EVOLUTION OF THE FOREST TENURE SYSTEM
IN BRITISH COLUMBIA

by
Peter H. Pearse, C.M.

Vancouver, B.C.
February 1992
CONTENTS

Preface .............................................. i
Introduction ........................................ 1
Early Historical Context ............................ 2
Crown Grants ........................................ 4
Old Temporary Tenures ............................... 8
The Crisis of 1907 .................................... 13
Timber Sale Licences ................................ 15
The Transition to Sustained Yield After 1947 .... 17
Tree Farm Licences ................................... 19
Public Sustained Yield Units and The Quota System .... 24
  Timber Sale Harvesting Licences .......... 27
  Third Band Sales .................................. 29
  Closer Utilization Under Tree Farm Licences .......... 30
  The Shift to Volume Rights ...................... 31
Forest Licences .................................... 33
Other Forms of Timber Rights ...................... 37
Selected References ................................ 41

Appendix: History of Old Temporary Tenures ....... 43

TABLES AND FIGURES

Table 1: Distribution of forest land, allocated cutting rights and actual
  harvests among forms of tenure in 1990 ................. 35
Figure 1: Growth of Harvests on the Coast Under Various Forms of Tenure . 36
Figure 2: Growth of Harvests in the Interior Under Various Forms of Tenure . 36
This report traces the development of the pattern of rights to timber and forest land in British Columbia. These rights to forest resources, commonly referred to as the forest tenure system, have been the primary instruments of forest policy in the province.

The variety and complexity of the Crown grants, leases, licences and permits that have been issued over the years is bewildering to a casual observer. It represents, in large part, the accumulated responses of governments to needs and circumstances as they changed and evolved over more than a century. As it stands today, the tenure system is not easy to document and describe in summary fashion. It can be best understood in the context of the historical events that shaped it, and the evolution of provincial forest policy. Accordingly, I have chosen an historical approach in explaining the province's forest tenure system.

My purpose in this report is to provide as clear as possible a documentary of the important forms of forest tenure that have evolved in British Columbia. It emphasizes the broad purpose of the major types of forest rights, their character, and how they fit within the broad pattern of resource tenure. For each of the major forms, I outline when and how it was introduced, its purpose, its important features, the rights it conveys to holders and the obligations it imposes on them, and the special regulatory and administrative arrangements governing it.

It is not possible in a paper such as this to explain all the terms and conditions of forest tenures in exhaustive detail; that would require a separate report on each form of title and contractual right. Moreover, it is important to note that the author is not an authority on the law of property, nor even a lawyer. My qualifications are in the fields of economics and forestry, and my expertise in this subject is based on academic research aimed at attempting to unravel what successive governments were attempting to accomplish in designing and modifying policies relating to the allocation of forest resources.
Not all forms of tenure are dealt with in the following pages. Some minor types of rights, like the *Tan Bark Lease* and *Hand Logger's Licence*, were of some importance half a century ago, but they do not appear in the present tenure system nor have they had any apparent influence on the design of present forms, so I have omitted them. I also ignore a considerable variety of rights over forest lands that exist today but have no significant consequence for industrial forest operations, such as *Special Use Permits* which authorize occupation of Crown land. In an effort to avoid blurring the complicated mosaic of timber rights, the review is limited to the major forms used to convey rights to timber to the province's forest industry.

Until recently, surprisingly few attempts were made to document or analyze developments in forest tenure. Successive governments issued rights under broad legislative authority, and while the implications for economic development of the province were enormous, there was little attempt to record the rationale, circumstances and outside influences that shaped the rights and the way they were issued. The 1976 Royal Commission on Forest Resources, of which I was the sole Commissioner, attempted to fill this gap in the historical record. In the following pages I draw liberally from documents of which I was the author or co-author, without attribution or acknowledgement in each instance. These sources include the 1976 Royal Commission report, the background material it had prepared, and the reports of the Task Force on Crown Timber Disposal (of which I was Chairman) which preceded the Commission. These documents, and other sources, are listed in the *Selected References* at the end of this report.

P.H.P.
Vancouver
February, 1992
EVOLUTION OF THE FOREST TENURE SYSTEM
IN BRITISH COLUMBIA

by
Peter H. Pearse

INTRODUCTION

The current pattern of rights over timber and forest land in British Columbia, which we refer to collectively as the forest tenure system, reflects the forest policy of successive colonial and provincial governments. Indeed, the tenure arrangements used by the Crown for allocating timber to private parties have been the primary instruments of forest policy. The forms of tenure that have been developed through time, each with its own set of terms and conditions, have been the vehicles not only for allocating rights to land and timber, but also for regulating the rate of harvesting, standards of utilization, forest protection and silvicultural practices and a wide range of other resource management functions. They have also been a means of pursuing broader policies, such as moulding the rate and pattern of industrial development in the province, in governing the form and amount of public revenue from forest resources, and in determining how the economic benefits from forest use are divided among harvesters, manufacturers and governments. Thus, while the forest tenure system reflects past government policy, and therefore the economic, political and social circumstances which have influenced policy-makers, it has, in turn, had major impacts on the economic development of the province.

Forest policy has changed dramatically since the first timber rights were granted by the colonial government in what was to become the Province of British Columbia, and this evolution is traced in the forest tenures devised by successive governments. Many of the earliest alienations still exist, either because they were permanent Crown grants or because the temporary rights conveyed have been repeatedly renewed. Today, the tenure pattern is a collage of rights of varying
vintage which, because they were designed under different circumstances to serve different objectives, vary substantially in the rights they convey and obligations they exact.

The present pattern of rights to forest resources is thus a legacy of history, and it can be understood properly only in the context of the historical circumstances within which it was developed. Accordingly, this report begins, in the next section, with an historical overview of the events and circumstances that have shaped forest policy and the rights issued over forest resources in British Columbia during the last hundred years. Subsequent sections describe, in turn, the major forms of rights in the context of the historical circumstances in which they were introduced and modified up to the present.

**EARLY HISTORICAL CONTEXT**

A useful point of reference in the history of British Columbia is 1858, the year of the great Fraser River gold rush that overturned the established order and set the region on a new course of development. Until 1858, the Hudson's Bay Company dominated the administration of what is now western Canada, and administered it in the interests of the fur trade.

Almost two centuries earlier, in 1670, King Charles of England had granted the Hudson's Bay Company a trading monopoly over Rupert's Land – all the lands draining into Hudson's Bay. These drainages included, in addition to northern Quebec and Ontario, all the territory stretching westward to the summit of the Rocky Mountains. Subsequently, the British Crown had granted the Company a licence giving it an exclusive trading monopoly over Vancouver Island and the territory west of the Rocky Mountains, then known as New Caledonia. And finally, by a separate Royal Grant in 1849, the Company had acquired proprietary rights to Vancouver Island on condition that a colony be established and all civil and military costs be met from the sale of land, coal and timber.

At the height of the hectic Fraser River gold rush in 1858, the Company's licence on the mainland was revoked and the Crown Colony of (mainland) British Columbia established.
Vancouver Island reverted to the Crown the following year because the Company had failed to establish a colony.

Thus two Crown colonies were established, one on Vancouver Island and one on (mainland) British Columbia, and authority to dispose of land and resources fell to the two colonial governments. The British Governor of both colonies was James Douglas, who was also Chief Factor of the Hudson's Bay Company (Ormsby 1958). The two colonies were united into one Colony of British Columbia in 1866 and, five years later in 1871, it joined the Dominion of Canada as the Province of British Columbia.
CROWN GRANTS

Historical origin. During most of the pre-Confederation period the only means available to colonial administrators for conveying timber rights from the Crown to private parties was through Crown grants of the fee simple interest in land. Forest land, like other classes of Crown land, was sold for settlement and the fee simple interest was granted without restriction on the right to cut timber. Early land policy was simply an adjunct to more general frontier policies aimed at encouraging settlement and promoting economic development, and the Crown grant procedure was simple and consistent with the traditions of freehold ownership inherited from England. Timber conveyed under these grants was often of little interest to either the Crown or the grantee; indeed it was sometimes considered an obstacle to settlement and agricultural development. And even where the timber was valuable, until 1865 there was no other means for providing potential users with legal access to it.

However, very little land was alienated before confederation. Under the Hudson's Bay Company's administration, settlement had been discouraged on the mainland and the Company had made only desultory efforts to attract settlers to Vancouver Island. As a result, almost all of the land and timber resources in the infant Crown colonies still belonged to the Crown.

When the colony of British Columbia entered Confederation in 1871, the provincial Crown was vested with ownership of, and jurisdiction over, all lands in the new province which had not already been granted to private interests. During the couple of decades that followed, significant tracts of rich timberlands were alienated by the Crown, largely in aid of railway construction. The 1883-84 grant of 1.9 million acres on Vancouver Island in aid of the Esquimalt and Nanaimo Railway, containing some of the province's finest stands of virgin timber, is the dominant remaining example of these early grants, though its ownership has since been fragmented. A considerable number of other large blocks of public lands were alienated in connection with railway projects, but most of these reverted to the Crown with the failure of these enterprises. The "Railway Belt" grant of 14.5 million acres to the Dominion government made at the same time as
the Esquimalt and Nanaimo Railway transaction was intended to induce completion of the transcontinental railway through British Columbia, but it too was returned to the provincial Crown in 1930 after 50 years of federal control.

*Increasing restrictions.* During the colonial period and early years of provincial status, grants of forested land were not restricted, and they contained no limitations with regard to timber on the land. But, beginning in the 1880's, changes in Crown land policy gradually narrowed the scope for new grants of forested land. The most fundamental policy development was the progressive separation of rights to land from rights to timber, and increasing restriction on alienation of title to forest land. As early as 1884, restrictions on grants of timberland were specified in the Land Act, and grants of "patented lands" during 1887 and 1888 reserved to the Crown the timber itself. To log these lands commercially the owners were required to obtain another authorization: a Special Timber Licence (one of the forms of old temporary tenures described below). The policy of reserving the actual timber in the grant was short-lived, however, and in 1888 the policy was changed to include the timber with the grant, reserving to the Crown a financial interest in the harvest in the form of royalty.

An amendment to the Land Act in 1887 prohibited grants of land "chiefly valuable for timber" but, because of statutory ambiguities and administrative laxity, grants continued to be readily available until 1896. Amendments introduced that year more explicitly defined the timberland which was to be reserved from sale, thus tightly circumscribing the government's power to alienate timber by means of Crown grants. In 1947 restrictions on the sale of timberland were extended to include forest land, defined as land best suited for forest production, whether timbered or not.

A second development was the introduction of Crown charges on timber. On Crown grants granted after 1888, the Crown reserved royalties, payable when the timber was cut and scaled (i.e. measured). Sawtimber cut from lands granted between 1888 and 1914 attracted a royalty of 50¢
per thousand board feet under the Crown grant documents then in use, and through legislation this same levy was applied to "patented lands."

Grants made during subsequent years attracted various royalties depending on the policy in effect at the time of alienation and governments' royalty policies over the years. However, these fixed royalties were overtaken by inflation and, in the new Forest Act of 1978, all royalties that applied to private land were abolished.

A third important limitation on the timber rights acquired through Crown grants was enacted in 1906, in the form of the Timber Manufacture Act. Timber cut from lands granted from then onward was required to be manufactured in the province, unless a Ministerial exemption is obtained. This followed a similar restriction applied to Crown lands in 1901. These export restrictions have been an important feature of provincial forest policy ever since (see Pearse Report 1976 Ch. 22 and Appx. E).

Rights and obligations. A grant of land from the Crown confers the fee simple interest, entitling the landowner to exclusive possession and use of the land in perpetuity. It includes the right to cut and use any timber on the land unless special qualifications to the title provide otherwise.

As a general rule owners of Crown-granted forest lands may harvest their timber and manage their lands as they wish. However, since the late 1940s the government has encouraged them to adopt sustained yield management techniques, through two forms of incentives. First, amendments to the Taxation Act passed in 1951 gave preferential property tax treatment to owners who harvest and regenerate their lands according to approved sustained yield criteria. These properties became known as Taxation Tree Farms; in 1987 they were reclassified as Managed Forest Land under the Assessment Act (see also Regulation 341/86 and 349/87). Second, through the Tree Farm Licence system (see below) they have been offered harvesting rights over Crown land in return for committing their private holdings to sustained yield forestry in an integrated management unit. Some parcels of Crown-granted forest land on Vancouver
Island are subject to both forms of incentive, being Managed Forest Land included within Tree Farm Licences.

As the combination of more restrictive legislation and tighter enforcement gradually eliminated Crown-granting as a means of making timber available, the government introduced policies whereby rights to harvest timber could be conveyed while the Crown retained ownership of the land. Thus tenures conceived in the early decades embodied two related themes which would thereafter govern British Columbia forest policy: an increasing reluctance to alienate the Crown's title to and financial interest in forest land and timber; and a growing effort to control and improve the use of the province's forest land endowment. The foundations of these strategies were first laid before Confederation, with the introduction of the old temporary tenures.

*Private forest land today.* Currently, Crown-granted land considered to be productive forest land comprises some 2.0 million hectares, which represents about four percent of the forest land in the province (see Table 1). However, these lands include some of the richest forest land, favourably located on Vancouver Island and the lower mainland. Thus the production of timber from Crown-granted lands figures much more importantly in the provincial total than their area suggests. In 1989, as Table 1 indicates, timber cut from private land accounted for about 10.4 percent of the total provincial harvest of 86.9 million cubic metres. For the same reasons, the value of the timber produced on these private lands is generally higher as well.
OLD TEMPORARY TENURES

Historical origin. The policy of granting rights to harvest timber without alienating title to the land originated in a Land Ordinance proclaimed by the Governor of Vancouver Island in 1865 – one year before that colony united with its sister colony on the mainland. The ordinance conferred on colonial administrators the authority to grant rights to cut Crown timber, in the form of Timber Leases, to individuals or companies "actually engaged" in lumbering. Beyond this statutory qualification the form and extent of these early leases was left to official discretion. Initially, the Crown retained no financial interest in the timber.

Timber Leases continued to be issued until 1905: first by the unified colonies and, after it entered Confederation in 1871, by the province. During the interval new legislation imposed ground rents, maximum terms, royalties, and, for a time, requirements that lessees own and operate sawmills.

Two other forms of provincial tenure followed quickly on the heels of Timber Leases. In 1888 Timber Licences, which were limited to 1,000 acres each and allocated on a first come, first served basis, were introduced to serve the needs of independent loggers, and eventually came to be the most ubiquitous form of old temporary tenure. Then, between 1901 and 1903, the government granted a number of very large Pulp Leases, which were designed to accommodate the expected needs of the pulp industry the province was endeavouring to attract. By 1907, when new allocations were suspended, an estimated 10 million acres of Crown forest land had become committed under these three types of tenure, 90 percent under Timber Licences. Some years later, in the 1920s, the government allowed some Timber Licences to be converted into a fourth form of tenure, Pulp Licences, which gave their holders certain relief from Crown charges on low quality timber harvested from them.

In the meantime, and for some years thereafter, the Dominion government, in the course of administering the Railway Belt granted by the province in 1883-84, was pursuing a parallel course. Extensive Timber Berths were issued to sawmills, conveying rights to harvest standing
timber in the Belt. Like the province, the Dominion retained ownership of the forest land itself. When in 1930 the Dominion conveyed back to the province those portions of the Railway Belt which had not been granted outright, the province for its part agreed to honour the berths and has administered them as part of its own tenure system ever since.

All these forms of tenure — Timber and Pulp Leases, Timber and Pulp Licences, and Timber Berths — became known as *old temporary tenures*. Following recommendations of the 1976 Royal Commission, the 1978 Forest Act (Sec. 20, 21) allowed holders of any old temporary tenures to choose between letting them expire at the end of their current terms, or converting them into a new form of *Timber Licences*. By then many of the original tenures had already expired; in 1976 the total area outstanding was some 0.7 million hectares — less than one-fifth of that in 1910.

The history and individual characteristics of the old temporary tenures are complicated and, because much is of only marginal relevance here, a more detailed description is relegated to an Appendix (it should be noted that the Appendix covers events up to 1974 only).

**Rights and obligations.** Each form of old temporary tenure was unique in some respects, having been designed to meet particular needs at the time it was originally introduced, but they had several important features in common. First, they conferred the right to harvest only the original standing crop of timber, which was almost always old-growth. The term and renewal provisions of the different forms varied, but they were invariably renewed as long as timber remained on them. Until 1965 the whole licence was renewed as long as it contained, in the words of the 1912 Forest Act, "merchantable timber in sufficient quantity to make it commercially valuable." In 1965 an amendment permitted the Forest Service to cancel portions of the tenures which had been logged, allowing the land to revert to the Crown.

Thus Timber and Pulp Licences and Timber Berths carried one-year terms which were annually renewed until the timber was harvested. Timber and Pulp Leases carried 21-year terms, which were renewed in similar fashion. This approach to renewals provided holders of those
tenures with rights of indefinite duration – as much time as they chose to remove the standing timber.

Second, holders of old temporary tenures had certain common financial obligations to the Crown. In order to retain their rights they were required to pay annual rentals (in the case of the leases) or renewal fees (for licences and berths), which varied according to the tenure and the area covered. These rentals and fees were specified in the legislation. In addition, the Crown reserved to itself a financial interest in timber harvested from the old temporary tenures, in the form of royalties which applied to the volume of timber removed, and varied according to species, grade, and region. From their inception in the nineteenth century until 1987, royalties were set out in a schedule in the Forest Act, and were amended from time to time. In 1987 royalties were removed from the statute and controlled instead by regulation (B.C. Reg. 356/87).

Third, all timber cut on old temporary tenures became subject to export restrictions in 1901. In that year, legislation required that all timber cut on Crown lands be manufactured in the province unless a special exemption is obtained. Five years later, as already noted, the Timber Manufacture Act of 1906 extended this requirement to lands granted by the Crown after this date. These provisions still apply.

A final important policy innovation during this period was allocation by competition. A legislative amendment passed in 1891 introduced cash bonus bidding for leases. The following year it was provided that all new leases must be put up to tender, a thread of policy which was to be woven into later tenure arrangements.

The last of the old temporary tenures was granted in 1907. Since then, most were allowed to expire, or were logged and cancelled. Some were integrated into Tree Farm Licences (discussed below) and thus became part of sustained-yield forests. Those that were not were subject to relatively little regulatory control.

Timber Licences today. The full array of old temporary tenures continued until 1978, when an entirely new Forest Act was adopted along with other major reforms in the wake of the
Pearse Commission. That Commission had reported that the complicated mixture of old temporary tenures that were still in good standing was inconsistent and ill-suited to the modern requirements of both the industry and the government, and so should be rationalized (Pearse Report 1976). Accordingly, the new 1978 Forest Act provided that all of these tenures be converted to a single form, called Timber Licences. It also makes provisions for consolidating scattered licences into new Timber Licences, to enable more efficient management and administration.

Timber Licences contained in Tree Farm Licences are subject to the Tree Farm Licence agreement and its management and working plan, and their expiry dates have been altered to conform to those of the Tree Farm Licence. When the original timber they contain is harvested, the old licence terminates and the land becomes part of the Crown land component of the Tree Farm Licence.

Those not contained within Tree Farm Licences are subject to an operating plan submitted to the Chief Forester for approval. The licence's duration is fixed according to the approved period for removing the timber on the area. All harvesting operations on these Timber Licences must be carried out under cutting permits that conform with approved operating plans prepared by professional foresters.

Upon conversion of old temporary tenures into new Timber Licences, the holders were given the option, under the 1978 Forest Act (Sec. 23), of paying stumpage on timber harvested, which at that time meant reforestation costs were reimbursed, or paying royalty and taking full responsibility for reforestation and other costs. With few exceptions licensees chose the royalty option. The only other charge for Timber Licences is an annual rent provided for in the Forest Act (Sec. 88, 89) at rates set out in regulations (Reg. 353/87).

Of the more than 15 thousand old temporary tenures originally issued, there are fewer than 1000 Timber Licences in good standing today. About half of these are integrated within Tree Farm Licences. More than 80 percent of them are held by five coastal pulp companies. In 1989 Timber Licences accounted for 7.1 percent of the province's timber harvest.
The early lumbermen secured old temporary tenures in areas of high quality virgin timber close to low-cost water and rail transportation routes on Vancouver Island, the lower Coast, and along the C.P.R. mainline in the Interior. Thus those that still exist, like the Crown-granted lands, are generally in relatively accessible locations and better timber, and the contrast between their contribution to the total harvest and the proportion of the forest area they cover is even more pronounced (as shown in Table 1). The location of Crown-granted lands and old temporary tenures has had an important influence on the pattern of development of later forms of tenure.
THE CRISIS OF 1907

Shortly after the turn of the century, provincial policy relating to the granting of rights to timber changed abruptly, leading to events that had important implications for the subsequent evolution of the forest tenure system. The crisis was precipitated by a feverish speculative boom in "timber staking," reminiscent of the gold rush nearly 50 years earlier.

The crisis was the result of a convergence of strong speculative demand for timber and attractive new licensing policies. The first of these was fuelled by apprehensions about exhaustion of the eastern pine forests, construction of the Panama Canal, and a cycle of economic prosperity including strong lumber markets, all of which drew attention to the apparently unlimited timber of the west coast. The second was by design of the provincial government which, desperately in need of revenue, made Timber Licences much more attractive to speculators.

Some years earlier, in 1894, the first provision was made for "staking" lands for licences—a procedure whereby a claim could be established by planting a stake at the corner of the area applied for. But the forest industry was slow to take up licences, in spite of growing demand for timber abroad, and the government was frustrated. In the words of the Minister of Lands, speaking in the legislature in 1912:

In 1905 the administration realized that the leasing system was an extremely bad one, ... The public revenue was insufficient. Development was starved for want of money .... The forest wealth of the province was locked up, ... yet ... a timber famine was predicted. ... Stumpage in consequence was being sought almost feverishly by investors.... It was decided to substitute a constructive forest policy that would revolutionize conditions ... (Hon. W.R. Ross, quoted in Sloan Report 1956 pp. 29-30).

Amendments to licensing policy in 1905 were designed to accommodate the demand from speculators. The new licences did not require the licensee to be engaged in logging, to operate a mill, or to cut the timber within any particular time, and until they were logged they were renewable without limit. Meanwhile, the government would receive an annual payment, but the timber would have to be paid for, through royalties which were to be varied from time to time, only when it was cut. Finally, and importantly, the licences were made freely transferable.
As a result of these favourable arrangements and the latent demand for timber, the new licences

... were taken up with great confidence both by operators and investors. In fact the opportunity to acquire standing timber in British Columbia caused recognition of its value to burst with suddenness upon the lumber interests of the continent. From less than fifteen hundred the number of licences sprang (sic.) rapidly within three years to over fifteen thousand (Fulton 1910 p. D-16).

The government was highly satisfied with its new policy.

The profits from a permanent Crown timber business should make British Columbia that phenomenon of state craft and good fortune – a country of "semi-independent means." ... heavy taxation need never fall upon the population of the Province (Fulton 1910 p. D-20).

But this satisfaction and optimism was tempered with anxiety about the flood of timber speculation. Adding to uncertainty, the year 1907 saw a reversal of the business cycle, and the "panic of '07." So, in late 1907, the government suspended all licensing, and struck a Royal Commission to assess the situation. This was the first of a series of such Commissions of Inquiry into forest policy in British Columbia, and its report (hereinafter Fulton Report 1910) was a turning point in tenure policy.

The Commissioners, in their 1910 report, estimated that roughly three-quarters of the province's merchantable timber had been alienated in one form or another. Based on the amount of timber it estimated to be already in private hands, the Commission was convinced that the forest industry's supply of timber was more than adequate for the foreseeable future. Indeed, at the current rate of harvesting, the timber already alienated was enough to last more than two centuries. Accordingly, the Commissioners emphatically endorsed the government's decision to reserve the remaining unalienated timber from disposition.

The recommendations of the Fulton Commission were well received and many were adopted in the first Forest Act, passed in 1912. Among other things, the Act made significant changes in administration. Until that time forest policy had been administered by the Department of Lands; the legislation created the Forest Service as a specialized agency within that Department to take charge of all forestry matters.
TIMBER SALE LICENCES

Historical origin. In recommending that the remaining unalienated Crown timber be held in reserve, the Fulton Commission proposed exceptions in special circumstances. Efficiency would require that fringes and corners of timber adjoining alienated tracts be removed when the lease or licence was logged, and conservation considerations called for removal of fire damaged stands. In addition some localities where few old temporary tenures had been staked would require access to or through Crown timber. And the prescient Commissioners were apprehensive that much of the timber already alienated might become concentrated in the hands of non-operating speculators, or that a combine of operating tenure-holders might restrict market competition. It was thus for the purpose of maintaining market integrity, as well as providing for efficient harvesting, that the Fulton Commission recommended a procedure for alienating timber that was otherwise under reserve. The instrument proposed for meeting these needs was the Timber Sale Licence (or simply "timber sale") which was provided for in the 1912 Forest Act. This new form of licence portended a major new shift in forest tenure policy.

Rights and obligations. The Act required that an area proposed for a Timber Sale Licence be surveyed, and that an inventory be made of the timber. Sales were preceded by advertising in the British Columbia Gazette for at least three months, and competitive bids were received by way of sealed tenders accompanied by a deposit of at least 10 percent of the bid price. In addition to the standard rental and royalty, a successful applicant was obliged to pay to the Crown the appraised upset price determined by the Forest Service and any bonus he bid above the upset price, as well as the costs of advertising, cruising, and surveying. This was the origin of the stumpage appraisal system, designed to provide more discriminating estimates of the value of Crown timber than the statutory royalties applicable to the old temporary tenures.

Timber Sale Licences introduced another lasting innovation in forest management. Each licence was subject to special conditions written into the contract to ensure proper harvesting,
protection and forestry practices. Their terms varied but, typically, they were issued for two or three years.

Timber Sale Licences were the only means available for making Crown timber available after 1907 (with the minor exception of Handloggers’ Licences), so this form of tenure became increasingly important as the demand for timber grew. Its use extended well beyond the special circumstances foreseen by the Fulton Commission, becoming a major device for serving the needs of the forest industry as it expanded into the Interior, which contained most of the remaining unalienated timber.

Until sustained yield policies were introduced in 1948 the Forest Service processed Timber Sale Licences almost without restriction in response to applications. They rapidly became the dominant form of rights to Crown timber in the Interior, and as the importance of the Interior grew the various forms of Timber Sale Licences became the most important form for the province as a whole. By 1945 Timber Sale Licences accounted for well over half the cut in the Interior and about 25 percent of the total provincial harvest. Under the sustained yield policy adopted shortly thereafter, the character of the tenure was changed, and it evolved through several forms. Their importance is reflected in the growth of harvest levels over time, depicted in Figures 1 and 2.
THE TRANSITION TO SUSTAINED YIELD AFTER 1947

Forest policy was modified over the years to accommodate the expanding industry, but the basic framework of the tenure system remained intact through the great depression and two world wars. By the 1940s apprehensions had arisen over the unbalanced distribution of timber harvesting across the province, the lack of access to timber for new ventures, and the inadequate provisions for maintaining future timber supplies. These and other concerns about resource management led to the appointment of the second Royal Commission in 1943.

The Commission proved to be another turning point in provincial forest policy. The Commissioner, G. McG. Sloan, in his 1945 report dealt primarily with the design of a sustained yield forest policy for the province (Sloan Report 1945). He had concluded that the public interest required such a policy in order to gain maximum advantage from the province's forest resources, and to provide stability to the industry and communities which depended upon them. Forest land, he proposed, should be managed to produce timber in perpetuity.

To cope with the ambitious task of bringing the province's vast forests under this form of regulation, the Commissioner proposed creation of two types of sustained yield management units, which he referred to as "private working circles" and "public working circles." The former involved a new licensing arrangement which would enable owners of Crown-granted land and old temporary tenures to combine their holdings with additional Crown land to form coherent management units, to be managed according to a sustained yield plan. They were intended to promote the orderly development and careful management of Crown and private forest land holdings, and to encourage industrial development and community stability by providing long-term supplies of timber for existing or proposed utilization plants. By delegating to the licensee direct responsibility for managing these units, the private resources of the industry would be mustered to the sustained yield effort, while supervision by the Forest Service would provide the necessary public safeguards.
The Crown forest lands that were not incorporated under these licensing arrangements should, the Commissioner proposed, be divided into "public working circles," each to be managed directly by the Forest Service as a sustained yield unit. The timber available for harvesting under the sustained yield plan would meet the needs of smaller and unintegrated enterprises.

The government incorporated most of these proposals in amendments to the Forest Act passed in 1947. The Minister was given authority to grant Forest Management Licences, which would embody the "private working circle" proposal; the name was subsequently changed to Tree Farm Licence. In pursuit of the second major recommendation, the Forest Service proceeded to designate "public working circles," which were renamed public sustained yield units and were later consolidated into today's Timber Supply Areas.

The Commissioner's 1945 report had recommended that another Commission of Inquiry be struck ten years hence, to assess the government's progress in implementing the sustained yield policy. This advice was also accepted, and in 1955 the same Commissioner (who, shortly after completing his earlier inquiry was appointed Chief Justice of British Columbia) was designated to conduct the new review. His second report, submitted in 1956, was considerably more voluminous than his first, though its recommendations were not nearly so far-reaching and were concerned mostly with administrative matters (Sloan Report 1956).
TREE FARM LICENCES

As an instrument of the new sustained yield policy the Tree Farm Licence tenue was appealing. Without relinquishing title or ultimate control over public lands, the government was able to bring under management private lands, old temporary tenures, and other Crown land, while assuring industrialists of the long-term timber supplies they required for investment in utilization facilities. Shortly after the new legislation was passed, the government began to receive scores of applications for the new form of tenure: by the end of the decade between the two Sloan Commissions, 23 had been awarded and in the following decade another 20 were approved.

Tree Farm Licences were always highly controversial, partly because of the way they were allocated. Applications submitted to the Minister were advertised, and sometimes public hearings were held, but the legislation gave unqualified discretion to the Minister to decide how many licences were to be issued, what size they would be, and which of competing applicants would be successful. Although the Crown lands committed under these licences would otherwise have been available for development under Timber Sale Licences, there was no provision for competition for these allocations. Because there were many conflicting applications, and there was no guidance about how Ministerial discretion should be exercised, awards sometimes were criticized by unsuccessful applicants. A good deal of dissatisfaction was expressed as well by the independent logging industry, which was concerned about its narrowing opportunities to acquire harvesting rights. Public concern also ran high, and the whole policy became a focus of political debate, especially when the Minister was charged and convicted of acting improperly in the award of a major licence. But the strongest charge was always that Tree Farm Licences constituted a giveaway of Crown resources to the big companies, to the disadvantage of small companies and the public at large. This criticism had an impact on subsequent changes to these licences.

Composition. Tree Farm Licences vary considerably, but they have some common features. They include lands of varying status, but all the lands in each licence are managed as an integrated sustained yield unit, under a single plan. The Crown-granted lands and Timber Licences
contributed by the licensee are designated as "Schedule A" lands in the licence document, while the additional Crown lands included are described as "Schedule B" lands. The contract describes the area covered by the licence, which is sometimes a single contiguous tract and sometimes several separate blocks. The location of licences and their boundaries were often influenced by licensees' prior holdings of "Schedule A" lands.

The proportions of "Schedule A" and "Schedule B" lands in Tree Farm Licences vary widely. The licensee is required to include among the former all his private forest lands or other timber rights held or subsequently acquired, that fall within the licence boundaries. He nevertheless continues to be bound by most of the terms and statutory provisions relating to these Crown grants and Timber Licences. As the licensee removes the timber from his Timber Licences those tenures are extinguished and the land is transferred to "Schedule B" lands. In addition, after the licensee has removed the timber from any of his Crown-granted parcels, he may elect to have them revert to the Crown and be transferred to "Schedule B" lands also; but whatever his choice, such lands remain subject to the sustained yield plan. Under the contracts, the government retains some limited scope to withdraw "Schedule B" lands from the licence area, when they are required for other purposes.

Some Crown-granted lands included as "Schedule A" lands are classified as *Managed Forest Land* under the Assessment Act, as described earlier. Thus the licensee can enjoy the property tax privileges accorded to Managed Forest Land and also the contribution that these lands make to the annual allowable harvest of the Tree Farm Licence.

*Term.* The first 23 Tree Farm Licences (then Forest Management Licences) carried perpetual terms, cancellable only if the licensee failed to fulfill his obligations. These unlimited terms attracted much criticism and, following recommendations of the second Sloan Commission, an amendment to the Forest Act limited the duration of all new licences to 21 years, renewable under terms and conditions to be renegotiated on expiry. There was some uncertainty, however, about whether this change applied to the licences already issued. Following recommendations of
the Pearse Commission, the new 1978 Forest Act provided that all Tree Farm Licences carry terms of 25 years with provisions for "evergreen" replacement. This means that after 10 years of the licence term have expired, the holder may call for a new 25-year licence to replace it, and the government is obliged to offer a replacement licence with only minor modifications of the terms and conditions.

**Management obligations.** The forest management responsibilities of licensees are heavier under Tree Farm Licences than under any other form of tenure. To ensure proper management and harvesting according to sustained yield principles, the licensee is required to submit management and working plans for successive 5-year periods. These plans cover operations on all tenures within the licence, and include reforestation programs, inventory data, allowable cut calculations, and general development priorities for the areas covered. They must be prepared by a Registered Professional Forester and approved by the Forest Service, and they govern all harvesting activities.

To harvest timber from any land in the licence area, including Timber Licences and Crown grants, the licensee is obliged to obtain Cutting Permits from the Forest Service, authorizing short-term operations on prescribed tracts under detailed terms and conditions. Cutting Permits also contain directives concerning utilization standards, slash disposal, environmental protection, and so on.

**Harvesting by contractors.** The so-called "contractor clause" was first introduced in 1953 to meet the growing anxiety of small logging operators as more timber became allocated under Tree Farm Licences. It commits the licensee to provide the opportunity to independent contractors to log a specific percentage of the harvest from "Schedule B" lands. Until 1978 the fraction of the harvest on "Schedule B" lands required to be made available to contractors varied, from zero in the earliest licences to 50 percent in the latest. Under the new 1978 Forest Act all Tree Farm Licences were required, as they were replaced, to conform to a 50 percent rule. In 1991 the
regulations governing the contractor clause were expanded (Reg. 258/91). At the same time, the contracting requirement was extended to apply to Forest Licences as well (see below).

_Crown charges_. On timber cut from old temporary tenures converted to Timber Licences which are within a Tree Farm Licence the licensee is obliged to pay either royalty at the currently prescribed rates or stumpage at appraised rates, depending on his choice when the licences were converted (described earlier). Like Timber Sale Licences, timber cut from "Schedule B" lands attracts stumpage charges appraised by the Forest Service. But unlike Timber Sale Licences, which sometimes provide opportunities for competitive bidding in excess of the appraised stumpage price, the "Schedule B" timber is immune from competition, and hence attracts only the upset price in all cases.

The treatment of forestry costs, and the way they are shared between the Crown and the licensees, has changed several times. Originally, the licensee could choose whether to pay full stumpage on timber cut on Schedule B lands, and have the costs of management, protection, and silvicultural treatment included as logging costs in the stumpage calculation, or receive no reimbursement but pay only 16 percent of the normal stumpage charge on timber cut after the end of the first rotation. In 1958, however, this latter choice, which only a few licensees had elected, was eliminated, and all licensees were required to pay full appraised stumpage. The 1978 Forest Act (Sec. 88) introduced the stumpage credit system, under which forestry costs were removed from the stumpage appraisal calculation; instead, licensees were reimbursed their expenditures on management, protection and silviculture through credits against their future stumpage assessments. In 1987 this policy change was reversed, so that today such costs are considered as operating costs and treated in the same way as logging costs in the calculation of appraised stumpage.

Annual rentals are payable on Crown lands within Tree Farm Licences, at rates fixed by regulation (Reg. 353/87). Property taxes ordinarily apply to private lands.
Appurtenancy and transferability. Most Tree Farm Licences are appurtenant to one or more timber manufacturing facilities – often integrated forest complexes. In these cases the prescribed manufacturing plant must be capable of utilizing a volume at least equal to the annual harvest issued under the licence, and must use the timber in that plant unless exempted from doing so by the Minister.

Many licence documents provide that any appurtenant manufacturing facility may not be sold or transferred separately from the licence. In such cases ownership of the mill and the licence must continue to be vested in the same party. Licences not appurtenant to facilities may not be transferred without the consent of the Minister.

Today, there are 32 Tree Farm Licences and they account for 25 percent of the total approved annual harvest on regulated lands in British Columbia – the provincial annual allowable cut. Most are large, and on the coast, where about 75 percent of the timber in this form of tenure is located, they account for about 60 percent of the allowable annual cut. In 1989 the harvest from Tree Farm Licences accounted for 43 percent of the harvest on the coast, 8 percent in the interior, and about 20 percent of the province's total harvest, as shown in Table 1.
PUBLIC SUSTAINED YIELD UNITS AND THE QUOTA SYSTEM

The second type of sustained yield unit recommended in the 1945 Sloan Report comprised entirely Crown lands to be managed according to a sustained yield plan by the Forest Service (Sloan 1945). To allocate timber rights in public sustained yield units the government simply adopted modified forms of the standard Timber Sale Licence. Accordingly, the new Timber Sale Licence arrangements introduced with the establishment of public sustained yield units were directed toward two objectives: first, to restrict the rate at which new licences were issued; and second, to regulate the rate of harvesting under individual licences. These procedural and contractual innovations enabled the government to reconcile harvesting with the calculated sustainable yield in each unit.

The adjustment to sustained yield harvest regulation in the public sustained yield units, and the modifications to the licensing process that accompanied this adjustment, were exceedingly complicated, and the measures adopted were often experimental, poorly articulated, and sometimes not well grounded in either legislation or contracts. Yet the accommodations made had far-reaching ramifications and lasting effect on the pattern of timber rights. The arrangements made in the transition to sustained yield thus call for some explanation.

The sustained yield policy required that, for each sustained yield unit, an "allowable annual cut" be determined with reference to the timber inventory in the unit and its capacity for future growth (see Pearse Report 1976, Ch. 17 and Appx. D). Then the Forest Service was obliged to issue Timber Sale Licences to authorize private operators to harvest timber up to the limit of the allowable annual cut. But in some of the more developed areas, the rate of harvesting already exceeded the allowable annual cut. The solution was the "quota" system, an informal administrative device that developed into one of the basic elements of the tenure structure.

After some experimentation, the Forest Service evolved a procedure for apportioning the allowable cut among the established operators in public sustained yield units. Where the allowable cut was already exceeded in newly established units, the established operators were awarded new,
reduced harvesting rights proportionate to their rates of harvesting in Crown timber in the area prior to its regulation, which in total were within the allowable cut. In some units this meant severe cutbacks on the part of licensees, but it dealt with the transitional problem of achieving a conformance with the allowable cut.

These arrangements, however, became more than transitional measures. The rights allocated to "established operators" (a designation that assumed great importance) became recognized as their continuing licensee priority, which implied that whenever one of their licences expired the Forest Service would make another available for an equal volume of timber. Subsequently, after some licensees amalgamated the rights they held under different licences, the ongoing annual volumes that they were authorized to cut became known as their "quota position" in a public sustained yield unit. Moreover, operators in units that were not overcut in relation to the allowable cut assumed "quota positions" as well.

Originally a "quota" was a percentage share of the allowable cut in the relevant unit, but it later became a specific allowable annual cut expressed in volume of timber. The original concept nevertheless had a lasting effect on harvesting rights, and undoubtedly influenced the shift to "volume licensing" (see below).

The critical element in the "quota" system was the way in which the timber rights of licensees were maintained and protected under the Timber Sale Licensing system, which called for competitive allocation of rights with limited terms. Neither the licence contracts (with a few exceptions) nor the Forest Act gave the licensees a right to renewal; indeed the latter provided that each right would take the form of a new licence, to be allocated by competitive bidding. So, to protect the "quota position" of "established operators," a combination of administrative discretion and statutory privileges was adopted.

These procedures gave "quota" holders distinct advantages over others when they sought to replace a licence which was about to expire. Under the Regulations the Minister had unqualified power to refuse any application for a licence, and this enabled him to exclude all
applications except the one submitted by the "quota" holder who wished to replace his expiring licence. Thus only a "quota" holder, and no one else, was officially recognized as an applicant for a licence in heavily committed public sustained yield units.

Then the "quota" holder, being the recognized applicant for the licence, was given special status in the subsequent bidding procedures, in which anyone, technically, could participate. First, he could elect that bidding be conducted through sealed tenders instead of at an oral auction, and thereupon gain the privilege of simply matching any tender higher than his own to obtain the licence. He invariably exercised that option. If no one else bid against him he was issued the licence at his bid price, usually the upset stumpage appraised by the Forest Service.

The "quota" holder, again by virtue of his status as the recognized applicant, was given a further advantage over competitors. Anyone else who tendered a bid for the licence was required to pay to the Crown a non-refundable bidding fee, which was substantial. If the bidder was unsuccessful in winning the sale (because the applicant matched his bid) he forfeited this fee. The "recognized applicant" was not required to submit a bidding fee.

The special privilege accorded the "quota" holder to initiate a new licence, combined with his sealed tender and matching bid privileges and the bidding fee penalty applied to his competitors, left others at such a disadvantage that competitive bidding for these licences almost never occurred. Thus "established operators" maintained their "quota positions" by replacing expiring licences with new ones without competition.

It is important to note that designation as a "recognized applicant," which was fundamental to the "quota" system, was not a legal right of licensees; it rested on the discretion of the Minister. These administrative expedients seemed to conflict with the intent of the Act to provide for competition, and their legality was later questioned, particularly where they were applied in units that were not being overcut (Pearse Report 1976 Ch. 6).

By the mid 1970s over half of the harvest in the public sustained yield units covered by Timber Sale Licences was thus committed to "established licensees" under the "quota"
arrangement. Many licensees had separate "quota positions" in several public sustained yield units.

Timber Sale Harvesting Licences

*Historical origin.* By the late 1960s, as a result of rapid consolidation and expansion of the industry, most licensees in public sustained yield units held "quotas" in the form of several Timber Sale Licences. These licences were of the traditional kind, conveying the right to cut all the timber within a delineated area. With the development of the sustained yield policy and the "quota" system, it became necessary to regulate the rate of harvesting under each licence, such that each licensee's harvest, under all his licences within a public sustained yield unit, matched his "quota position." Often, because of poor information about how much timber was in a licensed area, difficulties were encountered in reconciling the harvesting over the term of the licence with the licensee's quota. Other pressures on the traditional Timber Sale Licence were developing. With industrial activity increasing and demands for improved resource management growing, the Forest Service sought means of shifting more responsibilities onto licensees. The upshot was the introduction in 1967 of a new variety of the traditional licence, the *Timber Sale Harvesting Licence.*

*Rights and obligations.* These new licences eliminated the awkward task of reconciling volume allocations with the inventory of licensed areas. They did not confer a right to the timber on a specific area, but rather a right to harvest an annual volume in a designated public sustained yield unit over the term of the licence, which was typically ten years. Thus, beyond describing the management unit, the licence was not area-specific, and the particular areas to be harvested are defined by the Forest Service in Cutting Permits issued during the life of the licence. However, the general area in the public sustained yield unit where the licensee was expected to exercise his cutting rights is designated informally as his "chart area."

"Quota" holders in all public sustained yield units were invited to surrender their Timber Sale Licences in favour of this new variant and to consolidate all of their "quota" volume in the
unit under a single Timber Sale Harvesting Licence. Licensees responded quickly and positively to this invitation, so that the new tenure rapidly replaced most of the old Timber Sale Licences. In addition to the switch from area-based to volume-based rights, this form of agreement incorporated other innovations as well: most important, longer terms and increased management responsibilities.

The new licences carried longer terms, usually 10 years, though some had even longer terms, and two, intended to support new pulp mills, had 21-year terms. Although they provided no contractual right of renewal they became the main vehicle for allocating "quotas," and protecting licensee's "quota" positions through the practices described earlier. The Forest Service accepted applications for these licences only from licensees with established "quota positions," most of whom were sawmill owners. All Interior Timber Sale Harvesting Licences referred to an "appurtenant mill" which was required to be maintained and operated by the licensee, with equipment for manufacturing chips as a by-product of lumber in order to utilize timber to "close utilization" standards.

Under Timber Sale Harvesting Licences, upset stumpage was appraised by the Forest Service as individual Cutting Permits are issued, and the other levies applicable to ordinary Timber Sale Licences applied as well.

Expansion and abolition. The Timber Sale Harvesting Licence was better suited to the needs of the forest industry and considered to be conducive to better forest management, so it was quickly and widely adopted. By the mid 1970s, it accounted for some 60 percent of the cut from public sustained yield units.

These licences were no longer provided for in the new Forest Act of 1978. For the most part, the rights to timber they provided under the "quota" system were converted, as they expired, into new Forest Licences (described below).
Third Band Sales

Before the pulp industry expanded into the Interior in the 1960s, much of the timber being logged could not be manufactured into lumber in the established sawmilling industry; substantial quantities of waste residues were left in the forest or burned at the sawmills. Moreover, there were extensive tracts of small and defective timber that were not merchantable. The industry had adapted to a standard of timber recovery suitable for lumber manufacturing alone, known as the "intermediate utilization standard."

The new pulp industry offered an opportunity to use much of the wood hitherto unusable and so a revised "close utilization" standard of recovery was initiated in 1966. Within six years the new standard was established throughout the Interior and gradually it was introduced on the Coast as well. The volume of timber in forest stands, measured to this closer standard of utilization, was considerably greater, and so revised calculations of allowable annual cuts for public sustained yield units indicated scope for increasing the harvest.

Licensees who could demonstrate their ability to process the material that comprised this extra inventory (in effect, those who equipped their sawmills with barkers and chippers to make pulp chips from material unusable for lumber) were given proportionate increases in their "quota positions" — originally by one-third throughout the province, later increased to one-half on the Coast. But in the Interior, especially, where small timber comprises a large component of the forest inventory, even these increases left scope for additional harvesting within the new allowable cuts. So, wherever 80 percent of the harvesting rights in a unit were held by licensees who adopted "close utilization" standards, the Forest Service made further timber available to utilize some of the extra allowable cut. This was done through short-term Timber Sale Licences that became known as "third band" sales.

Such was the impact of "close utilization" in the Interior that "third band" Timber Sale Licences grew to account for well over a third of the total harvest of that region. On the Coast, where the shift in utilization standards had a much lighter impact on the measured inventory and
more of the increased available cut was added to established operators' "quotas," only a few "third band" licences were issued.

"Third band" licences were distributed in two stages, beginning about 1969. Initially, the Forest Service allowed applications from "established licensees" with sawmills, according to a criterion of "need." They were awarded "third band" sales to the extent that they required additional timber to permit continuous mill operations. Thus many "quota" holders came to obtain "third band" licences as well. Then once the "needs" of these mills had been met, applications were considered from new milling enterprises and from others that had been depending on timber from private lands.

"Third band" licences usually carried terms of one to five years but, as usual, there were exceptions. These licences did not (normally) constitute part of a licensee's "quota position" and they extended none of the bidding privileges associated with the "quota" system. But competition for them was nevertheless restricted. Eligibility for them was restricted to applicants who had installed pulp chip manufacturing facilities in their mills, and secondarily to those who could demonstrate a "need" for the timber to permit their mills to operate at their rated capacity.

The "need" criterion provided a strong deterrent to competition. If a licensee who could demonstrate "need" competed for and obtained a sale initiated by someone else, he would, by thus accommodating his "need," lose his eligibility to initiate a sale himself. And if he attempted to bid for such a sale when he already had sufficient timber, he would not be deemed to qualify as an eligible bidder and his bid would be disallowed. Thus, competition for replacement "third band" licences was largely eliminated, as it was for licences issued under the "quota" system.

Closer Utilization Under Tree Farm Licences

As these developments were taking place in the public sustained yield units, parallel but less complicated changes were adopted for the Tree Farm Licences. Holders of these tenures also
made the shift from "intermediate" to "close utilization" standards, substantially increasing the annual cutting rates approved under management working plans.

In Tree Farm Licences, the licensee was entitled to the entire approved sustained yield harvest in the licence area, so there was no need for policy to allocate the additional cut among competing users as was done in public sustained yield units. Each licensee fell heir automatically to all of the additional harvest indicated when "close utilization" recovery standards were adopted for his unit. This, coupled with new information about timber inventories and growth rates, resulted in substantial increases in the allowable annual cuts for Tree Farm Licences; the average increase was about 150 percent, but in some cases was much higher (Pearse Report 1976).

The Shift to Volume Rights

As already mentioned, the traditional Timber Sale Licence conveys a right to harvest the timber on a designated tract of land. Under the "quota system," however, all Timber Sale Harvesting Licences and most Timber Sale Licences granted rights to an annual volume of timber, but the licence itself did not identify the timber. Instead, the exact location of the authorized logging – and many other important matters such as the controls on harvesting practices, utilization requirements, and stumpage charges – was specified in short-term Cutting Permits issued to the licensee from time to time as his harvesting progressed.

The licence itself carried two implications for the location of Cutting Permit authorizations, however. One was that it specified the public sustained yield unit in which the right was to be exercised; the other derived from the Forest Service's practice of recognizing a so-called chart area for each licensee, within which he would exercise his cutting rights. Chart areas were informal designations for administrative and planning convenience, usually proposed by the licensees with a view toward coordinating development planning and minimizing interference with each other's operations.
The shift to licensing volumes rather than areas was closely linked to the effort to regulate harvesting within the constraints of the allowable annual cut. Undependable cruise estimates of the volume of timber on former area-based Timber Sale Licences, and the difficulty licensees faced in adhering to the allowable annual cut authorized in each of their separate licences, led to the licensing of volumes and regulation of licensees' cutting rates under all of their "quota" licences in a unit taken together.
FOREST LICENCES

By the mid 1970s, a variety of adaptations of the traditional Timber Sale Licence had evolved. Timber Sale Harvesting Licences were the most important, because they embodied most of the "quota positions" of licensees. Some quota, however, was held in "ordinary" Timber Sale Licences, which were (with some exceptions) sales of the traditional kind: short-term contracts conveying the right to the timber on a designated tract of land. As noted already, "third band" Timber Sale Licences were especially important in the Interior, and were separate from the "quota" arrangements. There were other variants of Timber Sale Licences invented to convey rights to harvest pulpwood, salvage timber, and special products.

The Royal Commission of 1975-76 was highly critical of the "quota system" which, though informal, had become the main mechanism for allocating timber rights (Pearse Report 1976). It recommended that it be replaced by a more well-defined system of rights and renewal provisions based on a new licence form to be called Forest Licences. In large part, these recommendations were reflected in the 1978 Forest Act. Over subsequent years, the Timber Sale Harvesting Licences and most of the other Timber Sale Licences were converted, as their terms expired, into the new Forest Licences.

Allocation, term and replacement. Applications for new Forest Licences are evaluated against several criteria set out in the Forest Act (Sec. 11). They include the bonus bid, prospective employment, environmental impact and developmental effect.

Forest Licences have terms of 15 years (or 20 years in exceptional cases), but they provide for "evergreen" replacement. In the case of Forest Licences, "evergreen" replacement means that the licence holder may, after holding his licence for five years, apply for a new licence to replace his existing one, and the government is obliged to offer him a new 15-year licence for the same allowable annual cut as authorized under the licence being replaced. If the licensee does not accept the revised terms, the agreement he already holds will continue for its remaining term, whereupon it will terminate with no further replacement rights.
Rights and obligations. A Forest Licence entitles the holder to obtain Cutting Permits as required to authorize harvesting of the allowable annual cut specified in the licence. In return for these cutting rights, the licensee must submit successive five-year management and working plans prepared by a Registered Professional Forester for approval by the Ministry's regional manager. They include a description of the operations to be conducted and the silviculture treatments to be undertaken. The licensee is expected to practice basic silviculture to ensure reforestation within a specified period. Five-year development plans are also required and must be updated annually or whenever required by the regional manager.

All harvesting must be conducted under the terms of Cutting Permits. The application for these must provide all the site-specific information about the timber and topographic conditions needed to analyze the timber contained in the cutting permit area and to determine the stumpage rates.

The obligation of licensees to provide independent contractors with the opportunity to cut a portion of the authorized harvest (described earlier as it applies to Tree Farm Licences) now applies to Forest Licences as well. Forest Licences require payment of an annual rent to the Crown, based on the authorized allowable cut, as set out in regulations (Reg. 353/87).

Forest Licences are much larger than traditional Timber Sale Licences, but smaller than Tree Farm Licences. In 1990 there were 177 Forest Licences in good standing. They accounted for 58 percent of the authorized allowable annual cut in the province, and just over 50 percent of the actual harvest that year, as indicated in Table 1. The licences are especially important in the interior, where more than 80 percent of the harvesting under this form of tenure takes place. There they account for 65 percent of the harvesting, whereas they authorize only 24 percent of the harvest on the coast.
Table 1. Distribution of forest land, allocated cutting rights and actual harvests among forms of tenure in 1990.

<table>
<thead>
<tr>
<th>Form of tenure</th>
<th>Number</th>
<th>Area (million hectares)</th>
<th>Allocated allowable annual cut (thousand cubic metres)</th>
<th>Harvest in 1989-90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private forest land outside Tree Farm Licences</td>
<td>1.6</td>
<td>8,461</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tree Farm Licences</td>
<td>32</td>
<td>3.6</td>
<td>18,679</td>
<td>17,415</td>
</tr>
<tr>
<td>Private land</td>
<td>0.4</td>
<td>2,978</td>
<td></td>
<td>545</td>
</tr>
<tr>
<td>Timber Licences</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other provincial Crown land</td>
<td>3.2^d</td>
<td>15,700^d</td>
<td></td>
<td>13,879</td>
</tr>
<tr>
<td>Crown forest land outside Tree Farm Licences</td>
<td>43.6</td>
<td>55,641</td>
<td>60,684</td>
<td></td>
</tr>
<tr>
<td>Timber Licences</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forest Licences</td>
<td>177</td>
<td>_c</td>
<td>43,360</td>
<td>44,628</td>
</tr>
<tr>
<td>Major Timber Sale Licences</td>
<td>167</td>
<td>_c</td>
<td>335</td>
<td>1,335</td>
</tr>
<tr>
<td>Minor Timber Sale Licences</td>
<td>1,481</td>
<td>_c</td>
<td>9,276</td>
<td>9,117</td>
</tr>
<tr>
<td>Pulpwood Agreements</td>
<td>11</td>
<td>_c</td>
<td>1,624</td>
<td></td>
</tr>
<tr>
<td>Woodlot Licences</td>
<td>456</td>
<td>379</td>
<td></td>
<td>422</td>
</tr>
<tr>
<td>Other provincial Crown lands</td>
<td></td>
<td>667^e</td>
<td></td>
<td>2,060</td>
</tr>
<tr>
<td>Total Provincial Crown land^a</td>
<td>46.8</td>
<td>74,320</td>
<td>77,549</td>
<td></td>
</tr>
<tr>
<td>Federal Land^b</td>
<td>0.3</td>
<td></td>
<td></td>
<td>274</td>
</tr>
<tr>
<td>Total productive forest land</td>
<td>49.0</td>
<td>74,320</td>
<td></td>
<td>86,935</td>
</tr>
</tbody>
</table>


^aIncludes provincial Crown lands within Tree Farm Licences.
^bIncludes Indian Reserves.
^cVolume licences, hence area not applicable.
^dIncludes Timber Licences.
^eForest Service Reserve.
Figure 1. Growth of Harvest on the Coast under Various Forms of Tenure

![Graph showing growth of harvest on the coast under different tenure types.]

Figure 2. Growth of Harvest in the Interior under Various Forms of Tenure

![Graph showing growth of harvest in the interior under different tenure types.]

Source: Leitch (1992) derived from B.C. MOF Annual Reports.
OTHER FORMS OF TIMBER RIGHTS

Today, the private lands, Timber Licences, Tree Farm Licences and Forest Licences described above account for most of the timber rights depended upon by the forest industry. Together they are the source of over 86 percent of the timber cut in the province. However, several other forms of tenure deserve mention, the most important of which is the modern form of Timber Sale Licence.

Modern Timber Sale Licences. Since 1912, the Timber Sale Licence has been adapted to a variety of needs and circumstances, and it has proven to be a highly flexible and versatile device for allocating timber. The 1978 Forest Act (Sec. 16-18) specifies the terms and conditions to be embodied in these licences in more detail than previously, but a large measure of flexibility is maintained. The current forms of Timber Sale Licence are as follows:

1. **Major timber Sale Licences.** These licences contain most of the conditions and requirements of a Forest Licence but allocate much smaller volumes of timber. They stipulate an allowable annual cut within a defined area, and call for Cutting Permits to authorize harvesting. They require the licensee to carry out basic silviculture, notably reforestation after logging.

   These licences are usually issued for the maximum authorized term of 10 years. Some are eligible for replacement in their final year, under a "designated applicant" provision for a new licence.

   In spite of their name, Major Timber Sale Licences are individually very small, and collectively account for less than two percent of the provincial harvest.

2. **Minor Timber Sale Licences – Competitive Sales.** The 1976 Royal Commission had pointed out that timber allocation policies appeared to have favoured large integrated firms at the expense of small firms within the industry. To address this perceived bias the 1978
Forest Act provided for special timber sales for small businesses, to be allocated by competition. This was part of the Small Business Enterprise Program.

Potential participants in this program must register in one of two categories of parties eligible to bid on the licences. One category is loggers who do not own or lease a timber processing facility, the other is timber processors who do not hold other rights to Crown timber. In 1990 there were 2261 registrants in the first category and 508 in the second. Initially intended to expand to 25 percent of the provincial allowable annual cut, allocations under the Small Business Enterprise Program reached about 7 percent by the end of the 1980s.

3. **Minor Timber Sale Licences – Bid Proposal Sales.** In 1988 the Small Business Enterprise Program was renamed the Small Business Forest Enterprise Program, and expanded to provide for bid proposal sales. These sales are specifically intended for independent remanufacturing and secondary processing enterprises, and their purpose is to encourage further manufacturing of solid wood products by small firms. Eligible applicants compete for them not only through bonus bids but also on the basis of their proposed use of the timber. When the program was introduced in 1988, five percent of the allowable annual cut authorized under Forest Licences and Tree Farm Licences was diverted to these new bid proposal sales.

These Competitive and Bid Proposal sales are the most important forms of modern Timber Sale Licence. Together, about 1500 of these sales accounted for 10.5 percent of the timber harvested in 1989.

4. **Direct Sales and Cash Sales.** These are short-term Timber Sale Licences, used to authorize harvesting very small volumes of Crown timber. Payment for these sales is made in the form of a lump sum. Direct Sales and Cash Sales are respectively used for allocations under and outside the Small Business Forest Enterprise Program. Together they account for an insignificant proportion of provincial harvest.
**Pulpwood Agreements.** Pulpwood Agreements provide a "last-resort" source of raw material for enterprises that manufacture wood fibre products such as pulp, paper and paperboard. Holders of these agreements undertake to use the wood residues from their own lumber and plywood mills and to purchase suitable residues from others in the area. In the event that these sources are disrupted and no other sources are available, Pulpwood Agreements entitle their holders to acquire Timber Sale Licences within a prescribed area in order to bridge the gap and sustain their processing operations.

Pulpwood Agreements were first introduced in 1962 (as Pulpwood Harvesting Area Agreements) when the close utilization policy and "third band" licences (described above) were being developed. Of the seven Agreements originally issued, five are still in force. In the past five years, six new Pulpwood Agreements have been issued under the 1978 Forest Act.

Pulpwood Agreements require their holders to operate timber processing facilities. They are issued for terms of 25 years, with "evergreen" replacement provisions at 10-year intervals, similar to Tree Farm Licences.

**Woodlot Licences.** The Woodlot Licence is designed for three purposes: to promote good forest management on small isolated parcels of Crown forest land that are otherwise difficult for the Ministry to manage, to encourage forestry on private lands, and to increase opportunities for public involvement in small-scale forest management. Owners of wood processing facilities are specifically prohibited from holding Woodlot Licences.

Woodlot Licences are like miniature Tree Farm Licences in many respects, but their terms and conditions are less onerous. A Woodlot Licence has a maximum term of 15 years, but is eligible for "evergreen" replacements at intervals of five years. The area of Crown land covered may not exceed 400 hectares and holders are restricted to one Woodlot Licence at a time. Like Tree Farm Licences, they are intended to be combined, for management purposes, with any nearby forest land owned by the licensee.
The forest must be managed under an approved management and working plan for the licence area, and harvesting must be carried out under Cutting Permits issued in conformity with the plan. Stumpage at appraised rates must be paid on timber cut from the Crown land portion.

About 460 Woodlot Licences have been issued. They account for about half of one percent of the provincial harvest.

The forms of rights described above include the main instruments used for conveying rights to timber in British Columbia. A variety of minor forms of authorizations exist for special purposes, such as clearing rights-of-way and cutting wood for domestic or agricultural purposes.
SELECTED REFERENCES


APPENDIX

HISTORY OF OLD TEMPORARY TENURES

An excerpt from
Crown Charges for Early Timber Rights

by

Peter H. Pearse, Arvid V. Backman and Edward L. Young

First Report of the Task Force on Crown Timber Disposal
Victoria: 1974
APPENDIX

HISTORY OF OLD TEMPORARY TENURES

Alienation of Crown lands in the Crown Colony of Vancouver Island began in 1858; and any land, including any timber it contained, was available for sale at 10 shillings per acre. In 1865, one year before Vancouver Island united with the mainland of British Columbia, and six years before this Province became part of the Dominion of Canada, a Land Ordinance introduced the principle of granting rights to harvest timber on Crown lands without alienation of the land and resources themselves.

The advantages of this distinctly Canadian system were easily recognized, and, as a result, the province has retained an interest in and a control over by far the greater part of its forest resources; at the same time it has supplied the lumber industry with abundant raw material at reasonable price.¹

Alienation of lands and timber by sale, pre-emption and homesteading continued, however, for several decades. In 1896 timber lands were defined and the sale of them prohibited, but this policy was not strictly enforced until 1912. Moreover, it remained possible to acquire forest land that had had the timber removed until relatively recently. But between 1865 and 1907 when the granting of harvesting rights was temporarily suspended, the Province provided rights to harvest timber through several kinds of temporary tenures and inherited some later from the federal government. Most

¹ H. N. Whitford, Ph.D. and Roland D. Craig, F.E. Forests of British Columbia, Committee on Forests of the Commission of Conservation of Canada (Sir Clifford Sifton, K.C.M.G., Chairman), Ottawa, 1918. Much of the documentation for this Appendix has been drawn from this excellent source (particularly Ch. 4), and from the thorough review of government policy and events in the Fulton Report 1910.
of these cutting rights have since lapsed, but those that are still held are a significant source of timber for the forest industry today, especially in the southern coastal region of the Province. This Appendix offers a brief review of the evolution of these tenures with emphasis on their purpose and the public interest in them.

**LEASES**

The first alienations of harvesting rights under the *Land Ordinance* of 1865 were timber leases which carried no conditions with respect to size, payments to the Crown or terms. The only fixed condition was that leases were available only to those “actually engaged” in harvesting timber, as stipulated in the *Ordinance*. The *Ordinance* also provided however, that leases might be subject “... to such rent, terms, and provisions as shall seem expedient to the Governor.”, and under this provision and subsequent enactments various Crown charges, terms and other conditions were later imposed.

Important amendments to the *Land Act* in 1888 limited the term of new leases to 30 years. Four years later it was reduced to 21 years, and in 1901 the *Act* provided for the renewal of leases for consecutive periods of 21 years, subject to the then existing conditions, rentals, royalties and regulations.

The first Crown charges were in the form of annual ground rentals, which by 1888 varied from 5¢ to 10¢ per acre. In the amendments of that year rentals were fixed at 10¢ per acre. Nine years later rentals were set at 15¢ per acre, with the condition that rental and royalties together could not be less than 50¢ for each acre under lease. By 1906 rentals were 25¢ per acre and they have since been raised to 50¢.

Before the legislative changes of 1888 royalty on timber harvested was fixed at 50¢ per Mfbm and applied at this rate to all leases granted after 1879. Half of the royalty was refundable upon export of spars, piles, shingles and manufactured lumber from the Province until 1900 (on shingles until 1905).

The legislation of 1888 made clear the intention that leases were designed to encourage manufacturing in the Province. It was required that each lessee operate a sawmill with a 12-hour capacity of at least 1 Mfbm for each 400 acres under lease. There was apparently some difficulty in enforcing the spirit of this provision, and subsequent amendments made it more explicit. In 1892 it was
required that the mill be appurtenant to the lease and a deposit
equivalent to 10¢ per acre was necessary as a guarantee that the
mill would be built. In 1897 the lessee was required to actually
operate the mill for six months each year, and the allowed size of
the lease per 1 Mfbm daily capacity was reduced to 100 acres.
Provision was also made for non-mill owners to obtain leases, but
they were required to pay a rental 5¢ above the 10¢ per acre paid
by mill-owners at that time.

The encouragement to manufacturing was strengthened in 1901
when legislation required that all timber cut on Crown lands be
manufactured in the Province — a policy that has been followed
ever since. The Timber Manufacture Act of 1906 extended this
requirement to timber harvested from lands Crown granted after
that date.

The principle of competitive bidding for harvesting rights was
introduced in 1891 with provisions that allowed lands surveyed by
the government to be put up to tender. The following year it was
provided that all leases should be put to competition.

The granting of timber leases was discontinued in 1905. By then,
nearly 688 thousand acres had been alienated in this way. Today,
this area has declined to 107 thousand acres, covered by 95 leases
(see Table 1). They now bear royalty as specified in the Forest
Act (see Table 4), and annual rental at 50¢ per acre. Those that
lie outside Tree Farm Licences are subject to the forest land tax at
1 per cent of assessed value and to forest protection tax of 12¢ per
acre. Those within Tree Farm Licences bear the forest protection
tax at the equivalent of 10¢ per cunit of sustainable yield. Thirty-
three of these leases expired between 1964 and 1966, the remainder
in 1972. All were renewed for 21 years.

Around the turn of the century a demand for pulp timber began
to emerge, and the government made provision for pulp leases. Pulp
lessees were required to build a pulp mill in the Province with a
capacity of one ton of pulp (or ½ ton of paper) per day for each
square mile under lease, and to operate it at least six months per
year. These were granted for 21 years, renewable, subject to rentals
of 2¢ per acre and royalty of not more than 25¢ per cord of
pulpwood. Timber not used for pulp carried the same royalty as
timber cut on other leases, and all timber harvested was required
to be manufactured in the Province.

Pulp leases were granted only between 1901 and 1903. Only one
paper mill was operating by 1903 (at Port Alberni) but some 353 thousand acres were so alienated; of which 301 thousand acres in 33 leases remain outstanding today. These pulp leases average over 9,000 acres in size—far larger than the other old temporary tenures (see Table 1). Apart from ground rentals which are only 11¢ per acre, the Crown charges are similar to those applied to timber leases. All existing pulp leases were renewed for 21 years in 1954.

**LICENCES**

Leases were designed to meet the needs of mill-owners. Their size was constrained by the capacity of the appurtenant mill; strong incentives were provided for processing; mill operations were required and payments for timber were low. The *Timber Act* of 1884 introduced timber licences to serve the requirements of the large number of independent loggers. To prevent speculation in timber, the first licences were very restrictive: they were limited to 1,000 acres; any person could hold no more than one; they were not transferable; they could be cancelled if logging did not proceed; and their term was only four years. They were originally designed to be more lucrative to the Crown than the leases of the time. Licences were sold for $2.50 per acre, annual rentals were $10 and timber dues were payable at 15¢ per tree plus 20¢ per Mfbm. Mill ownership was never a requirement for licences.

The *Act* of 1888 introduced special timber licences. These were subject to the same limitations as the earlier licences but the term was for only one year, renewable at the discretion of the Chief Commissioner of Lands and Works; the annual fee was fixed at $50; and royalty at 50¢ per Mfbm was the same as that paid on leases. Some changes in the provisions governing special timber licences were made before the radical reforms of 1905. In 1901 the area was reduced to 640 acres (a square mile) and the fee increased to $100. This was increased again in 1903 to $140 and $115 west and east of the Cascade Mountains respectively, and in that year also the term was increased to a maximum of five years upon payment of all rentals as a lump sum in advance. In 1894 the first provision was made for “staking” lands for licences—a procedure whereby a claim could be established by planting a stake at a corner of the area applied for.
About this time, pressures began to build for changes in policy that ultimately changed the whole forestry picture in the Province. The lumber industry was experiencing a period of prosperity accompanying a general economic expansion generating a growing demand for timber. Existing licence holders were agitating for extension of their terms. Apprehensions about future supplies of timber in the United States were becoming widespread, and the great white pine forests of Eastern Canada were nearing exhaustion. Construction of the Panama Canal began in 1904 with profound implications for the lumber industry of the Pacific coast. The Government of the Province began to realize its enormous wealth in timber, yet public revenues were heavily strained.

The circumstances of the time were later explained by the Minister of Lands, The Honourable W. R. Ross, speaking to the Legislature in 1912.

In 1905 the administration realized that the leasing system was an extremely bad one, the timber being sold for twenty-one years ahead at the low prevailing rates. It was obvious that the public timber was being sold at a sacrifice price. It was decided to substitute a constructive forest policy which would revolutionize conditions in the province. This marked the beginning of the modern epoch in forest policy.

For years the province had been in bad way. The public revenue was insufficient. Development was starved for want of money. The credit of the province was low and immigration had been reduced to a trickle. These conditions could not do more than retard the progress of the lumbering industry, but the cut was small. So also was the forest revenue, which was only $455,000 in 1904. There existed then the extraordinary situation that in a country of magnificent forest resources the revenue derived from them was only about one-seventh of the scant provincial revenue of $3,000,000. The forest wealth of the province was locked up, it was no help to the progress of the young community. The province was starving for capital and had no means of drawing upon its natural wealth. And yet the rest of the continent was even then beginning to realize that the timber supply was insufficient; in fact a shortage, a timber famine, was predicted in thirty years by those in a position to know.

Stumpage in consequence was being sought almost feverishly by investors. Here in British Columbia was the timber; here the crying need for public revenue to open up the province, for capital to invigorate our anaemic industries and there, throughout the older regions of the continent, was the capital we needed, capital which was seeking to invest itself in the fast diminishing western reserve of timber that
in consequence of the exhaustion of the eastern forest was destined to control the lumber markets of America before another thirty years should pass.

It was a moment of danger for the province. Modern history is full of sad examples of young countries determined to get capital at any price, at any ruinous sacrifice of their future.

The administration of 1905 nailed its colours to the mast; its motto was 'public ownership of forests.' But it was essential to encourage one of the mainstays of the province, the lumbering industry; also it was essential to give a supply of timber for the future operations of existing mills; to encourage by the same means the building of new mills.²

The action taken by the government in 1905 is described in the more restrained language of the Fulton Report of 1910.

The legislative problem was solved in a most ingenious manner by the abolition not only of the leasing method but also of the limited, non-transferable licenses, and by the adoption of an entirely new principle in forest policy. That principle was the reservation of a share in the increment of value of standing timber as it should accrue. It is true that other Provinces in Canada had attempted something of the kind by leaving uncertain the amount of royalty that they would levy in future years upon the timber sold by them under their auction-licensing systems. But tardy recovery of some of the public's share in the risen value of the licensed timber bears no comparison, as a policy, with the effective and subtle control that the British Columbia Government retained in 1905 over future alienations of Crown timber. This power was secured by the issue of transferable licenses, options to cut timber during a 21-year period on specified square miles of forest, and the essence of the idea lay in the fact that it was left entirely to the Government to fix, from year to year, what annual payments should be made for the renewal of these options.

Although the new licenses were thus subject to any alteration in either rental or royalty that the Government might at any time impose, they were taken up with great confidence both by operators and investors. In fact the opportunity to acquire standing timber in British Columbia caused recognition of its value to burst with suddenness upon the lumber interests of the continent. From less than fifteen hundred the number of licenses sprang rapidly within three years to over fifteen thousand.

Though the effect upon the public revenue was most gratifying the insatiable nature of the continental demand for standing timber

aroused a certain uneasiness, and the Government, at the end of 1907, decided to impose a reserve upon all remaining Crown timber. The fifteen thousand licenses continued, however, to exist, and to-day we estimate that 9,000,000 acres of merchantable forest are covered by them.  

The authorities of the day were highly satisfied with the fruits of their innovative policies:

Two things are therefore plain; one, that the value of standing timber in British Columbia is destined to rise to heights that general opinion would consider incredible to-day; the other, that under careful management heavy taxation need never fall upon the population of the Province.

The profits from a permanent Crown timber business should make British Columbia that phenomenon of state craft and good fortune—a country of "semi-independent means."  

In the economic recession that followed 1907 many licensees allowed their licences to lapse and, in spite of special provisions to enable reinstatement through payment of back rentals, many more defaulted during the Great Depression (see Figure, p. 12).

Of the more than 15 thousand licences taken up by 1907, 2,219 remain in good standing today and they still comprise by far the most important category of old temporary tenures (see Table 1). They now bear annual rental of 50¢ per acre, forest protection tax, forest land tax on those outside Tree Farm Licences and statutory royalty. Most (but not all) carry a term of only one year.

Between 1919 and 1921 certain special timber licences were converted to pulp licences under provisions of the Forest Act, so that their owners could gain some of the advantages that holders of pulp leases had over holders of timber leases. The annual renewal fee was set at half that on special timber licences, and the royalty was 40¢ per cord (which was nevertheless higher than the 25¢ payable on timber cut on pulp leases). If saw-timber is removed, the royalty and rentals payable are subject to the same upward adjustment as in the case of pulp leases. These licences are subject to forest protection tax and forest land tax in the same way as timber licences. There are now 221 pulp licences covering 103 thousand acres—the smallest category of old temporary tenures.

---

TIMBER BERTHS

Under the Terms of Union under which British Columbia entered Confederation and became part of the Dominion of Canada in 1871, the Dominion undertook to construct a railway to connect the western seaboard with the railway system of Canada. In return, British Columbia agreed to transfer to the Dominion certain public lands in aid of the railway construction. After some difficulties were resolved, the Province conveyed to the Dominion a belt of land extending 20 miles on each side of the main line of the Canadian Pacific Railway—some 17,000 square miles. Because some of this land was considered valueless, the province conveyed “lieu lands” in addition, amounting to 5,470 square miles in the Peace River area (the “Peace River Block”).

In 1930, following a Royal Commission inquiry, the Dominion returned to the Province the Dominion Railway Belt and the Peace River Block, subject to any alienations made during the period of Dominion control. Timber harvesting rights granted by the Dominion in the form of timber berths thus came under provincial administration.

In 1910 the railway lands were roughly estimated at 11 million acres, some 1.3 million of which were under federal timber licence or permit. By January 1973, the area covered by timber berths had declined to 164 thousand acres in 105 berths. These berths were originally subject to special Crown levies, but by Order-in-Council in 1968 rental and royalty rates as well as forest protection tax and forest land tax were made the same as those applied to timber licences.

RELEVANT PROVISIONS SINCE 1910

Appreciation of the circumstances surrounding old temporary tenures requires an understanding not only of their origin but also of subsequent events that have changed the economic and institutional context. In 1907 when alienation of harvesting rights was sus-

5 The conveyance of 3,000 square miles on Vancouver Island in aid of the Esquimalt and Nanaimo Railway, and a number of other railway grants, were separate transactions and are not of direct concern here.

6 In addition to the tenures discussed above, there were other early alienations of harvesting rights, such as handloggers’ licences and hemlock tanbark leases, none of which survive today.
pended, the government passed an Order-in-Council reserving all unalienated timber in the Province. The Royal Commission of 1910 had only very crude information about the existing forest resources, but they estimated that two-thirds of the merchantable forest had been alienated, leaving the other third — perhaps 3.75 million acres ("a pure conjecture") in the forest reserve. They guessed that there was 240 million Mfbm of merchantable timber in the Province and that the current harvest was less than 1 million Mfbm.

With so much timber already alienated to meet future needs, the Fulton Commission recommended that the forest reserve be kept intact and that no further alienations take place except in very special circumstances. Perceptively, they saw the possibility of monopolistic tendencies among licence holders, and to forestall this it might be expedient to put new timber on the market. Or, small fractional areas of reserved timber adjoining alienated timber might best be made available for harvesting with the lease or licence. For such cases, they recommended an appraisal system to establish a minimum price, above which competitors might bid.

After 1907, there was no way in which new alienations of Crown timber could be made, but the Forest Act of 1912 made provisions for the innovative system recommended in the Fulton Report. These new licences became known as "timber sales", and gradually took on much greater importance than the Commissioners had envisaged. Before World War II the harvest from timber sales had risen to more than one-third of the combined cut from leases and licences.

These timber sales, typically for terms of two or three years, were subject to standard royalty, the same rental per acre as applied to timber licences (21.88¢ on the Coast and 15.62¢ in the Interior), and forest protection tax. They also introduced important innovations in public forest management. First, each sale was subject to special conditions written into the contract to ensure proper harvesting, protection and forestry practices. Second, in addition to royalty (which has since been abolished for these sales), they were subject to stumpage charges. The Forest Branch's appraisers, by estimating the value of the harvested timber and subtracting the estimated costs of harvesting and transport would establish a minimum acceptable price or "upset price" above which competitors (except in cases of very small tracts) might bid. This was the origin of the
appraisal system now used in determining the charges for most Crown timber made available for harvesting.

Prior to 1946 then, most timber harvested in the province was still cut on old temporary tenures which were not subject to close government management and (apart from the relatively small harvest from private lands) the rest came from short-term timber sales and its variant called pulpwood timber sales.

Through acquiring strategically-located old temporary tenures, many companies were able to establish advantageous positions in competing for nearby Crown timber. Evidence presented to the second Sloan Commission reveals the high competitive advantage that some companies enjoyed by effectively controlling access to Crown timber. In result, competition for such timber often did not occur, and the sales were made at appraised “upset” prices. To the extent that such strategic acquisition of old temporary tenures occurred, at least part of the price paid must be credited to the expectation of lower-priced Crown timber nearby.

One other significant policy had been introduced prior to the second Royal Commission enquiry in 1945. Twenty years earlier, in 1925, the government introduced a new concept of forest reserves. Crown forest land was, for the first time, to be managed for continuous production of wood crops, and a fund was created for the development of reserved areas. By 1945, 44 forest reserves had been established, amounting to 6.6 million acres on the coast and 12.3 million acres in the interior. In these reserves no agricultural or other development was permitted, and timber was alienated by timber sales. However, the Sloan Report of 1945 reported that little had been done to ensure sustained yield on these areas.

The first Sloan Report in 1945 was directed primarily to two related problems. First, how could the Crown forests be brought under a system of planned forest management following sustained yield principles? Second, how could operators be provided with assured, long-term supplies of timber sufficient to encourage them to undertake the heavy investments associated with capital-intensive utilization plants? Sloan’s recommended solution, which was adopted, was to create two kinds of “working circles” to be managed according to the principles of perpetual sustained yield.

One of these forms, which became known as Public Working Circles and later as Public Sustained Yield Units were to be managed directly by the Forest Service to serve the needs of independent
logging operators. The Forest Service would calculate the annual allowable harvest and make it available to loggers through the medium of timber sales. There are now 94 Public Sustained Yield Units in the Province.

The second was conceived as a partnership arrangement between the government and timber companies who did not hold enough timberland in freehold or old temporary tenures to serve their long-term wood requirements. Companies with holdings in a particular area were to have sufficient nearby unalienated Crown forest combined with their own tenures to provide raw material in perpetuity in sufficient quantities to meet the needs of large utilization plants. The whole unit would be managed by the company on a sustained yield basis according to working plans approved by the Forest Service and these management responsibilities were considered very onerous at the time. These “private” working circles were called Forest Management Licences and later Tree Farm Licences. Together, these Public Sustained Yield Units and Tree Farm Licences now cover all the Crown forest land in the Province.

After some initial hesitation, most of the large forest companies responded enthusiastically to this arrangement, and today there are 34 Tree Farm Licences in the Province, 10 of them exceeding 500 thousand acres and 5 more than a million acres. Firms in advantageous geographical positions applied for and received rights to adjacent unalienated Crown timber which was added to their own holdings to form sustained yield units. They continued to pay royalty on timber harvested on old tenures enclosed within the management unit, and the other Crown timber was sold at appraised “upset” stumpage prices (competition being precluded). New companies sometimes acquired holdings of old temporary tenures to put themselves in a position for the partnership arrangement, although some of the later Tree Farm Licences in the interior are comprised almost entirely of stumpage-bearing timber. Of the 34 Tree Farm Licences held today, 20 are comprised of more than 95 per cent Crown land over which the licencee had no prior tenure.

As a result, more than half of the old temporary tenures are now within Tree Farm Licences. The accompanying Table indicates the number and acreage of each category of old temporary tenures within and without Tree Farm Licences in January of this year. In the Vancouver Forest District, where two-thirds of the total acreage in old temporary tenures is located, the proportion within
OLD TEMPORARY TENURES WITHIN AND OUTSIDE TREE FARM LICENCES
(January 1974)

<table>
<thead>
<tr>
<th></th>
<th>Within T.F.L.'s</th>
<th>Outside T.F.L.'s</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>number</td>
<td>acres</td>
<td>number</td>
</tr>
<tr>
<td>Timber Licences</td>
<td>1,222</td>
<td>590,999.12</td>
<td>997</td>
</tr>
<tr>
<td>Timber Berths</td>
<td>5</td>
<td>3,787.80</td>
<td>100</td>
</tr>
<tr>
<td>Timber Leases</td>
<td>71</td>
<td>81,847.80</td>
<td>24</td>
</tr>
<tr>
<td>Pulp Licences</td>
<td>165</td>
<td>72,723.18</td>
<td>56</td>
</tr>
<tr>
<td>Pulp Leases</td>
<td>18</td>
<td>195,792.92</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,481</td>
<td>945,150.82</td>
<td>1,192</td>
</tr>
</tbody>
</table>

*Source:* B.C. Forest Service.
Tree Farm Licences is considerably higher (about 63% of the total acreage).

The harvesting of old temporary tenures both within and without Tree Farm Licences must be carried out according to the Forest Service's logging guidelines which apply to all operations on Crown land. These guidelines are designed for protection of the environment, for accommodation of other forest uses, and for fire prevention and reforestation. In addition all operations within Tree Farm Licences must proceed according to 5-year working plans and more
detailed short-term logging plans approved by the Forest Service. In seeking these approvals, Tree Farm Licence holders normally submit inventory data on their old temporary tenures, even though this information is not used for royalty assessment purposes. Old tenures outside Tree Farm Licences are not subject to the same rigorous control, and while the Chief Forester may demand a logging plan, inventory information is not usually submitted in detail.

As the forest industry of the Province has evolved and become concentrated into fewer, larger and more vertically integrated corporations, the holdings of old temporary tenures has become highly concentrated in the hands of a few companies. Today, about 80 per cent of the total acreage is held by only 5 firms and their subsidiaries.

ROYALTY AND APPRAISED VALUE

We have already noted the governments’ frequent adjustments to royalty rates in an attempt to respond to changing values of timber through time. The upper graph in the accompanying figure illustrates, by way of example, the changes in royalties applied to three of the more important categories of timber in the Vancouver Forest District over the last four decades.

We have referred, also, to the government’s intent to approximate the value of standing timber in setting royalty rates on Crown timber. The lower graph in the accompanying figure provides a rough indication of the government’s success in pursuing this objective, by tracing over the period the royalty rates applied to major species as a percentage of the corresponding average appraised stumpage prices of other Crown timber in the Vancouver Forest District. This representation is faulty insofar as royalty-bearing timber is likely to be of greater value than timber which bears appraised stumpage charges and the relation between the two may not be constant through time.

However the lower graph does indicate considerable fluctuations in the relationship between royalty charges and appraised stumpage prices over the years. A comparison of the upper and lower parts of the figure suggest that these fluctuations are attributable less to the occasional changes in statutory royalties than to changes in timber values. Thus the curves in the lower figure reach a peak in
the depths of the Great Depression, then fall in spite of upward revisions in royalties as timber values rise thereafter. The substantial upward revisions in royalty rates in 1968 reversed that trend only slightly. Throughout, royalty charges have, of course, been held well below average appraised timber values. Since statutory royalties permit no variation around the average (as does appraised stumpage) royalty rates in the order of average appraised values would have left harvesting of much of the royalty-bearing timber uneconomic.

Implementation of our recommended change in royalty assessments would have the effect of bringing royalty charges into a constant relationship to appraised stumpage values, except to the extent that the value of timber on old temporary tenures changes relative to that on other Crown lands.