	82,027,200	32.2
Crown Grants and Indian Reserves	14,031,900	12.8	12,980,400	9.0	27,012,300	10.7
TOTALS	109,738,200	100	144,761,000	100	254,499,200	100

Source:- Mulholland, F.D. "The Forest Revenues of British Columbia." Percentage figures calculated from acreage and volume figures obtained from this book.

Other large alienations including some valuable forest land were also made for the encouragement of a specific project. Most of these were grants in aid of railways and to a lesser extent, roads. The history of the lands granted to the Dominion government and their subsequent return to the province has been detailed. Besides this, however, 8,203,410 acres were granted to various railway companies, of which 4,065,076 acres were afterwards repurchased by the government, leaving a permanent alienation to the railways of 4,138,334 acres.<sup>6</sup> Of the remaining railway grants to-day, the most important is the grant of 1884 to the Esquimalt and Nanaimo Railway, covering over two million acres. This grant included some of the finest stands of Douglas fir in British Columbia, much of which has since passed into the hands of private companies.

The first attempt to prevent further wholesale alienation of timber lands came in 1884. By the provisions of the Land Act of that year it was decreed that:

"No land chiefly valuable for timber shall be disposed of by public or private sale."<sup>7</sup>

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6. The original railway grants were:	
Nelson and ForttSheppard Railway	550,783 acres.
British Columbia Southern Railway	3,755,733 "
Columbia and Western Railway	1,348,225 "
Kaslo and Slocan Railway	250,022 "
Columbia and Kootenay Railway	188,593 "
Esquimalt and Nanaimo Railway	2,110,054 "
<u>Total</u>	<u>8,203,410 acres.</u>
7. Land Act 1884. 47 Victoria c. 16.	

But this act remained very largely a dead letter. A subsequent act of 1888<sup>8</sup> imposed royalty charges and raised the price of land in general from \$1.00 to \$2.50. Since these prices did not take into consideration what type of land it was, so timber land could still be secured at the same price as any other land. A step in the right direction was taken in 1891 by limiting all types of land purchased to sections from 160 to 640 acres and a second purchase was not permitted until the first had been improved to an extent equal in value to the original price of the land.<sup>9</sup> Timber land, under this legislation was still not classified as such and could still be purchased at the price of first class land i.e. \$5.00 per acre. It was not, however, until 1896 that the principle of state ownership of the forests of British Columbia was recognized by law.<sup>10</sup> From that date onwards all "timber land" was reserved from sale or pre-emption. The statutory definition of this "timber land" was fixed as land carrying 8000 board feet to the acre west of the Cascade Range, and 5000 board feet to the acre east of the Cascade Range.<sup>11</sup> These regulations are still in force to-day. Until government inspection was established in 1912 some timber areas were secured, but the general aggregate of Crown timber has since 1896 remained intact.

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8. Land Act Amendment Act 1888. 51 Victoria c16.

9. Land Act Amendment Act 1891. 54 Victoria c. 15.

10. Land Act Amendment Act 1896 59 Victoria c. 28.

11. The Cascade Range by statute includes the Coast Mountains, which border the Pacific coast and lie north and west of the Fraser River.



### C. Timber Leases

In 1870 the leasing system of timber disposal was introduced into British Columbia.<sup>12</sup> The advantages of this system over that of the crown grant were very great from the point of view of the government, since it still retained possession of the land only leasing the cutting rights. Furthermore, the Legislature hoped, too, it would encourage the building of sawmills. Indeed, by 1888 this was definitely a policy of the provincial government for an act of that year<sup>13</sup> made the erection of a sawmill an essential condition of the granting of a lease. To give the lessees a security of tenure comparable with that of owners of crown-granted lands, the term of the leases were set at thirty years. A further extension of the leasing system in 1891<sup>14</sup> granted the right to cut hemlock for tanning purposes. The differences between this type of lease and the ordinary lease are not important enough to warrant description here.

The term of tenure of these leases as it exists to-day was fixed in 1901.<sup>15</sup> In this year it was provided that leases could be renewed for consecutive and successive periods of twenty-one years, subject to such taxes as the government might impose. The old thirty-year leases were permitted to enjoy the same privilege if they surrendered their old lease

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12. Land Ordinance of 1870.

13. Land Act Amendment Act 1888, 51 Victoria c. 16

14. Land Act Amendment Act 1891, 54 Victoria c. 15

15. Land Act Amendment Act 1901 1 Edward VII c. 30



within one year. Five years later the granting of leases was discontinued,<sup>16</sup> but all lessees were allowed to retain their leases granted to this time on the conditions of the act of 1901. The reason for this action was that the lease-hold system had been primarily designed to provide sawmill owners with a definite source of lumber at cheap rates, but with the introduction of the licensing system (described in section D) this was no longer necessary. This system had done its part in helping to establish the lumbering industry. Now that the industry was established its use was largely over. Another contributing factor in its abolition was that it was a very wasteful system of timber disposal. One lease of five thousand acres might contain five, ten or even more scattered areas in a forest district, some of which would be less than a couple of hundred acres in extent. Much of the choicest sections were thereby selected leaving the areas in between to the province, too small in many cases to be productively operated.

One other type of lease that exists to-day, but under a different type of tenure, deserves attention. That is the wood-pulp lease. It was first granted in 1901,<sup>17</sup> in order to encourage pulp and paper industries in British Columbia. The length of tenure was twenty-one years and the erection of a pulp-mill was compulsory. Before the abolition of this type of lease in 1903,<sup>18</sup> some 353,250 acres had

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16. Land Act Amendment Act, 1906. 6 Edward VII c. 24.

17. Land Act Amendment Act, 1901 1 Edward VII C. 30.

18. Land Act Amendment Act, 1903-04. 3 and 4 Edward VII  
c. 39.

been disposed of in this manner. All these leases which to-day cover about 335,000 acres were renewed in 1936 for a period of eighteen years.<sup>19</sup> Although this form of tenure has never been revived, in 1912 a licence for the disposal of pulp was granted in the form of a timber sale contract.<sup>20</sup>

#### D. Timber Licenses

The origin of the timber license in British Columbia was the old "general license", designed to enable the small and independent lumberman to obtain timber. Under a "general license" such men could afford to operate where-as they could not afford to take out a lease with its condition of the erection of a sawmill. With a limit of a thousand acres these licenses were first granted in 1884 on a four-year tenure.<sup>21</sup> In 1888 "special licenses" on the same conditions except that they were renewable annually, were introduced.

The amount of timber land taken up under these licenses was, however, very small and might have remained so but for the conditions of the time. Towards the end of the nineteenth century and during the first decade of the twentieth century, there was a period of great rural development and railway expansion, and as might be expected the consumption of lumber began to reach more than normal heights. The result was a "timber famine." Therefore, the government of British Columbia seeing the enormous areas of

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19. Mulholland op. cit. p. 34.

20. Forest Act, 1912. 2 George V c. 17

21. Timber Cutting Act, 1884, 47 Victoria c. 32.

timber land in the province lying idle and recognizing for the future the seriousness of a "timber famine", perceived an opportunity to relieve the situation and at the same time secure thereby an increased revenue for the treasury. Accordingly, as early as 1894 the provision for staking lands for licenses was passed,<sup>22</sup> and in successive years by making the license transferable and renewable for twenty-one years. As a result, when the "timber famine" became acute, wild speculation took place and for a time there was a large boom. But as was inevitable the acquisition of timber far outran the requirements of the market. Finally in 1907, the government, although they were receiving the greatest revenues in their history from the staking of these licenses, saw that the future resources of the province were being exploited for gain in the present, and that being the case withdrew this form of tenure by order-in-council.<sup>23</sup>

In the worst years of this wild staking (1904-07) some 18,000 square miles of timber land were so disposed by the government, and this are contained about 200,000<sup>000</sup> board feet of timber. In 1904 there were only 1451 licenses in existence, by 1907 this number had increased to over 15,000. Although the privilege of staking further licenses was withdrawn in 1907, all equities in licenses were kept in-

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22. Land Act Amendment Act 1894, 57 Victoria c. 24. A parallel situation is to be found in the United States at the same time in the Homestead and Timber and Stone Acts

23. Order-in-council, 1907 7 Edward VIII.

tact. Since that date they have gradually decreased in number through being allowed to lapse or through tax delinquency, and to-day there are only a few thousand in existence.

Another form of license of minor importance, but which has to be mentioned because it is still in existence to-day is the hand-loggers' license. The original terms under which this form of license was granted are worthy of note since they imposed no restrictions as to area or methods of logging to be employed.

"The Chief Commissioner may, upon the payment of the sum of \$10 therefor, grant a general license to any person to cut timber upon Crown lands, not being timber limits, without any reservation as to area---and such license shall be in force for one year from the date thereof, and no longer."<sup>24</sup>

The Royal Commission of Inquiry on Timber and Forestry 1909-10 recommended the discontinuance of such licenses, but this advice has never been followed by the provincial government. Except for raising the license fee and prescribing certain minor restrictions they remain to-day much as they were in 1888.

By this license much fine timber has been indiscriminately cut. The land, too, is destroyed for future use since many of the trees that are cut never reach the water, because of an amendment which forbade the use of

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24. Land Act Amendment Act, 1888. 51 Victoria c. 16.

steam power. The fire hazard from such debris is enormous. An estimate by the Commission of Conservation in 1918 for a twenty-eight year period is enlightening on this matter.<sup>25</sup>

500,000,000 board feet marketed

300,000,000 " " cut and allowed to go to waste

800,000,000 " " indirectly destroyed through  
fire and windfall

From a taxation point of view, they certainly are not justified. In the last forty years they have provided annually a few thousand dollars in license fees and from fifteen to twenty thousand dollars in royalties. This is very little in comparison with the damage done. The probable reason that this form of tenure is perpetuated is out of sympathy for the small man.

#### E. Timber Sales.

With the prohibition of timber land alienation under the crown grant, timber lease or timber license respectively, no method remained by which forest land could be secured. Accordingly, the Forest Act of 1912 introduced the system of tenure by which timber is disposed of to this day, the timber sale contract.<sup>26</sup> This tenure gives the holder the right to cut and dispose of the timber on the land within a specified period of time, usually from two to five years. This tenure, however, carries with it no right to

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25. Whitford and Craig, op. cit. pp. 94-95.

26. Forest Act, 1912, 2 George V, c. 17. See appendix for a copy of this contract.

the land on which the timber stands. These tenures are all disposed of by public tender or open public auction depending on the amount of timber offered.

The number and area of these timber sales granted each year has gradually increased. About fifteen per cent of the forest revenues to-day come from the item of stumpage, i.e. the sale price of the timber sold under the terms of a timber sale contract. The growth in extent and importance of this type of tenure is clearly depicted in the following table of timber sales awarded.<sup>27</sup>

Table No. 4

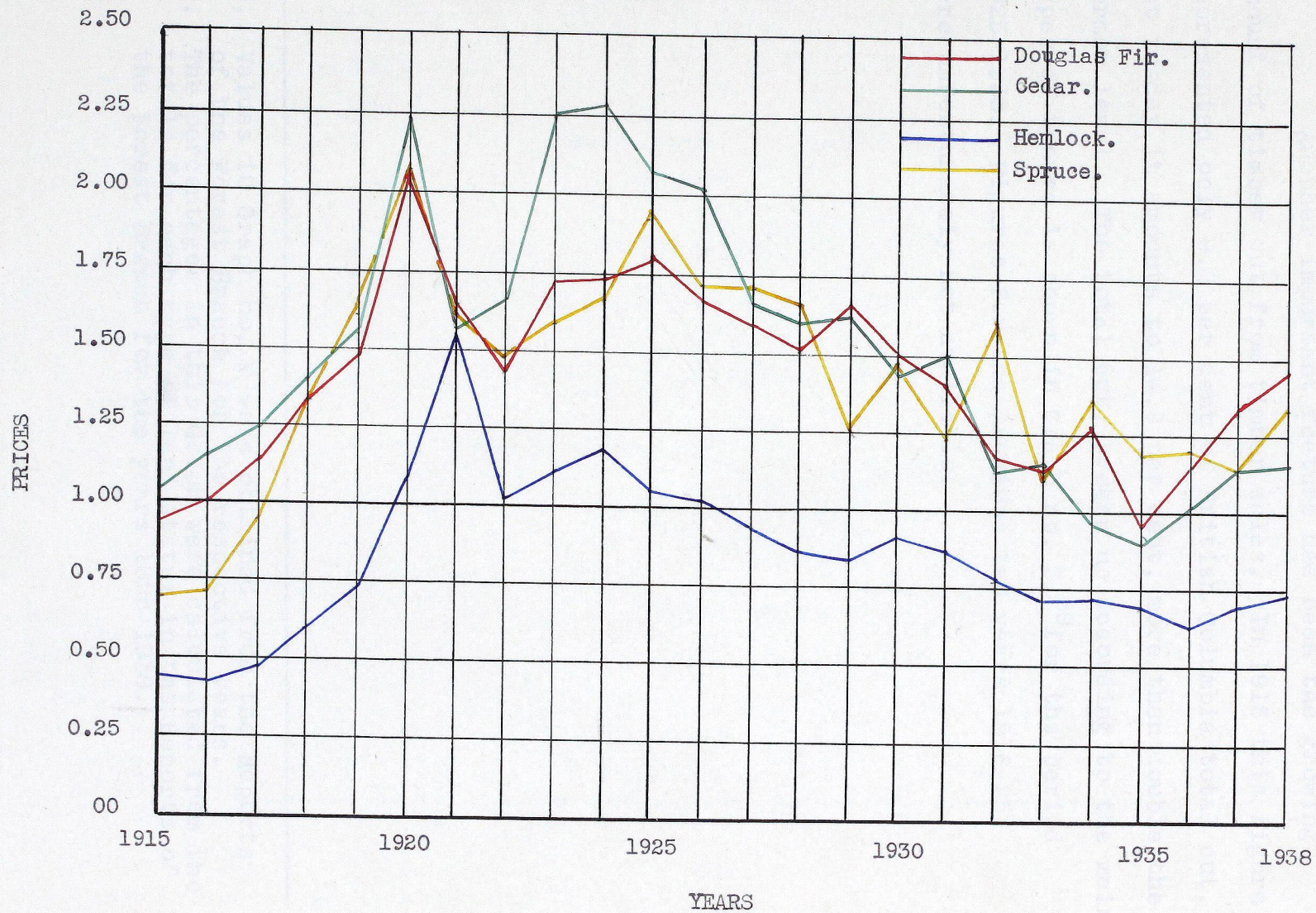
YEAR	NO. OF SALES	ACREAGE	SAW TIMBER (F.B.M)	PER CENT STUMPAGE OF TOTAL REVENUE
1915	98	12,990	94,550,000	3.5%
1920	594	121,690	440,649,755	7.0%
1925	613	94,015	189,022,314	13.2%
1930	866	162,043	199,485,000	15.0%
1935	1357	231,958	260,831,000	11.0%
1936	1443	252,624	358,804,000	11.7%
1937	1449	278,988	450,798,000	15.1%
1938	1501	272,424	415,747,000	15.8%

Much of the percentage increase in the total revenue is due to the rise in stumpage prices. This is especially notable up to 1925 as reference to graph no. 2 will show. Actually, since 1925 these prices have declined somewhat, but

27. Reports of the Forest Branch, 1915, 20, 30, 35-38. The last column was calculated from the total for stumpage and the grand total revenue for each year.



AVERAGE STUMPAGE PRICES FOR MAIN SPECIES 1915-1938.





this has been offset by more than doubling the number and acreage of timber sales awarded each year.

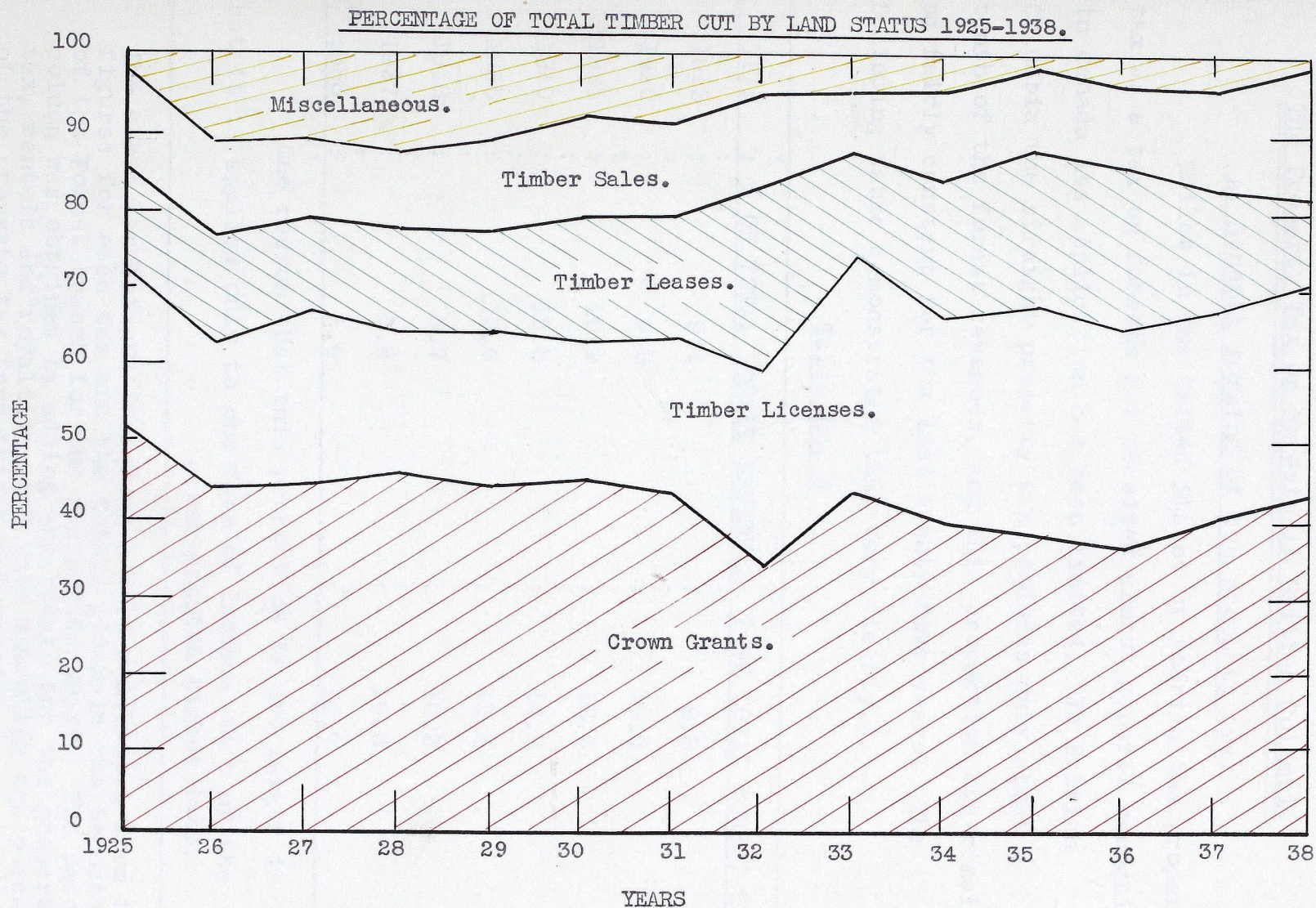
Another important feature has been the growing amount of timber cut from timber sales. In 1915 this figure represented only 9.2 per cent of British Columbia total cut, but to-day it amounts to 19.9 per cent, more than double the former level. The total cut, broken up according to the main types of tenure is shown in Graph no. 3,<sup>29</sup> for the period 1925-1938. Figures for the previous ten years 1916-25 were unfortunately not available.

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28, Values in Graph no. 2 were obtained from the Reports of the Forest Branch for the respective years.

29. The percentages in this Graph were calculated from the totals for each type of land status in the Reports of the Forest Branch for the years 1925-1938.





N.B.--Miscellaneous includes Dominion lands, Indian lands etc.



Chapter IV

The Property Tax on Forests in British Columbia

A. General working of the property tax.

Whilst in the United States of America the property tax as a tax on forests has received almost general recognition, in Canada its application has been limited. In British Columbia the straight property tax produces only about a tenth of the forest revenues, and this proportion has remained fairly constant for the last twenty-five years. The following table demonstrates this very clearly.<sup>1</sup>

Table No. 5

YEAR	:	% OF TOTAL FOREST REVENUES:	:	% OF TOTAL FOREST TAXES
1915	:	9.1	:	9.8
1920	:	8.6	:	10.3
1925	:	10.2	:	10.5
1930	:	12.3	:	14.9
1935	:	10.7	:	12.5
1936	:	8.7	:	10.3
1937	:	8.8	:	10.8
1938	:	8.6	:	10.7

One reason that this proportion is not larger is that it is applied only to one form of tenure, that of the crown-granted timber land.

1. The above percentages in column 1 were calculated from the figures for each tax and the totals given in the Reports of the Forest Branch for the respective years. The second column was obtained by adding the totals for the property tax, rentals and royalties, and then computing the percent of the property tax from this total amount.

On all timber land<sup>2</sup> obtained in this manner a one and a half per cent tax on its assessed value is charged. Moreover, it is not the sole tax on crown grants, as such land is also subject to certain royalties as will be discussed in a later chapter. It is worthy of note, too, that this tax is administered by the Finance Department and not the Lands Department as are the other forest taxes.

Such a tax on property satisfies the government's need for a steady stream of revenue each year, but has quite dissimilar effects on different types of forest properties. In order to analyse these effects, forest properties may be conveniently divided into three basic classes.<sup>3</sup>

1) Annual sustained yield properties. In this class of forest property the annual income is regularly sufficient to equal the interest on the capital value of the property.

2) Deferred yield properties. Here the annual income is not equal to, but less than the interest on the capital value of the forest. Capital is being accumulated to the detriment of present income, which is to be deferred for some future date.

3) Depletion yield properties. In this final class the income is greater than the interest on the capital value, and as a result the capital is being depleted for an increase in current income.

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2. This means statutory timber land as defined in Chapter III.

3. These terms are employed by F. R. Fairchild in "Forest Taxation in the United States", though used in part by other writers.

A single property may not remain permanently in one class. The deferred yield forest on maturing may become an annual sustained yield, which is the ideal situation, and the aim of most foresters, or yet a depletion yield, the most destructive type.

For the purpose of investigating the incidence of the one and a half per cent forest property tax of British Columbia in relation to each of the above types of properties, certain assumptions must be made. Let each of the three properties be worth \$12,000 if no property tax were in existence. The interest rate may be taken at a fairly conservative level, 3 per cent. Property No. 1 gets 3 per cent perpetually from his forest land, i.e. \$360 per annum. Property No. 2 defers his income for  $15\frac{3}{4}$  years when his capital having increased to \$19,090, he obtains a perpetual annual income from it at the rate of 3 per cent, i.e. \$572.70 each year. The third property produces an annual income of \$2400 for just over five years, at which time all the capital is depleted, and no further income is forthcoming. From this it will be seen that these three properties represent the three types outlined above.

Now the provincial legislature introduces a  $1\frac{1}{2}$  per cent property tax, and for the sake of comparison in this study, an alternative of a straight and unprogressive  $33\frac{1}{3}$  per cent income tax. In the case of each property, the value

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4. This odd figure is only used for convenience in computing other amounts.

of the capital immediately decreases to \$8000, since that is all that anyone would pay for each property, after discounting the effect of the tax. Such a purchaser would have to bear all the future taxes and the value of the capital is in theory the sum of its total future net income.

In the case of the first property, the annual sustained yield class, the incidence of either the property tax or income tax is the same. The  $33\frac{1}{3}$  per cent income tax decreases the annual income from \$360 to \$240, and the value of the capital from \$12,000 to \$8000, just  $33\frac{1}{3}$  per cent respectively. Now on the other hand the  $1\frac{1}{2}$  per cent property tax on the capital value of the property, when subtracted must leave enough income to capitalize to this value at the assumed interest rate of 3 per cent. Taking "x" as the value of the capital then:

$$360 - 0.015x = 0.03x$$

and from this "x" is \$8000 and a  $1\frac{1}{2}$  per cent property tax in British Columbia would exact \$120, just the same as  $33\frac{1}{3}$  per cent of \$360. Therefore, in the case of an annual sustained yield property, a  $1\frac{1}{2}$  per cent property tax is equivalent to a  $33\frac{1}{3}$  per cent income tax. The present worth of either tax on this property is accordingly  $33\frac{1}{3}$  per cent of the capital value before the imposition of the tax.

The deferred yield (No. 2) property presents a rather different picture. Here the \$12,000 forest yields nothing for  $15\frac{3}{4}$  years, but thenceforward \$572.70 per annum. A  $33\frac{1}{3}$  per cent income tax on this property would produce

nothing for  $15\frac{3}{4}$  years and then exact \$190.90 annually. Under this straight income tax the present worth of all future taxes would again be \$4000 or  $33\frac{1}{3}$  per cent of the value of the capital before the introduction of the tax as in property No. 1. But the property tax does not act in this manner. It is paid all through the  $15\frac{3}{4}$  year period while the owner is in receipt of no income. To find the burden of this tax we must first obtain the value of the capital. Now the future perpetual income of \$572.70 minus the  $1\frac{1}{2}$  per cent tax must be equal to 3 per cent of the value of the capital. Solving the equation as before:

$$572.70 - 0.015x = 0.03x$$

The value of the capital (x) comes to \$12,726.66 and a  $1\frac{1}{2}$  per cent property tax on this is \$190.90, the same as under the  $33\frac{1}{3}$  per cent income tax. On this basis of a  $1\frac{1}{2}$  per cent property tax the present worth of this value is the amount which with  $1\frac{1}{2}$  per cent for taxes and 3 per cent for interest will equal \$12,726.66 in  $15\frac{3}{4}$  years, or that sum discounted for this period at  $4\frac{1}{2}$  per cent since money doubles in  $15\frac{3}{4}$  years at  $4\frac{1}{2}$  per cent;<sup>5</sup> therefore, the present worth is half this figure, \$6363.33. From this the present worth of the  $1\frac{1}{2}$  per cent property tax is the original capital less

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5. The purpose of this odd number of years will now be evident.

this amount (\$12,000 - 6363.33) which is \$5637.67. This figure represents the incidence of all future property tax payments on this deferred yield property, and it amounts to 46.98 per cent of \$12,000, a considerable degree higher than the  $33\frac{1}{3}$  per cent burden on the annual sustained yield property.

Finally, there is the third type, the depletion yield property. From this forest the owner in our example receives \$2400 a year for five years and the remaining capital of \$1200 the sixth year. The income tax of  $33\frac{1}{3}$  per cent would therefore produce \$800 for five year, \$400 the sixth year and nothing after that. The present value of these amounts is \$4000 or  $33\frac{1}{3}$  per cent of the capital previous to the levying of the tax. This is just the same as in the annual sustained yield and deferred yield properties. The operation of the  $1\frac{1}{2}$  per cent property tax is vastly different. This tax will take each year an amount sufficient to make the capital for the following year, before subtracting the \$2400 income payment, larger than what it was the preceding year by  $4\frac{1}{2}$  per cent, i.e. 3 per cent interest and  $1\frac{1}{2}$  per cent tax. Then the value after the property tax has been discounted will be

$$\frac{2400}{1.045} \left( \frac{1 - (1.045)^{-5}}{1 - (1.045)^{-1}} \right) + \frac{1200}{(1.045)^6}$$

which solved comes to \$10,536. From this it is evident the property tax has reduced the value of the capital \$464 (12,000 - 10,536), which figures represent only 4.52 per cent of its value.

From this analysis of these three types of properties<sup>6</sup> the incidence of the  $1\frac{1}{2}$  per cent property tax clearly is different in each case. The straight  $33\frac{1}{3}$  per cent income tax treated each uniformly. Assuming it remained at the same rate the owner of each property could have provided for all his future taxes by putting away a fund equal to one-third of his capital before the imposition of the tax. But with the property tax the burden was not equitably distributed. The present worth of this  $1\frac{1}{2}$  per cent tax on each property and accordingly the per cent of his capital before taxes, each owner would have to lay aside in order to meet all his future taxes (the tax ratio) was as follows:-

1) Annual sustained yield property	33.33 per cent
2) Deferred yield property	46.98 " "
3) Depletion yield property	4.52 " "

The conclusions to be drawn from this inequitable situation are not very pleasant. Most striking is the fact that the wasteful owner comes off best. Then it is also obvious that the property tax discriminates against the deferred yield forest in favour of those yielding some form of annual income, as No.1 or No. 2.

One ameliorating condition should be mentioned in this connection. If the effects of the property tax are fully understood and the respective properties fully capitalized to meet them, this unequal burden largely dis-

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This analysis follows that outlined by F.R. Fairchild in "Forest Taxation in the United States", but all calculations are original



appears. However, taxes are rarely<sup>fully</sup> capitalized. This is due in large measure to the inborn tendency of optimism among the buyers and sellers and the uncertainty of just what the future may hold in the way of taxation. As a result, the property tax discriminates against deferred-yield investments and tends to encourage early felling of trees as in a depletion yield. How great this will be depends to a great degree on the level of the tax rate.

#### B. Influence of the tax rate

The question now arises what effect will a change in the tax rate, up or down, have on each type of forest property. This is a very pertinent question as the tax rate seldom remains the same for any long period of time. In British Columbia the present rate on timber land of  $1\frac{1}{2}$  per cent of its assessed value has only been in existence since 1925. From 1917 to 1925 it was 3 per cent, and previous to that date 2 per cent.

Taking the same three examples used in section A, we can discover the tax ratio at any given tax rate. For the 1917-1925 period of a 3 per cent rate these ratios were as follows:-

1) Annual sustained yield property	50.0 per cent
2) Deferred yield property	76.2 " "
3) Depletion yield property	8.7 " "

The difference between these ratios and those for a  $1\frac{1}{2}$  per cent tax rate is most noticeable in the case of the deferred

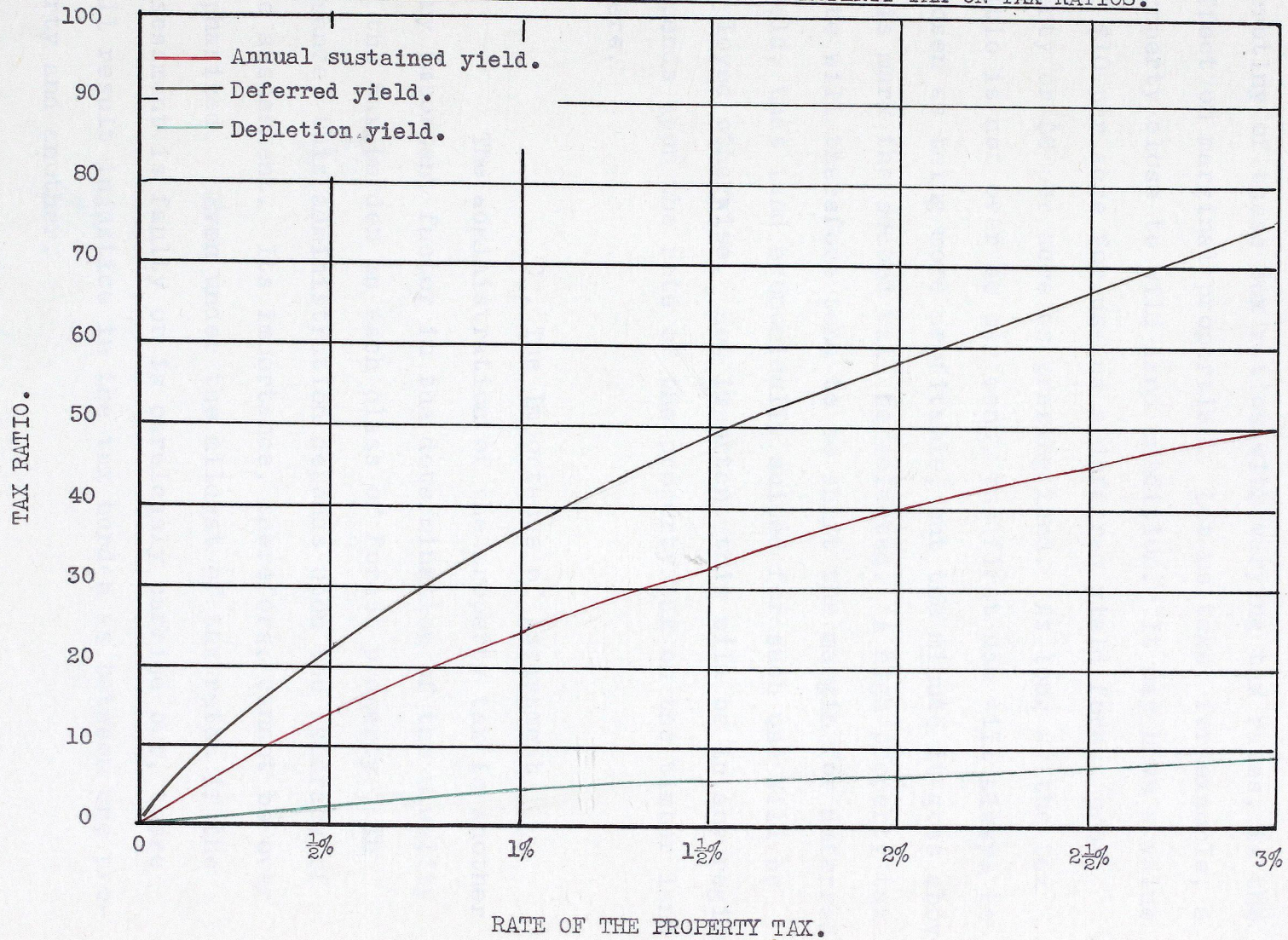
yield property, and least noticeable in that of the depletion yield property. The reduction of the rate from 3 per cent to  $1\frac{1}{2}$  per cent in 1925 therefore benefitted the deferred yield properties most, but would generally tend to make the inequalities between each property less as can be seen by an examination of Graph No. 4.<sup>7</sup>

The cutting in half of the rate in 1925 has tended to make the inequalities between each type of property less aggravated to-day, although inequalities still exist where capitalization of taxes is not complete as was pointed out previously. Indeed, as early as 1919, the 3 per cent rate was denounced by a Board of Taxation.<sup>8</sup> However, even though the lowering of the tax rate may help to iron out inequalities, the uncertainty for deferred yield forests remains pronounced. The risk due to an upward or downward movement in the tax rate over a long period for such a property is very great. As the income may be deferred for any length of time over ten years, the property tax subjects this property to a risk completely out of proportion to that of the other two. This is unjust where the yield is being deferred on account of the immaturity of the trees. However, where

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7. Graph No. 4 depicts the tax ratio for each type of property at tax rates varying from  $\frac{1}{2}$  per cent to three per cent. These values were computed on the basis of the original assumptions made for each property in section A of this chapter.
  8. Reports of the Board of Taxation (Victoria, King's Printer, 1919) p. q 99



EFFECTS OF CHANGES IN THE RATE OF THE PROPERTY TAX ON TAX RATIOS.





the forest is being held for a rise in prices, there is a justification.

Another inference that can be drawn from a close scrutiny of these tax ratios with varying tax rates, is the effect on marginal properties. Let us take, for example, a property close to wild land condition. It may have a value of \$10 per acre for use as a deferred yield forest property or \$6 per acre as grazing land. As long as the tax ratio is not over 40 per cent, the first use will always be chosen as being more profitable, but the minute it goes above this mark the second will be selected. A high property tax rate will therefore tend to so shift the margin for deferred yield, that land economically suited for such use will be employed otherwise. How important this will be in any region depends upon the rate of the property tax on the timber land there.

### C . The Importance of Assessment

The administration of the property tax is another very important factor in the determination of the equality of the tax burden on each class of forest property. In essence, this administration depends upon the accuracy of the assessment. Its importance, therefore, cannot be over emphasized. Even under the mildest of tax rates if the assessment is faulty or is carelessly carried out, there will result injustice in the tax burden as between one property and another.

By the laws of the province of British Columbia an annual assessment roll is prepared in each assessment district based on the returns rendered by each owner. Like other land, timber land is assessed at "the actual cash value of the land in money."<sup>9</sup>

The main purpose of this assessment is to find out the value of all timber land subject to taxation. Theoretically, the value of anything in economics is the quantity of some goods or service which could be obtained in exchange for it. To ~~obtain~~<sup>determine</sup> this as accurately as possible, assessors usually have access to sale realizations, and survey and timber cruising data. But at best any assessment is a judgment, an attempt to appraise the value of something.

If properties are overassessed, then this is equivalent to raising the tax rate, and if underassessed, the converse is true. If one property is assessed at a different level to another, then there is inequality between these two properties. The problem then becomes one of determining how accurate assessments are. On obtaining a "true value", we can from this calculate a ratio between this figure and the assessed value. Such a ratio is known as an "assessment ratio." Perfect assessment would in theory result in a ratio of 100 per cent.

Now in the assessment ratio the numerator is always known, since it is the amount at which the property is assessed on the tax rolls of the province. But the denominator,

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9. Taxation Act, R.S. 1924. C. 254. s1.

the "true value" is not a matter of record. It can be found by two methods, firstly by the estimates of an experienced appraiser, and secondly, by a consideration of sale values. Both methods are open to severe criticism, but they are the only way in which anything like this "true value" can be obtained. The first method was impossible for the writer, so the second in as far as it was possible has been adopted.

Sale figures were collected from various timber brokers and lumbermen. Data in sufficient quantity (ranging from 2 to 12 sales in any district) were only obtained for six assessment districts. It would have been desirable to limit these figures to single year periods, but this was not possible due to the paucity of material in any one year. So three periods were selected, namely 1925-1930, 1931-1934, and 1935-1938. These figures were then compared with average assessment figures for the respective periods and assessment ratios calculated from these two groups.<sup>10</sup>

It must be clearly understood that the resulting assessment ratios are only an indication of the accuracy of assessment in general, and must not be construed to represent any injustice in individual assessments in a single district. The limitations of these sale figures are numerous. To begin with any sale although a contract between a buyer and a seller is not in itself "prima facie" evidence

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10. See Table No. 6 for these assessment ratios for the six assessment districts.

Table No. 6

Assessment Ratios for Selected Districts in British Columbia

1925 - 30

Assessment District:	Av. Ass. value per Ac.	Av. Sale value per Ac.	Assessment Ratio
Alberni	\$57.47	\$ 56.45	101.8%
Comox	49.80	56.00	88.9%
Cowichan	69.46	78.66	88.3%
Nanaimo	43.18	40.00	107.9%
Vancouver	100.41	112.42	90.2%
Victoria	---	---	---

1931 - 34

Assessment District:	Av. Ass. values per Ac.	Av. Sale value per Ac.	Assessment Ratio
Alberni	\$ 66.66	\$ 74.07	90%
Comox	50.69	59.92	84.6%
Cowichan	72.18	84.45	85.5%
Nanaimo	53.63	59.52	90.1%
Vancouver	---	---	---
Victoria	39.46	45.00	87.7%

1935 - 38

Assessment District:	Av. Ass. value per Ac.	Av. Sale value per Ac.	Assessment Ratio
Alberni	\$---	\$ ---	---
Comox	42.35	50.20	84.4%
Cowichan	51.65	56.80	90.9%
Nanaimo	35.86	44.60	80.4%
Vancouver	---	---	---
Victoria	---	---	---

Source:

The average assessment values per acre were calculated from the average assessed value for each year published in the Reports of the Forest Branch for the respective years. In as much as they are averages of averages, they are not 100 per cent accurate, but the discrepancy over a period of a few years is very slight.

The average sale values per acre were calculated from sale prices obtained from timber brokers and lumbermen. In the case of those on the installment basis, the present worth was computed. Where the terms of the sale included an interest in the property, the present value was estimated, with the assistance of the lumbermen concerned. Most values are the average of from 5 to 10 sales, but in no case has an average for any district been used where there were less than 2 sales

Assessment Ratio =  $\frac{\text{Assessed Value}}{\text{Sale Value}}$  expressed as a percentage.



of the value of the property being sold. In the sale both parties may not have equivalent bargaining power, and the resulting sale price in such cases will conform to the party with the largest bargaining power rather than the actual market value of the property. Furthermore, some prices will, in all probability, represent forced sales and accordingly will not be a measure of the market value at the time. Over and above these reasons, there is the fact that a large number of sales are made on terms, sometimes to be paid in a limited number of years, and at other times, granting a percentage of the total cut. So, though the assessment ratios calculated from these sale figures serve as an indication for general purposes, they must not be accepted, "ipse dixit", to prove any specific inequality as between one district and another.

The general indication from these assessment ratios is that on the whole timber land in British Columbia is assessed below rather than above its actual value. In other words, the assessors tend to be conservative. This rather leads to the conclusion that owners of crown grants have no complaint in the matter of over-assessment. No conclusions as to differences between different assessments can be drawn from the relatively small material available for this study.

## Chapter V

### The Ground Tax or Rent

#### A. Theory and general effects of the tax.

The ground tax or rent is a flat charge exacted annually and computed on the basis of some specified unit of area. In Canada, the unit of area that has come into general acceptance is the square mile, so that this tax is levied at a certain rate per square mile. The difference between such a tax and the property tax now becomes evident. Whereas a tax on a square mile of forest land under the latter may vary from year to year as the assessment varies (assuming the rate remains constant), under the former it is a blanket charge in each jurisdiction and does not vary each year.

To give a clear cut picture of the theory of this tax is not very easy. To start with, its first important characteristic is that it is levied annually. ~~As such,~~ therefore, part of its design is to be a regular revenue provider for the government. Furthermore, although it differs from the property tax in the essential point of being a flat rate as opposed to a percentage rate on an assessed value, as was explained above, it nevertheless has a marked resemblance to the property tax in other ways. The rent is charged on the unit area of land and not on the timber, although the amount of timber per unit area definitely has a bearing on the ultimate rate of the tax. Notwithstanding this fact, the property rather than the timber on it is the actual basis of the tax, and in this respect it is a type of property tax.

There is, however, one further element in the ground

tax, that of a tax in the form of a license for operation. In primitive societies the wealth produced by a savage is nearly ~~by~~ all wages, very little going to interest and none to rent. With the evolution of progress rent becomes a steadily increasing factor in wealth. It represents the value of the opportunity to accumulate riches. This value is not a state creation or a personal creation, but a value inherited from a munificent Creator at the beginning of time enhanced by the outcome of social progress.<sup>1</sup> The owner of the land for the period of his seisin has a monopoly over the opportunity to produce wealth thereon. In the rental there is accordingly, an element of the license tax in an attempt to tax this unearned opportunity for profit.

Although the effect of such a tax depends very largely on the rate and the conditions of its operation, certain general effects applicable under nearly any circumstance can be observed. As an annual tax it will always tend to encourage quick cutting and discourage holding the land for the timber to mature or for a second crop. Since the idea of developing the forest as a crop rather than a wasting asset is the aim of modern forestry, such effects are by no means in the best interests of sound forestry practise. If we consider the three types of properties described in the last chapter, this tax like the property <sup>tax</sup>, tends to discriminate in favour of a depletion yield property, as against an annual sustained yield property or a deferred yield property. But from this it must not be construed that the tax is necessarily "ipso

facto" unjust, since the most important single factor in determining the justice or injustice of such a tax is the rate.

From the government's point of view the tax has much to commend it. Not only does it bring in an always recurring amount of income to the province's coffers, but it is much less costly to administer than the property tax. As it is a flat rate per square mile all that it is necessary to know for calculating the tax is the area of the property to be taxed. There are no expensive assessment costs to be met every year, and this saving is of no small importance to any government. As a result, many jurisdictions in Canada have favoured this method, and adopted it in preference to the straight property tax.

B. The position of rentals in the tax structure.

In British Columbia the annual rental is levied on three types of tenure, namely the timber lease, the timber license and the timber sale. It parallels on these tenures the property tax on crown-granted lands. As a source of tax funds it has gradually been declining in importance. A quarter of a century ago about three-quarters of the forest revenues came from this origin, whereas to-day the figure represents only one-fifth of these revenues. The following table shows its relative importance in the forest revenues and forest tax structure for the last twenty-five years.<sup>1</sup>

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1. The percentages in the first column were calculated from the figures for each tax and the totals obtained from the Reports of the Forest Branch for the years 1915, 20, 25, 30, 35-38. Those in the second column were obtained

Table No. 7

Year :	% of Total Forest Revenue :	% of Total Forest Taxes
1915 :	65.2	70.6
1920 :	49.9	59.8
1925 :	31.9	45.8
1930 :	28.1	33.9
1935 :	18.5	23.5
1936 :	20.3	23.8
1937 :	19.8	22.9
1938 :	21.3	26.2

The main cause for this decrease is that both timber licenses and timber leases, as was explained in Chapter III are no longer granted. Since they provide about 95 per cent of the total rental fees, as they lapse or are given up so the total of rentals decreases. The amount of rentals from timber sales is infinitesimal and has increased little in the last ten years. An average for the ten year period 1929-1938 gives the following composition for these ground taxes.<sup>2</sup>

Timber license rentals	87.2	per cent
Timber lease rentals	9.3	" "
Timber sale rentals	3.5	" "

1 (Cont.) by adding the totals for all rentals, royalties and property tax figures and computing the per cent of rentals in this amount.

2. The above percentages were calculated after averaging the totals for each rental source for the ten year period 1929-1938 as published each year in the Reports of the Forest Branch.

C. The rate of the tax.

There are two main rates charged for rentals in this province. West of the Cascade Mountains the rate is \$140 per square mile, while east of the Cascades it is only \$100 per square mile. The only exceptions to these rates are those on pulp licenses which are half of these rates in the respective regions, i.e. \$70 on the coast and \$50 in the interior.

The first point worthy of examination in the above rates is the difference between those east and west of the Cascades. This reduction of \$40 in the interior is due to the smaller volume of timber to the acre in this region. The statutory definition of timber land there is only 5000 board feet to the acre as against 8000 board feet to the acre on the coast. From this difference alone we can see a basis for the divergence in the two rates.

In order to analyse these two rates more closely, the following method has been adopted. The purpose of this method was to compare the two rates by finding out what per cent of the value the tax took in any one year. This was achieved by first calculating the average number of board feet to the square mile from the total stand and area for each region. Then taking the average stumpage price (to the nearest even number) for British Columbia timber sales for the year 1938, and computing from this a figure for the average value of one square mile on the coast and in the interior. Having obtained these figures, then it was possible to ascertain what per cent \$140 and \$100 appropriated respectively

of the average values for a square mile west and east of the Cascades. This is illustrated in detail in Table No. 8.

The results of this analysis tend to show that the \$100 rate in the interior is the higher of the two. The rate there of 1.93 per cent is more than twice as high as that of 0.92 per cent on the coast. Considering too, the fact that stumpage values in the interior are often lower than on the coast, whereas in this table the average rate for the whole of British Columbia was used, the higher percentage would in all probability be raised. Only figures for merchantable timber and its area were used here as they were the only ones obtainable for both regions. It is, however, unlikely that the addition of volume and area figures for immature timber would alter these results to an appreciable degree. From the above, it would appear that there is in this situation a certain inequality, the discrimination being against the interior.

It is pertinent now to inquire how British Columbia's rates compare with those in other provinces of Canada. Four other jurisdictions besides this province levy ground taxes.

The rates of these areas are as follows:-

New Brunswick	\$8	per	square	mile
Quebec	\$3	"	"	"
Ontario	\$5	"	"	"
Dominion lands	\$5	"	"	" (but \$128 for lands situated in British Columbia.

On the face of it these rates appear very low in comparison to those on the Pacific. But analysing them in

Table No. 8

Comparison of British Columbia Rental Rates.

Region	: Merchantable : Timber (bd. ft.)	: Area (sq. Mi.)	: Average No. of : bd. feet per sq. mi.
Coast	: 155,128,800,000	: 12,312	: 12,599,724
Interior	: 99,370,400,000	: 23,088	: 4,308,312

Source: Columns 1 and 2 are from Mulholland's "The Forest Resources of British Columbia," except that column 2 is here expressed in square miles instead of acres. The average stumpage value is the approximate figure for 1938 taken from the Report of the Forest Branch. The remaining columns are computed from these.

Table No. 9

Comparison of Canadian Rental Rates.

Province	: Accessible : Merchantable Timber : (bd. ft.)	: Area (sq. mi.)	: Average No. of : bd. ft. per sq. mi.
New Brunswick	: 9,601,000,000	: 13,383	: 717,403
Quebec	: 60,740,000,000	: 213,500	: 284,496
Ontario	: 33,260,000,000	: 56,101	: 59,287

Source: Columns 1 and 2 are from the Canada Year Book, 1939. The average stumpage values are approximated from those given in the "Forestry Chronicle" for 1938. The remaining columns are again computed from these. The Dominion Lands rental is omitted as reliable figures upon which to base calculations could not be obtained. It should be noted that the Ontario rent has been reduced in recent years by a specific percentage each year by law, usually varying from 40 to 60 per cent, and so this would bring the percentage down to between 2 and 3 per cent.



Average Stumpage value per 1000 bd. ft.	: Average value: per sq. mi.	: Rental Rate	: Tax per cent of value
\$1.20	\$15, 119.67	\$140.00	0.92%
1.20	5, 169.97	100.00	1.93%

Average Stumpage Value per 1000 bd. ft.	: Average Value: per sq. mi.	: Rental Rate	: Tax per cent of value
\$1.25	\$896.75	\$8.00	0.89%
1.25	355.62	3.00	0.85%
1.70	100.79	5.00	4.96%

the same manner as previously<sup>3</sup> shows that the \$140 rate compares very favourably to them. Only in Ontario does the rate seem rather burdensome. This demonstrates that contrary to the belief of some people, the \$140 per square mile is no heavier than the seemingly lower rates in the eastern provinces. The actual percentage figures would change with the rise and fall in stumpage values, but, assuming these only change relatively, the alteration in the per cent that the tax takes in each province would be proportional in every case.

Despite the low percentage that this analysis shows, the \$140 rent to exact, in practise the burden is much heavier. As was pointed out in section B, timber licenses supply almost 90 per cent of these taxes. Now by far the majority of these licenses are under 640 acres in extent and no reduction in the ground tax is allowed on this account. As a result, the \$140 or \$100 respectively is paid in a large number of properties for some fraction of a square mile. This would, of course, increase the percentage of the value which the tax confiscates.

This same principle is in evidence in the question of tax reductions. By law the annual rental may be reduced each year<sup>4</sup> by the omission from its computation of six hundred and forty acres or any multiple thereof, which has been logged off to the satisfaction of the Minister of Lands. Again the small license holders cannot take advantage of this

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3. See table No. 9.

4. Forest Act, 1912 2 George V, c.17.

reduction.

The flat rate has also a decidedly varying effect on different tenures, regardless of what percentage of the value it may be appropriating. The timber sale which runs for only a few years barely feels the burden of the tax. It may be likened to a depletion yield property, and as under the property tax again comes off best. On the other hand, a license or lease is usually held over a number of years. Consequently, the effect on annual sustained yield properties and even more so on deferred yield properties becomes very burdensome in comparison to that on a timber sale. In table No. 10, the cost of carrying rentals in British Columbia and in other provinces for periods from 10 to 100 years is given. In order to obtain fairly conservative figures money has been valued at 3 per cent. From this table the lumberman can find out his tax bill if he defers his yield for some future date or intends to return for a second logging in the future. Assuming a lumberman owns one square mile under license on the coast, his tax bill for any such operation in the future is somewhat prodigious.

In 20 years	\$3763
" 40 "	\$10,560
" 80 "	\$46,176
"100 "	\$85,082

The longer the period of waiting for the actual logging, the faster the tax bill grows. The increase for each ten year period is proportionately greater as time goes on.

There is one final consideration with regards to the rate. That is the problem of tax delinquency. Under the present system, if the tax is not paid in any year \$1.25 a month is charged for each month until the tax is paid. After one year of delinquency this penalty is raised to \$10.00 a month. At the end of two years the license or lease is then withdrawn from its owner. The bill for penalties at the end of one year is not very great (\$15), but the rise for the second year can only be justified on two grounds, as a punishment for non-payment, or in order to prevent the taxes accumulating to the extent that the security of the property becomes inadequate. The likelihood of this situation being reached in two years would not, however, appear very great. After two years, the penalty bill is \$135, outside of the actual taxes owing, almost the cost of another year's taxes on the coast. The result of this policy has been to force many licenses to revert to the crown, and has contributed in no small measure to the continued drop in the number of these licenses in the last quarter of a century. While much of this timber land may have been wildly staked in the early nineteenth hundreds, the penalizing effect of this delinquency policy seems rather harsh.<sup>5</sup>

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5. In 1937 the repeal of section 44 of the "Forest Act" reinstated many licenses long in arrears, but this privilege was withdrawn after running for only a few months.

Table No. 10

Cost of Carrying Rents in Canada.

Jurisdiction	Rent	10 yrs.	20 yrs.	30 Yrs.
Quebec	3.00	34	81	143
Ontario				
Dom. lands outside of B. C.	5.00	57	134	238
New Brunswick	8.00	92	215	381
Pulp license - interior (B. C.)	50.00	573	1344	2380
Pulp license - coast (B. C.)	70.00	803	1882	3332
B. C. - Interior	100.00	1147	2688	4760
Dom. lands in B.C.	128.00	1468	3441	6093
B. C. - coast	140.00	1606	3763	6664

Source: The above values were derived from the following formula:-

$$S = \frac{a(1.0p^n - 1)}{(1.0p - 1)}$$

where "a" the annual rental payment, "n" the number of years, and "p" the per cent (interest) at which the rental is to be compounded.

40 yrs	50 yrs	60 yrs.	70 yrs.	80 yrs.	90 yrs.	100 Yrs.
226	339	489	692	990	1331	1823
377	564	816	1154	1649	2218	3039
603	903	1305	1846	2639	3549	4862
3771	5641	8156	11,536	16,492	22,180	30,386
5280	7898	11,419	16,150	23,088	31,052	42,541
7543	11,283	16,313	23,072	32,983	44,360	60,773
9655	14,442	20,881	29,532	42,218	56,781	77,789
10,560	15,796	22,838	32,301	46,176	62,104	85,082

## Chapter VI

### The Forest Yield Tax in British Columbia

#### A. Theory and forms of the tax.

As a result of the inherent inequalities of the property tax as applied to forests, some new type of tax was widely desired by forest owners. The main theoretical objection to the property tax is that the tax has often to be paid before the receipt of any income from the property. Accordingly, the idea of a forest tax based on income rather than property finds considerable support among forest owners. Having proceeded this far, the next question is whether the base should be gross or net income. The former possesses two outstanding advantages. Firstly, it insures a more regular taxable income for the government, and secondly, it is much easier to ascertain than the rather will o' wisp figure of real net income. In most jurisdictions where it has been adopted, this tax has been restricted in its application to the stumpage value of the trees and the forest products, at the time of their cutting. As such, the forest yield tax is a type of severance tax. Its most important asset is the fact that it exacts nothing until after the receipt of income.

The essential characteristic of this plan is the use of a ~~net~~ income basis in place of a property basis. Its adoption can be in either the pure form or a modified form. In the pure form both the land and the timber are utilized in the computation of the tax. On the other hand, in the modified form only the timber is taken into account and the land



is left still subject to an annual tax. In this situation the yield tax applies to the actual cut of timber and other forest products. This very tax under the name of "royalty" is the type of yield tax in operation in British Columbia.

A pure yield tax although it might at first appear the more logical and simple of the two is on the whole less advantageous than the modified form. Forest lands have other uses than the felling of the timber on them, such as grazing and animal and fish preserves. Again, they may be used for their timber whilst the land is being held as a speculation for increased value in the future either for agricultural or residential purposes. The extra value the forest gains from these present or future uses is not taxable under a pure yield tax system. But by partially keeping a tax on the land (either the property tax or rental as in British Columbia) this is taken care of. Under the modified form of yield tax, a definite source of revenue is also assured from some type of land tax.

This brings us right up against the first obstacle in the way of a yield tax system, the danger of irregular revenue. Any tax on income will tend to vary with changing business conditions. This has not been a deterrent to its operation in British Columbia for two reasons. Firstly, the proportion of old-growth timber being cut is quite high. Where the forests are mostly young growth and the cut is consequently small this tax runs into difficulties from a fiscal point of view. Secondly, the tax is levied provincially and

not by each separate municipality or city as in parts of the United States of America. This means that the heavy cut of one district will help to balance up the small cut of another district. The importance of this fact can be seen from the composition of the royalty figures for 1938.<sup>1</sup>

Table No. 11

District	Forest Area	Royalties
Vancouver	6,539,700 Ac.	\$1,216,787.01
Prince Rupert	8,490,200 Ac.	99,559.55
Fort George	14,867,900 Ac.	55,503.01
Kamloops	4,542,400 Ac.	81,372.67
Nelson	6,042,000 Ac.	95,365.39

On the assumption that each of these forest districts were a separate county unit running its own finances, a yield tax would not be practical for Prince Rupert, Fort George, Kamloops or Nelson. They would be forced to employ a land tax to obtain sufficient revenue. But when these revenues are provincial these sectional differences lose their prominence.

The truth of this in British Columbia is evident from the continual growth in the importance of royalties as a forest revenue producer and in the forest tax structure. In no year have they been the cause of a shortage in expected

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1. Reports of the Forest Branch, 1938, and Mulholland "Forests of British Columbia."

forest tax revenue, but rather the opposite. The following table shows this very clearly.<sup>2</sup>

Table No. 12

Year	% of Total Forest Revenues	% of Total Forest Taxes.
1915	18.3	19.6
1920	25.1	29.9
1925	42.6	43.7
1930	42.5	51.2
1935	54.9	64.0
1936	55.9	65.9
1937	54.3	66.3
1938	50.3	63.1

Another obstacle is the destruction of the basis for comparing the tax burden on forest properties with other types of land investment. Timber owners tend to lose a protection against unequal tax treatment in comparison with that under a uniform property tax on all types of land. This reason has done much to prevent its more widespread adoption in the United States.

Finally, there is the problem of its administration. The percentage tax has to be calculated on some measure of the

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2. The percentages in the first column were calculated from the figures for each tax and the total Forest Revenue given in the Reports of the Forest Branch for the respective years. The second column was obtained by adding the totals for the royalties, rentals and the property tax, and then computing the per cent of the royalties from this total amount.

stumpage value, the determination of which would be by no means an easy matter. Even if it were based on the price of logs, these would vary from day to day in different localities, and, accordingly, make any computations somewhat complicated. On top of this there is the difficulty of determining the exact amount of the cut. British Columbia has got over this difficulty by adopting a flat rate per 1000 board feet cut. This together with the highly efficient method of government scaling practised in the province, gets over this obstacle. Yet it is certainly no panacea, the flat rate per 1000, as will be explained in a later section.

#### B. The operation of the tax.

The main schedule of royalties applies to timber cut on timber leases, timber licenses and timber sales. As with the ground tax, a separation is made between the regions east and west of the Cascade Mountains. In the former, the royalties are levied according to species only, but in the latter, the grade of each type of log is also taken into consideration. On the average, these royalty charges range from \$1.50 to \$0.60 per 1000 board feet cut. Besides this, there is a detailed schedule for poles, piling, hewn railway ties, mining props, fence-posts, cordwood, etc.

Crown grants are, however, on a different footing. Timber cut from land obtained in this manner prior to April 7, 1887, is free from any royalty, but is subject to a manufacturing tax, all of which, except 1 per cent, is re-

bated if the timber is manufactured within the province.<sup>3</sup>

This tax, although not a royalty, is always included in the royalty figures for each year. Crown grants bought from 1887 to 1914 pay a flat royalty of \$0.50 per 1000 board feet cut, regardless of species or grade. Any land granted subsequent to this date falls under the same regulations as the other tenures.

This preferred position with regard to royalties which the earlier crown grants possess is an awkward problem. Admittedly, the exemption prior to 1887 and the lower rate from 1887 to 1914 were provided for by statute at the time at which the tenure was granted, and were the conditions under which the land was purchased. But a special privilege once granted is surely revocable with changing times. The good fortune of prior position in the past cannot of itself vest a permanent priority for all time. If this were all that could be said, the situation would be relatively easy. The difficulty, however, lies in the fact that the original owner has in many cases sold the land, and the subsequent purchaser has paid for the value of the privilege in the sale price. Despite this fact, the levelling of these rates with those in effect on other tenures would seem advisable. Before this could be achieved, the land tax on crown grants

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3. The tax is calculated according to grade at a fixed sum per 1000 board feet cut. Since it is nearly all (except 1 per cent) rebated if the timber is manufactured in the province, it is in reality an export tax on the raw product.

and the other tenures would have to be put on a uniform basis. All would have to be subject to a uniform property tax or ground tax as might be decided. Then the royalties could be placed on an equal basis.

Royalties have since their very inception gradually been raised. But this does not mean that the tax burden has been made more heavy, for with the continued increased value of stumpage, the government certainly had a right to share in this unearned increment. As one British Columbia Minister of Lands said when the royalty was about to be raised, "we are claiming a modest share in the rising value of Western stumpage."<sup>4</sup> Since 1925 no further rise in royalty has been legislated. The rates in effect at that date have lasted to the end of 1939.<sup>5</sup> As a measure of this rise in stumpage values up to 1925, reference to Graph No. 2 shows the average sale price of crown timber for each year. These figures, while not representing the real value, represent it proportionately.

#### C. The flat rate.

In the following analysis of the flat rate of royalties per 1000 board feet cut, two aims have been kept in view. The first aim is to attempt to ascertain how heavy this yield tax is in comparison to other yield taxes in

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4. Ross, William R: British Columbia Forest Policy. Speech delivered on February 10, 1913. p. 13.
  5. Actually in 1925 the royalty rates were only made to last until the end of 1938, but an amendment (Forest Act Amendment Act, 1938. 2 George VI. c. 18) later extended them to the end of 1939.



operation. And secondly, to see what effects the present tax has on lumbering in general.

The period chosen for study is that from 1925 to 1939, since the royalty rates remained stable throughout this time. In order to find out what percentage of the value these royalties took during each of these fifteen years, it was necessary to obtain some standard by which to measure the value for that year. This was done by procuring average log prices for the main species and their different grades through the courtesy of the British Columbia Loggers Association.<sup>6</sup> It must be clearly understood from the start that in using these figures this analysis is subject to a certain margin of error, since they do not include every independent producer in the province. But whilst they do not represent a majority of the producers, due to the large number of small independent men outside the organization, they do represent the majority of the production, which is the important thing for this study. This, therefore, is the best data obtainable under the circumstances.

The next question was the area to be selected. After consideration, the coast region appeared much more suitable than the interior, since so great a percentage of the total cut comes from this section. This fact is distinctly demon-

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6. These included averages for Douglas Fir, grades 1, 2 and 3; Cedar grades 1, 2 and 3, Hemlock and a general average for all species.

strated in Graph No. 5, which separates the cut according to the two regions in per cents. Consequently, only coast royalties are employed in this study. The grand total result should, on the whole, represent the province under all these conditions just outlined.

Now, the first necessity was the average log prices.<sup>7</sup> Then, taking royalty for each species and grade for which there was an average log price, it was possible to compute the per cent of the royalty, or, in other words, the per cent the royalty confiscated. This was done as follows:

$$\frac{\text{Royalty on a specific species and grade}}{\text{Average log price of that species and grade}} \times 100 = \text{rate of tax.}$$

The results of this process for the fifteen years, 1925 to 1939 are shown in the Table No. 13.

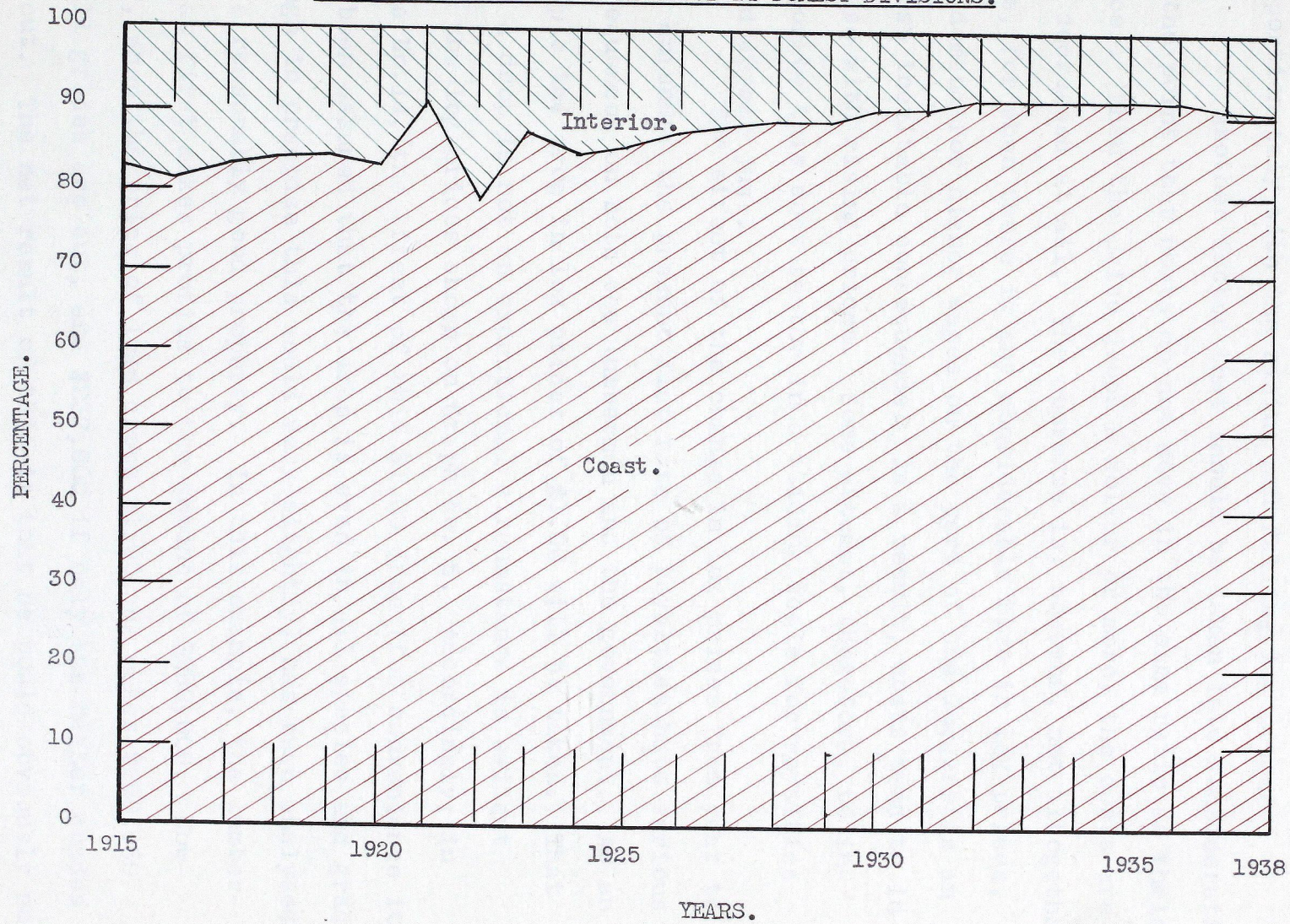
The first conclusion to be gained from an inspection of this table is that the percentage rate is obviously not even, but varies from year to year. And by comparison with the average log prices on Graph No. 6, it can be seen that the rate is at its highest level when log prices are at their lowest. This means that the tax increases when the lumbering business is bad and decreases when prosperity returns. The difference, too, is by no means small. As an example, let us take Grade 1 Cedar. In 1929, the rate was 5.3 per cent, but by 1934, it was nearly double this figure at 10.1 per cent. Numerous other examples could be cited to show this same effect.

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7. See Graph No. 6.



PERCENTAGE OF TOTAL TIMBER CUT BY FOREST DIVISIONS.





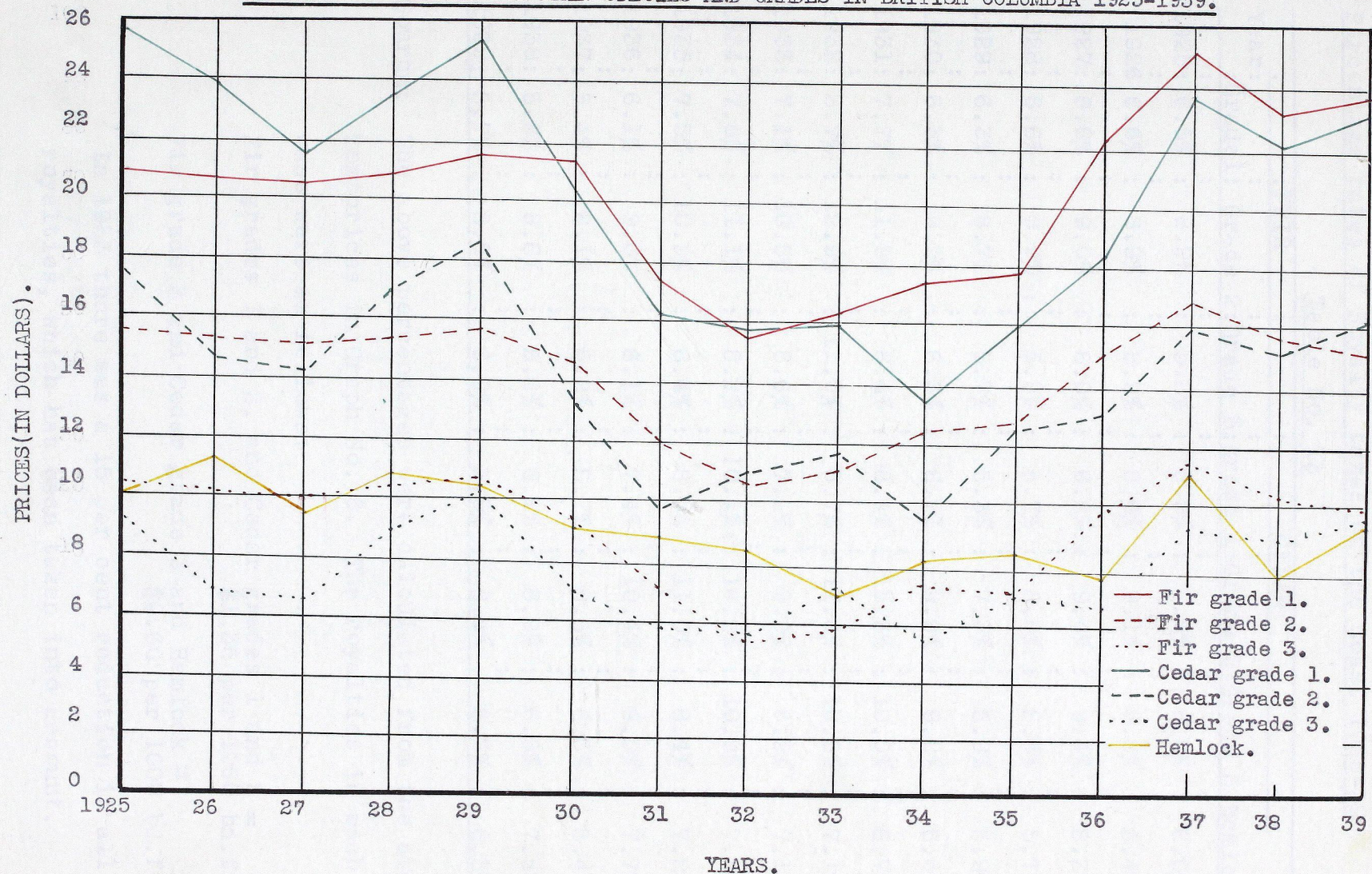
The solution to this problem of keeping the rate even lies in the adoption of some form of sliding scale, which will vary proportionately with the rising and falling log prices.

Another factor that should be taken into consideration is the point that costs do not move in the same ratio as the log prices. When the price drops a dollar or more, the costs are not decreased at all. The converse is, however, not altogether true, for when there is any considerable rise in log prices, the demand for higher wages on the part of the loggers is an almost inevitable consequence. As a result, costs tend to increase with rising prices. Some attempt, therefore, to incorporate this cost factor in a sliding scale for royalties would appear just.

The effect of the change in log prices from year to year can under the present flat rate of royalties have serious consequences on both the lumberman and the government. As an example the drop in log prices of \$1.00 will be taken. That such a drop is not an exceptional circumstance is evident from the log prices shown on Graph No. 6. Accordingly, in Table No. 14, the effect of this \$1.00 drop (for convenience it has been assumed that the drop is even in all species and grades, though in practice this would vary slightly) has been analysed for a reasonably good property. In this example, the lumberman at first makes profits to the amount of \$280,000. However, when the price of logs drops \$1.00, he makes \$230,850 if all grades are cut, and \$237,600 if only the higher grades are cut. The net result of this is that he would obviously not



AVERAGE LOG PRICES FOR MAIN SPECIES AND GRADES IN BRITISH COLUMBIA 1925-1939.



GRAPH NO. 6.



Percentage rates of Royalty taxes on the Coast 1925-39

Table No. 13

Year:	FFIR			CEDAR			
	Grade 1	Grade 2	Grade 3	Grade 1	Grade 2	Grade 3	Hemlock
1925:	6.5%	8.9%	5.8%	5.2%	7.8%	6.6%	6.0%
1926:	6.6%	8.9%	5.9%	5.6%	9.1%	8.8%	5.4%
1927:	6.6%	9.0%	6.0%	6.2%	9.4%	9.4%	6.3%
1928:	6.6%	8.9%	5.9%	5.7%	8.0%	6.8%	5.7%
1929:	6.3%	8.7%	5.7%	5.3%	7.3%	5.9%	5.9%
1930:	6.3%	9.2%	6.3%	6.7%	9.9%	9.2%	6.5%
1931:	7.7%	11.2%	8.4%	8.4%	15.3%	10.0%	6.7%
1932:	8.7%	12.9%	11.0%	8.7%	12.8%	10.8%	7.1%
1933:	7.1%	10.5%	8.6%	7.2%	9.9%	6.9%	7.1%
1934:	7.8%	11.1%	8.2%	10.1%	14.2%	10.9%	7.3%
1935:	7.5%	10.9%	8.4%	8.5%	11.0%	8.4%	7.2%
1936:	6.1%	9.0%	6.1%	7.4%	10.4%	9.0%	7.7%
1937:	5.4%	8.1%	5.2%	5.7%	8.5%	6.5%	5.4%
1938:	5.8%	8.6%	5.8%	6.1%	8.9%	6.6%	7.5%
1939:	5.7%	8.8%	6.0%	5.8%	8.4%	6.2%	6.3%

Source: The above percentages were calculated from the average log prices in Graph No. 6. The royalties in each case were as follows:

Fir grades 1 and 2, and Cedar grades 1 and 2 =  
\$1.35 per 1000 bd.ft.cut

Fir grade 3 and Cedar grade 3 and Hemlock =  
\$0.60 per 1000 bd.ft.cut

In 1933 there was a 15 per cent reduction in all royalties, which has been taken into account.



bother to take out the lower grades. The loss to the logger in the above example is not very great, but in poorer grade properties becomes a much more important factor. This is after all only one half the damage done. Now, let us consider how the government fared from a taxation point of view. At the beginning, when all grades were logged they would collect royalties as follows:

Fir Grade 1	-	15,000	at \$1.35 per M	\$20,250
Fir Grade 2	-	10,000	at 1.35 per M	13,500
Fir Grade 3	-	4,000	at 0.60 per M	2,400
Cedar Grade 1	-	8,000	at 1.35 per M	10,800
Cedar Grade 2	-	5,000	at 1.35 per M.	6,750
Cedar Grade 3	-	3,000	at 0.60 per M	1,800
Hemlock	-	5,000	at 0.60 per M	<u>3,000</u>
TOTAL				<u>\$58,500</u>

But when the prices dropped \$1.00 they would lose the royalty on grade 3 Fir and Cedar and Hemlock. This amounts to \$7,200 or about 12½ per cent of the total royalty bill if all ~~grades~~ had been cut. Such a loss is of no <sup>small</sup> importance and could be overcome by some form of sliding scale, especially on the lower grades which are marginal. The adjusted tax would naturally decline in depression years, but this would be in conformity with any income tax; and, furthermore, the land taxes (property tax and rental) would remain fairly constant, thereby insuring the government of a certain ~~portion~~ of its regular revenue, while at the same time, exacting the same burden from the lumberman's yield as in normal times.

Table No. 14

The Effects of a \$1.00 drop in log prices

Species	Grade	Amount of Timber M.b.f.	Royalty per M.b.f.	Total Costs per M.
Fir	1	15,000	\$1.35	\$10.85
Fir	2	10,000	1.35	10.55
Fir	3	4,000	0.60	9.80
Cedar	1	8,000	1.35	10.55
Cedar	2	5,000	1.35	10.35
Cedar	3	3,000	0.60	9.60
Hemlock	-	5,000	0.60	9.25

The total costs are estimated and include the following:

1. Royalty.
2. Average logging cost of \$8.
3. Approximate purchase price of timber for an assumed year.

The log prices are approximated according to ratio of these prices from Graph No. 6 for an assumed year.

: Net stump-:Total : \$1.00 drop in log prices						
Price of	:age per M.	:Profit	:Net Stumpage:	Profit on	:Loss on	
Logs per M:	:	:	: per M.	:upper grades:	:Lower grades	
\$20.00	: \$9.15	: \$137,250:	\$8.15	: \$122,250	: \$---	
15.00	: 4.45	: 44,500:	3.45	: 34,500	: ---	
10.50	: 0.70	: 2,800:	- 0.30	: ---	: 1,200	
20.00	: 9.45	: 75,600:	8.45	: 67,600	: ---	
14.00	: 3.65	: 18,250:	2.65	: 13,250	: ---	
10.00	: 0.40	: 1,200:	- 0.60	: ---	: 1,800	
9.50	: 0.25	: 1,250:	- 0.75	: ---	: 3,750	
		\$280,850		\$237,600	\$6,750	
				6,750		

Net profit if lower grades are cut \$230,850  
 Net profit if lower grades are not cut \$237,600

Finally, we come to the question of determining how heavy the tax is. Referring again to table No. 13, the heaviest burden appears to be on the second grades. These are taxed at the same flat rates as the first grades, although they sell a few dollars per 1000 board feet cheaper in each case. Some adjustment here might well be in order.

But if British Columbia's flat rate royalty possesses certain inequalities and has some bad effects in its operation as have just been explained, it admits of one important assuaging characteristic--it is not a high tax. On the average, the effective rate ranges from 6 to 9 per cent. This does not, of course, include the worst years of the depression or yet the most prosperous times. The truth of this statement can best be seen when we compare the British Columbia rate to the percentage rates that are in existence in fourteen of the states south of the border. In the following table these are given.<sup>8</sup>

Table No. 15.

State	Yield Tax Rate
Alabama	10 per cent
Connecticut	2 - 10 per cent
Idaho	12½ per cent
Louisiana	6 " "
Massachusetts	6 " "
Michigan	10 " "

8. Fairchild, F. R. "Forest Taxation in the United States." pp. 396 - 401.

State	Yield Tax Rate
Minnesota	10 per cent
New York	6 per cent
Ohio	5 " "
Oregon	12½ " "
Pennsylvania	10 " "
Vermont	7 - 10 per cent
Washington	12½ per cent
Wisconsin	10 " "

The provincial royalty rate is certainly, therefore, not a very high or confiscating rate.

## Chapter VII

### The Protection Tax.

The forest protection tax levied in British Columbia on the owners of all types of timber tenures, is a flat tax of so many cents per acre. It is not included as an item in the Forest Revenues, and really cannot correctly be deemed revenue, since the tax funds thus collected are reserved solely for the use of forest protection. Together with a sum contributed annually by the government, they are placed in the Forest Protection Fund as established in 1912.<sup>1</sup>

Just taking into consideration the rate, the present forest protection tax is abnormally high. When it was first levied in 1912, the rate was 1 cent per acre. Since that time the rate has gradually increased until to-day, it has reached the amount of 6 cents per acre, six times the original rate. In comparison to similar taxes imposed by other authorities in Canada, this is very steep. Ontario has a rate of \$6.40 per square mile which is equivalent to 1 cent per acre; New Brunswick charges  $\frac{1}{2}$  cent on each acre of timber land; Nova Scotia has a sliding scale which averages about  $2\frac{1}{2}$  cents per acre, and the Dominion levy is a tax equivalent to half the cost of protection.

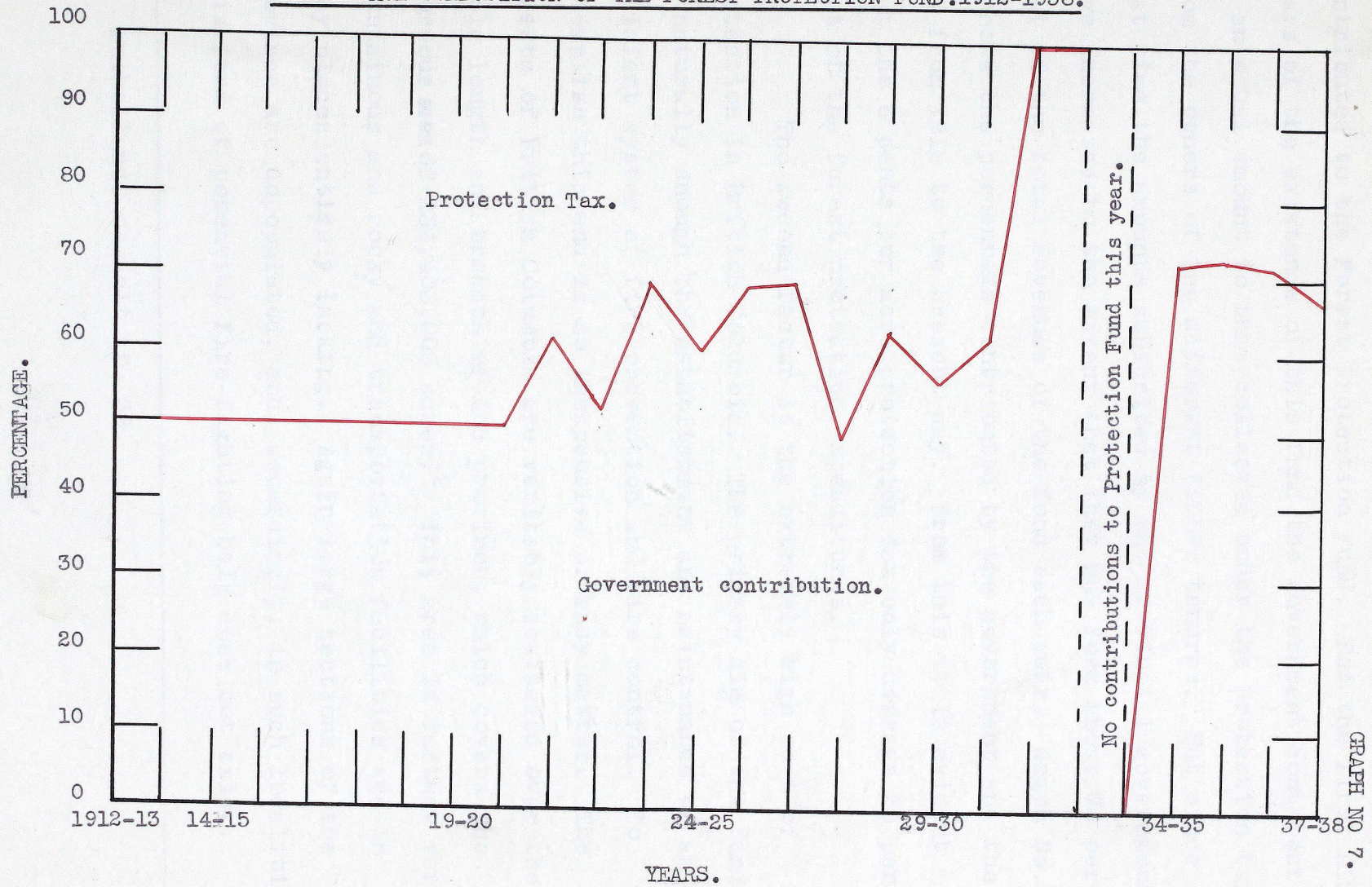
There are two factors, however, that tend to offset this disparity. The first of these is the increasing percentage of each year's protection funds which the government has

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1. Forest Act, 1912. 2 George V. c. 17.



PERCENTAGE COMPOSITION OF THE FOREST PROTECTION FUND.1912-1938.





contributed to the Forest Protection Fund. For the first nine years of the existence of this fund the government contributed an equal amount to that collected under the protection tax from the owners of the different timber tenures. But since that time the amounts subscribed by the provincial government have increased to the extent that they now form about 70 per cent of the total revenues of the fund each year. Graph No. 7 shows the percentage contributed by the government and the tax from 1912 to the present day. From this it is evident that the 6 cents per acre protection tax only defrays 30 per cent of the forest protection expenditures.

The second factor is the extremely high cost of protection in British Columbia. The primary aim of the fund is naturally enough the establishment and maintenance of an efficient system of fire prevention and fire control. To accomplish this end is no inexpensive or easy matter. The forests of British Columbia are veritably scattered over the whole length and breadth of the province, which covers the enormous area of 234,403,000 acres.<sup>2</sup> This area is further very mountainous and rocky and transportation facilities are in many places entirely lacking. Again, large sections of the province are unpopulated, and, accordingly, in such localities this form of potential fire-fighting help does not exist.

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2. Mulholland. op. cit. P. 39.

Finally, the long coast line of some 7000 miles in length with its legion of inlets and small islands presents a real difficulty in fire-fighting and increases the costs due to the extensive patrols required.

An analysis of these forest protection expenditures will demonstrate the heavy costs incurred. According to the Forest Branch of the province there are three main lines of activity to be provided for by the Forest Protection Fund.<sup>3</sup>

- 1) Prevention. This includes the cost of upkeep of the tools and equipment; the making of trails, telephone lines, lookout posts; public education and any necessary improvements.
- 2) Organization. This item covers the salaries and expenses of the officials for both the permanent and temporary protection staff.
- 3) Suppression. In this category are included the actual costs of fire-fighting.

In the following table these funds are detailed in the manner prepared by the department.<sup>4</sup>

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3. Report of the Forest Branch, 1935. p z. 31.

4. Reports of the Forest Branch, 1915, 20, 25, 30, 35-38.

Table No. 16

Year	Patrols and Fire Pre- vention	Tools and Equipment included under improve- ments	Fire- Fighting:	Improve- ments	Totals
1914-15	\$228,352.00	\$	\$143,461.00	\$31,385.00	\$403,198.00
1919-20	198,172.35	\$	165,688.80	28,397.43	392,258.58
1924-25	344,532.39	25,418.54	258,033.66	5,689.64	633,674.23
1929-30	373,416.71	45,401.56	494,645.42	22,570.79	936,034.48
1934-35	207,533.05	15,600.52	127,380.39	3,847.73	354,361.69
1935-36	234,253.37	59,048.72	24,908.24	8,234.62	326,444.95
1936-37	255,175.73	20,348.26	130,493.44	10,333.44	416,350.87
1937-38	324,426.12	100,859.62	28,355.87	11,257.57	464,899.18

Fire-fighting is the most variable amount and has a very large share in the determination of the total forest protection expenditures. The damage done by these fires is tremendous. From an inspection of the next table, some idea of this can be gained.<sup>5</sup> It must, of course, be borne in mind that fire statistics are the least reliable of all forest information. Many fires are not seen by foresters, but are only reported to them. Moreover, the forest official has not sufficient time in the exercise of his duties to make a detailed assessment of the damage suffered, and in many cases, has not the training necessary, where he is of a very subordinate rank.

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5. Reports of the Forest Branch, 1915, 20, 25, 30, 35-38.

Table No. 17

Year	No. of Fires	Area Burned Ac.	Timber Burned M.b.f.	Timber: Salva- ble M .b.f.	Damage to Forest \$	Other Damage	Total Damage
1915	1031	244,189	187,250	43,030	108,873	\$57,774	\$166,647
1920	1251	389,846	229,253	49,575	485,183	473,900	959,863
1925	2521	1,023,789	1,024,508	350,770	2121,672	625,518	2,747,190
1930	2271	602,675	390,978	25,216	1,408,183	337,909	1,746,092
1935	1111	47,871	26,113	14,359	68,399	221,144	289,543
1936	1547	433,902	932,808	23,814	1,109,473	66,189	1,175,662
1937	1193	54,843	13,263	565	36,384	119,380	155,764
1938	2412	711,818	1,047,541	400,527	1,555,849	675,166	2,231,015

A factor that cannot successfully be represented in the above table is the damage done to young stands. Disregarding the exceptional case where the fire clears land for agricultural purposes, the loss in potential value for the future is very great. For example, take a stand that in 100 years will contain 30,000 board feet to the acre. The average annual growth in such a case would be 300 board feet to the acre. If the present sale price in that region averages \$1.25 per 1000 board feet, and the royalty averages \$1.00 per board feet cut, then assuming the prices stay at this level for some time to come, a young stand would in 50 years time be worth in revenue

$$\frac{2.25 \times 300}{1000} \times 50 = \$33.75 \text{ per acre}$$

All this future potential revenue value is lost to the government. And this loss is quite heavy, indeed.

A tax to meet all these protection expenditures would seem essential, and the protection tax helps to serve this purpose. But there is another element that is worthy of consideration. Each year it is always found necessary to spend quite a considerable amount for the protection of ordinary private property. A fire that starts on a non-forested section of land has to be extinguished just as much as one that starts on timber land. Yet such owners do not share in the support of the costs of forest protection. Whether this situation would be made more equitable by some contribution from these lands is hard to say. It depends, really, on two things; firstly, whether protection is a real cost of <sup>the</sup> industry, and secondly, whether the tax is not in a way like the workmen's compensation levies, and the government's contribution then covers private property.



Chapter VIII

Conclusions

Equitable taxation is all that the forests should and can expect. Since, however, most sections of timber land yield only periodic returns, the bulk of the tax should be levied at the time the timber is cut, so that it coincides with the receipt of income. Under such a policy, the idea of treating the forest as a crop rather than a wasting asset like mining, will gain strength. And if our forests are to remain the permanent heritage of the race, the adoption of this ~~is~~ aim is essential. Notwithstanding this fact a certain percentage of the tax must be levied annually in order to insure the government a regular income and not make it dependent upon the will of the lumberman as to when he wishes to cut his timber. If our forests ever reach a point of complete annual sustained yield, where a year's cut can be harvested in ~~steady~~ succession, then the annual tax could be withdrawn. But until such a time comes to pass it will have to remain part of the forest tax system, a system which will be a combination of an annual tax on the land and a yield tax on the timber severed.

Of the three taxes levied for revenue purposes in British Columbia (the property tax, the rental, and the royalty) not one descends to the nadir of unfairness, or yet, at the same time, reaches the zenith of equitableness. In the case of the property tax, despite the best of administration, <sup>and</sup> the study of assessment ratios for selected districts in this province tend to show that this important part of the admini-

stration is fairly operated; it possesses certain inherent elements of injustice. The tendency of the tax is always in the direction of favouring quick cutting, and is most burdensome on deferred yield forests. An alleviating factor was provided by the cutting of the rate in half in 1926, but the injustices as between one type of property and another, though less marked, still remain.

The other land tax, the rental, has the great disadvantage of being a flat rate, and is bound therefore to exact varying burdens on different properties. Of the two main rates in existence, if anything, the coast rate appears to be low, or the interior rate too high. Some equalization between each rate, either by raising the former or lowering the latter, would seem advisable. Compared to other rates operative throughout Canada, British Columbia's main rate (the coast rate) is not high. It has, however, a much heavier incidence on timber licenses, so many of which are less than one square mile in extent, than it has on timber sales and timber leases. Such licenses also are at a disadvantage in availing themselves of tax reduction for cut-over land. The tax delinquency rules also hit them harder than a timber sale, and the high charge in the second year, followed by confiscation and loss of the license can only be justified on punitive grounds, or to stop the charges from accumulating till the security is no longer adequate. Finally, the cost of carrying this ground tax is, as in the case of the property tax, much more burdensome on the deferred yield forest and the annual sustained yield

than it is on a depletion yield property.

With the royalty we come to the fairest of the forest taxes, one which is only levied when there is income to meet it. The rate at present in operation in British Columbia is certainly not high, and the tax is very efficiently administered. The only fault is that the rate again is a flat rate rather than a percentage rate, and, as a result, has a varying effective percentage rate each year dependent on the market price of logs. Unfortunately, the worst effect of this flat rate is seen in the depression, when it can least be afforded. This inequality could be nicely overcome by some form of sliding scale for the royalty charges, which would be sensitive to the price of logs. Such a scheme would not only be more fair to the lumberman, but more advantageous to the government in that it would insure the collection of royalties from the low grades, that otherwise might not be cut.

The prime need is some form of uniformity as between the taxes and their rates on the different types of tenures. Some class of annual land tax based on the value of the land and the type of forest investment concerned, that applied to all tenures in place of the two land taxes now in use would be the first step. Then all royalties could be placed on an equal footing, and all special privileges with regards to royalties that have been extended to early crown grants, abrogated. Only when this comes about will it be possible to make certain that there is, in respect to taxes paid, an equality of sacrifice by each type of timber land status.

In conclusion, there is the question of the protection tax. The present rate is very high, but is necessary for the costly work of fire protection, and even at that provides less than a third of the expenses required each year. Where a possible injustice rests is in the fact that many non-forest properties receive this protection without making any contribution towards its upkeep. The equity of this situation depends largely on whether or not the government contribution covers this.

As a whole, the forest taxation system in British Columbia is not a tyrannical Draconian code. Inequalities exist, but that is to be expected. For the future all effort must be concentrated in reforming these inequalities, "mutatis mutandis."

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PROVINCE OF BRITISH COLUMBIA.	FOREST BRANCH.	DEPARTMENT OF LANDS.
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# TIMBER SALE CONTRACT X.....

*Forest District*.....

Description of Timber—1.

**This Indenture**, made the..... day of....., A.D. 19....., between His Majesty the King (herein represented and acting by....., Deputy Minister of Lands for the Province of British Columbia), who, with his successors in office, is hereinafter called "the Licensor," of the one part, and....., who together with..... executors, administrators, and successors, is hereinafter called "the Licensee," of the other part.

WITNESSETH that, in consideration of the payments and stipulations to be made and observed by and on the part of the Licensee and of the Licensee's offer to purchase made under and subject to the provisions of the "Forest Act," the Licensor doth hereby grant unto the Licensee, subject to the provisions of the said Act, and for the term and subject to the reservations and conditions hereinafter provided, a licence to cut and remove all the dead timber standing or down, and all the live timber designated for cutting by a Forest Officer, merchantable as hereinafter defined, upon an area which is agreed to comprise (*see particulars*) acres, situated and described as follows, and shown upon the map annexed and thereon coloured red: (*see particulars*), from the date hereof, for the term of (*see particulars*) years thence ensuing.

Payments—2.

In consideration whereof the Licensee hereby covenants, promises, and agrees with the Licensor as follows: The Licensee shall pay to the said Licensor the several sums at the times and in the manner following, namely:—

- (a.) A stumpage price for the timber at the following rates, payable immediately upon receipt of account: (As bid.)
- (b.) An annual rental, based on (*see particulars*) acres, at the rate of..... per acre, amounting to \$ (*see particulars*); further payments to be made annually in advance on the..... day of..... in each year hereafter during the continuance of the licence hereby granted: Provided that such annual rental is to be reduced in each year by the omission from its computation of six hundred and forty acres or any multiple thereof as provided in the "Forest Act."
- (c.) All forest-protection dues as provided in the "Forest Act" and amendments, payable annually in advance on the..... day of..... in each year during the life of this contract.
- (d.) The cost of cruising and advertising incident to this contract, being the sum of \$ (*see particulars*).
- (e.) Royalties as provided in the "Forest Act" and amendments, payable immediately upon receipt of account.
- (f.) The cost of scaling, payable immediately upon receipt of account.

Conditions—3.

And the Lessee further covenants, promises, and agrees to cut and remove said timber in strict accordance with the following conditions and with all regulations and provisions governing timber sales in the "Forest Act" and amendments:—

- (a.) No timber will be removed from the sale area until it has been conspicuously marked with the following registered mark issued for this timber sale: (*See particulars*.)
- (b.) Stumps will be cut so as to cause the least practicable wast, and will not be cut higher than the diameter of the tree at the point where it is cut, and in no case higher than (*see particulars*) inches on the side adjacent to the highest ground, except in unusual cases in the discretion of the officer of the Forest Branch in charge. All trees will be utilized to as low a diameter in the tops as practicable, so as to cause the least waste, and to the minimum diameter of (*see particulars*) inches when merchantable in the judgment of the officer of the Forest Branch in charge. Log lengths will be varied so as to provide for the complete utilization of merchantable timber.
- (c.) Any (*see particulars*) tree which, in the judgment of the Forest Officer, contains a net total scale of (*see particulars*) per cent. or more of the total volume of the tree suitable for the manufacture of (*see particulars*) shall be considered merchantable under the terms of this contract, and may be designated for cutting by the Forest Officer.
- (d.) All trees, designated as hereinafter defined, shall be cut: (*See particulars*.)
- (e.) No unnecessary damage will be done to young growth or to trees left standing. So far as practicable, trees will be felled uphill, and no trees will be left lodged in the process of felling. If trees designated to be left standing are badly damaged through carelessness during the process of logging, or are cut, they will be paid for at the rate of \$..... per tree.
- (f.) When operations are begun on any natural logging area the cutting on that area shall be fully completed to the satisfaction of the Forest Officer in charge before cutting may begin on other areas, unless such cutting is authorized in writing with the requirement that cutting shall be completed on the area left unfinished as soon as practicable.
- (g.) As far as practicable, all branches of the logging operation shall keep pace with one another, and in no instance shall brush-disposal be allowed to fall behind cutting, except with the written consent of the Forest Officer in charge.
- (h.) Unless other arrangements are made in writing with the District Forester at (*see particulars*), all timber will be scaled before removal from the sale area in accordance with the provisions of the "Forest Act" and amendments, and in no case will any timber be manufactured or sold until it has been properly scaled as provided in the "Forest Act" and amendments.
- (i.) Trees designated for cutting in clause (d) which are left uncut, timber wasted in tops and stumps, trees left lodged in process of felling, and any merchantable timber which is cut and not removed from any portion of the cutting area after logging on that portion of the cutting area is completed shall be scaled, measured, or counted as hereinbefore provided, and paid for as follows: (*See particulars*.)
- (j.) Brush will be disposed of as follows: (*See particulars*.)
- (k.) Provisions for fire-protection: As provided in the "Forest Act."
- (l.) Other clauses: (*See particulars*.)

[OVER.

Provided that, upon the expiration of the said term, all rights of the Licensee hereunder shall absolutely terminate, and any and all timber then cut from and lying on the said lands shall be and become the absolute property of the Licensor: Provided that the Minister of Lands may for good cause extend the said term, which he may do for a period not exceeding one year, when the stumpage may be increased to such a rate as the said Minister may decide.

Provided further that, unless such amounts are reduced in writing by the Minister, at least \_\_\_\_\_ shall be  
(Feet B.M., cords, etc.)  
cut prior to \_\_\_\_\_; at least \_\_\_\_\_ shall be cut prior to \_\_\_\_\_;  
(Date.) (Feet B.M., cords, etc.) (Date.)  
at least \_\_\_\_\_ shall be cut prior to \_\_\_\_\_  
(Feet B.M., cords, etc.) (Date.)

The Licensee agrees that the sum of \$ \_\_\_\_\_ which accompanied tender for timber covered by this contract, shall be held until the completion of the contract; and provided that the contract has been faithfully carried out to the satisfaction of the Licensor will be refunded; otherwise this amount will be subject to such deductions as the Licensor may find necessary in order to carry out the full intent and provisions of this contract; or otherwise will be forfeited.

Except as may otherwise be provided by any Statute or Order in Council that may from time to time be in force, all timber cut under this contract shall be used in this Province, or be manufactured in this Province into boards, lath, shingles, or other sawn lumber, to such an extent to be of use in the trades without further manufacturing, except in the case of piles, telegraph and telephone poles, ties, and crib timber, which may be exported under an Order in Council.

The Licensee covenants with the Licensor:—

- (a.) That he will not assign or transfer the licence hereby granted or any interest therein without the written consent of the Licensor first had and obtained:
- (b.) That no person of the Chinese or Japanese race shall be employed in or upon the cutting or removal of any timber under the terms of this licence, subject, however, to the rights of any such person under any treaty having the force of law in Canada:
- (c.) That in carrying out his operations under this licence he will in no way block, obstruct, or damage any road, trail, or other property, and any obstruction caused or damage done by him will be removed and repaired forthwith by the Licensee at his own expense.

The decision of the Minister of Lands will be final in the interpretation of any of the terms and conditions of this contract.

The Forest Officer in charge, by giving notice to that effect in writing to the Licensee, or to the person in charge of logging operations upon the area, may suspend any logging operation conducted upon this area, should violation of any of the terms, covenants, provisoes, or conditions of this contract have occurred; and such violations shall render this contract liable to cancellation by the Minister of Lands.

Provided further that the interest, rights, and privileges of the Licensee in the said hereditaments, tenements, and premises shall be construed as subject always to all the provisions of the "Forest Act" and amendments thereof.

In witness whereof the parties hereto have hereunto set their hands and seals the day and year first above written.

Signed, sealed, and delivered by the }  
Licensor in the presence of— }

SEAL.

Signed, sealed, and delivered by the }  
Licensee in the presence of— }

SEAL.

(Licensee or Purchaser.)

NOTE.—If contracting party is a copartnership, the instrument should be signed and sealed by each member of the partnership. If contracting party is a corporation, the corporate seal should be affixed by the officials who are authorized to execute deeds on behalf of the corporation and be accompanied by the signature of these officials.



## Bibliography

### Books

Fagan, E.D. and Macy, C.W. (Ed.): Public Finance; selected readings. (New York, Longmans, Green, 1934).

Roth, Filbert: Forest Valuation (Ann Arbor, privately published, 1916)

The Taxation of Forests - Papers and Discussion at a Forest Conference in White Mountains, July 12th, 1912. (Concord, Society for the Protection of New Hampshire Forests, 1912.).

### Government Publications

Fairchild, F.R.: Forest Taxation in the United States. (Washington, U. S. Department of Agriculture, Miscellaneous Publication No. 218, 1935).

Final Report of the Royal Commission of Inquiry on Timber and Forestry, 1909-1910. (Victoria, King's Printer, 1910.).

Lawler, James: Historical Sketch of Canada's Timber Industry. (Ottawa, Department of the Interior, Forestry Branch, Circular No. 15.).

Mulholland, F.D.: The Forest Resources of British Columbia (Victoria, King's Printer, 1937.).

Public Accounts of the province of British Columbia, 1900-1938.

Reports of the Forest Branch, Department of Lands, 1912-1938.

Reports of the Board of Taxation. (Victoria, King's Printer, 1919.)

Ross, Hon. William R.: British Columbia Forest Policy - speech of 10th February, 1913.

Synopsis of Report and Full Report of Royal Commission on Taxation, 1911. (Victoria, King's Printer, 1912.)

Statutes of the province of British Columbia, 1871 - 1938.

Whitford, H. N. and Craig, R.L.: Forests of British Columbia. (Ottawa, Commission of Conservation publication, 1918.)

## Articles

- Allen, E.T.: "Forest Preservation and its relation to Taxation". Proceedings of the Canadian Tax Conference (Citizen's Research Institute of Canada) 1927, pp. 60 - 65.
- Barnes, O.F.: "Proposed System of Forestry Taxation," Proceedings of the National Tax Association. vol. xv. pp. 143 - 149.
- Bédard, A.: "Forest Preservation and its relation to Taxation, (Quebec)" Proceedings of the Canadian Tax Conference, (Citizen's Research Institute of Canada) 1927. pp. 57 - 59.
- Clark, J.F.: "Woodland Taxation." Canadian Forestry Journal, vol. 1, pp. 159 - 172
- Dickson, R.J.J.: "Timber Disposal Regulations in Canada in relation to Forest Management." The Forestry Chronicle. vol. x, pp. 31 - 42
- Dickson, R.J.J.: "Summary of Changes in Timber Disposal Regulations." The Forestry Chronicle. vol. vii - xv. (1931 - 39)
- Fairchild, F.R.: "Suggestions for a Practical Plan of Forest Taxation" Proceedings of the National Tax Association, vol. vi. pp. 371 - 393
- Fernow, Dean B.E.: "Forest Taxation and Conservation as practised in Canada." Proceedings of the National Tax Association. vol. 11, pp. 93 - 98
- Frost, J.E.: "Taxation and Reforestation." Proceedings of the National Tax Association. vol. xxi. pp. 359-6 4
- Howe, C.D.: "Forestry Preservation and its relation to Taxation (Ontario)" Proceedings of the Canadian Tax Conference. (Citizen's Research Institute of Canada.) 1927, pp. 54 - 57.