



WESTERN AUSTRALIAN
FORESTS

What Reforestation Is Doing
Growing National Asset

SPEECH

delivered by

HON. J. C. WILLCOCK, M.L.A.
(Premier and Minister for Forests)

in the

Legislative Assembly,
Tuesday, 17th October, 1939

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THE MINISTER FOR FORESTS (Hon. J. C. Willcock—Geraldton): As a period of 20 years has elapsed since the Forests Act, 1918, was placed on the statute-book, it is fitting that I should briefly review, for the information of the House, the progress made in this important phase of the Government's activities. Timber, it is interesting to note, was the first product exported from the Colony of Western Australia. Naturally the extensive hardwood forests of the South-West were regarded by early settlers as an inexhaustible source of supply, and unfortunately no adequate steps were taken until after the passing of the Forests Act in 1918 for the conservation or protection of the valuable national heritage represented by those forests. Records show that Western Australia has exported jarrah and karri to the value of £33,500,000, to which amount must be added the value of these timbers used locally. Thus, on a conservative estimate it would appear that timber to the value of over £50,000,000 has been produced from the forests of the South-West.

CLASSIFICATION.

In 1918 our Forests Department consisted of one trained forester and a small staff of rangers who were engaged principally in revenue-collecting and in policing duties.

The newly-formed department was faced with a tremendous undertaking in restoring very large areas of cut-over forest, badly damaged by repeated fires. The first major work undertaken was a classification of the timber lands of the State, and that work was carried out in co-operation with the Lands Department. As a result it was found that the forest area was very much less than that indicated by early estimates. To previous Labour Governments must be given the credit for dedicating permanently to the production of timber all good-quality forest remaining in the hands of the Crown. We now have 3,367,000 acres of State forests.

REGULATION OF CUT.

From the figures obtained in the course of this classification work it has been possible to arrive at a reliable estimate of the total volume of mature jarrah and karri log-timber remaining. It would appear that if reforestation measures and control of cutting had not been introduced, our main sawmilling industry would have come to an end within a period of approximately 30 years. To meet this position, working plans have been prepared regulating the output of log-timber from each section of State forest; and the co-operation of saw-milling firms has been secured in a reorganisation of saw-

milling operations, which has resulted in the industry being placed on a sustained-yield basis, thus ensuring continuity of supplies and of employment. The importance of this policy of stabilisation has been reflected in the manner in which the timber industry has weathered the world-wide trade depression of recent years. It is in a position to-day to formulate plans for meeting the difficult trade conditions which are to be anticipated during the war period.

REGENERATION.

Turning now to regeneration of jarrah and karri forests, simultaneously with the progress on the management side, large-scale silvicultural work has been undertaken to develop new crops of jarrah, karri, and other species of timber on cut-over areas. The work of the department in developing a technique to secure satisfactory regeneration by natural means has been highly successful; and we now have 400,000 acres of State forest carrying a healthy crop of young jarrah trees, each of which has already reached the small-pole stage. In the karri forest a new growth has been established on 22,000 acres.

I have given a short historical sketch of the activities of the Forests Department since the passing of the Forests Act, 1918, and dealt with the regeneration of jarrah and karri which has been undertaken since that time, and given the acreage dedicated permanently in the State to forestry. The area is over 3,000,000 acres. Jarrah and karri are our two main commercial timbers, but we have other timbers, which might be termed sidelines, in connection with which the Forests Department has taken action.

MALLET.

So far as mallet is concerned, new methods have been developed as a result of which it has been found possible to establish cheaply plantations of brown mallet in the Great Southern districts by direct sowing; in the Narrogin district approximately 12,000 acres of waste poison land has been converted into mallet plantations, which will yield a highly profitable return from tanning bark. Tests carried out by the Forest Products Division of the Commonwealth Council of Scientific and Industrial Research have shown that the timber of this tree is the best substitute for imported hickory and ash for such articles as tool handles. It is expected that these

plantations will prove of great value for timber, as well as for bark when the trees arrive at maturity.

SANDALWOOD.

With regard to sandalwood, owing to the incursion of rabbits, sandalwood regeneration on a large scale has proved impracticable, but this industry has been regulated so that a maximum return has been secured to the State for this valuable commodity, which had been sold at a nominal rate before the passing of the Forests Act, thus resulting in serious loss to the State and consequent gain to Chinese interests in the Far East. However, the business of marketing sandalwood has been placed on a satisfactory basis. The market requirements of China and other countries are regulated in such a way that an eminently satisfactory price is now obtainable for our sandalwood. Before war broke out in China, sandalwood provided a remunerative source of employment for many people throughout the State but, owing to the war, the sale of sandalwood in that market has been severely restricted. It is surprising, however, that despite the war conditions in China, a fair amount of sandalwood has been exported there. Our stocks, which had reached almost gigantic proportions some years ago and in respect of which the Government made advances up to £50,000 or £60,000, have all been marketed, and we now have on hand only sufficient stocks to cater reasonably for China's present requirements.

PINE PLANTING.

With regard to pine planting, notwithstanding our considerable exports of hardwoods and the manner in which we have learned to use jarrah and karri for many purposes for which softwoods are regarded as essential in other countries, we still find it necessary to import approximately £250,000 worth of pine timber each year. A large proportion of this importation can be produced on land in the State which would otherwise be lying idle. The Forests Department has succeeded in developing pine planting practice on special lines to meet our somewhat difficult climatic conditions and at the same time make use of relatively poor soils. We now have 11,700 acres of effective plantations; and already one case mill is working regularly on thinings obtained from these plantations.

SUMMER FIRES.

The greatest single problem in all reforestation work in this State, as in many other regions of the Commonwealth, is control of summer fires. Because our main timber trees, such as jarrah and karri, are not killed outright by fire, there has been a general failure to realise the cumulative damage that has occurred in our forests in the past owing to frequent summer fires. These fires not only hold back and damage young growth, but may reduce the volume of mature timber available for saw-milling in virgin forest by as much as 30 per cent., owing to dry sides and burnt-out butts allowing attack by pin-hole borers and heart rot. Prior to 1918, the most serious cause of severe forest fires was the accumulation of debris from falling operations. This debris, catching alight in the summer months, causes a conflagration which is quite unmanageable and which does great damage. One of the first activities organised by the newly-formed department was the systematic burning of all lop and top from falling and hewing operations in the spring and autumn months of each year. This operation, known as top disposal, is regularly carried out each year, over areas of between 40,000 and 50,000 acres, at a cost of only a few pence per acre. Before the tops are lit, the debris is cut away from around the bases of all good immature trees remaining on the cut-over areas.

Other preventive measures include extensive controlled burning of firebreak belts and non-productive flats and swamps scattered through the forest. Despite the wide advocacy of controlled burning as a fire prevention measure by many farmers, the Forests Department is practically the only landholder which carries out this work systematically on a large scale every year, and tens of thousands of acres are burnt in spring and autumn months. All this burning is done between cleared fire lines, so that the extent of the burn is at all times under proper control.

LOOK-OUT TOWERS.

Despite all the precautionary measures taken, outbreaks of summer fires will occur and assume serious proportions unless dealt with promptly. It is encouraging to note a decided drop in the number of summer outbreaks in fire districts as the work of the department and its value to the community is becoming better appreciated; nevertheless

the employees of the department are called upon to suppress some hundreds of fires each summer. I notice that people who go picnicking are now much more careful in extinguishing fires. The work has been brought to a high degree of efficiency by an organisation which provides for the early detection of any outbreak of fire from lookout towers constantly manned in the summer months. The Forests Department now has 20 fire lookout towers, varying from 30 feet in height on prominent bald hills to structures 130 feet in height where it is necessary to build towers high enough to see over the trees immediately around the tower site. These towers are linked with district offices and the homes of the staff and workmen by a departmental telephone system of a specially cheap type of tree line construction, now extending over a length of 1,060 miles.

Mr. Doney: A very sound system it is too.

The MINISTER FOR FORESTS: Yes. Working parties engaged on ordinary duties in the forests are kept in constant touch with the towers by temporary telephone lines, and are equipped with utility trucks fitted with specially devised forest fire-fighting equipment. Therefore, as soon as smoke is sighted in or near a forest, word is telephoned to one of these mobile gangs, which is able to reach the scene of the fire in an average time of less than 40 minutes, and have it under control before it reaches unmanageable proportions.

ROADS AND FIRE LINES.

To provide access for fire control and general management, the Forests Department has constructed and maintains 2,600 miles of roads and 6,300 miles of fire lines. Most of the latter are suitable for use by motor vehicles in the summer months. Roughly speaking, we have about 10,000 miles of roads constructed through our forest areas for the purpose of preventing and fighting fires. As the area under fire control has extended to the extreme South-West, increasing reliance is being placed on the co-operation of settlers in and around forests for assistance in fire prevention and suppression. The department gratefully acknowledges the valuable and increasing assistance which is being rendered by these friendly neighbours. They have, of course, as much to gain as has the Forests Department; but we recognise with gratitude their hearty co-operation.

As a result of the measures which I have briefly outlined, the department has been very successful in excluding severe summer fires from regenerated, planted and protected forests. Annual losses have been kept down to a very small fraction of 1 per cent. of the area under protection; the area damaged by fire being in all only a few hundred acres each summer. It is desirable, however, that members should realise what this annually recurring fire menace means. If vigilance is relaxed for one summer or if for some cause the staff of the department is reduced below a safe level, the work of 20 years may be wiped out in a few days. As one measure to guard against such a contingency, settlements of forest workers have been established in the forests, and the department now has 175 regular employees, including staff, resident in departmental houses. Little groups consisting of about half-a-dozen cottages have been established, and the occupants maintain communication and their services are available in case of fire.

IMPORTANCE OF FIRE PROTECTION.

I think we can congratulate the department on having done a good job in the matter of fire protection. Members will probably realise, as I did vividly during a trip to the Eastern States, the immense importance of fire protection. When I was in the East six or seven months ago, there had just been large bush fires in the southern part of New South Wales and in Victoria, as a result of which forest timber to the value of £15,000,000 or £20,000,000 was destroyed in two or three days because of the abnormal conditions that existed at the time, and about 40 people lost their lives. That is sufficient to indicate how necessary it is for us to exercise adequate precautions to obviate such a catastrophe. I visited the hills district out of Melbourne to see what had happened there. Where there had been a smiling village consisting of 20 or 30 cottages, I saw only debris, three or four brick chimneys, the remains of 1,000 gallon tanks, and twisted iron. Tremendous damage was done in that area. I was told that practically the whole of the mountain ash forests of Victoria had been wiped out, involving the destruction of 2,000,000,000 super feet of log timber which represented sawmilling supplies for 21 years. The Forests Department of Victoria estimated that it had lost about £2,000,000 in royalties and that the tim-

ber trade would have produced sawn and seasoned timber worth £10,000,000 to £15,000,000. Mountain ash is rather different from our karri, because, once it is burnt, that is the end of the tree; it never recovers. A small proportion of the timber may be utilised, but after two or three years it becomes useless.

FIRE-FIGHTING DEMONSTRATION.

Following that disaster, the Victorian Minister for Forests came to Western Australia and made a thorough inspection of our forests and fire-fighting appliances, and studied our legislation. The Minister for Lands accompanied him in the forest areas for two or three days, and a demonstration of fire-fighting was staged for his benefit. I think the Minister, to use a colloquialism, got the wind up when he saw how far the fire was allowed to spread before being attacked. He said, "I thought it was gone." By the methods employed, however, the fire was conquered in half-an-hour and very little damage was done. So impressed was the Minister with what had been done in Western Australia that, in the report of the Royal Commission that investigated forest conservation and fire prevention in Victoria, he advocated our system of fire prevention which, I think, will be adopted as the best that exists in Australia. We do not talk about ourselves very much, but the technique developed for the conservation of our timber resources, and particularly its protection from the ravages of fire, is certainly appreciated in Victoria. Imitation is said to be the sincerest form of flattery, and when we find a Minister coming from another State and adopting our ideas, I think the officials of our department are deserving of commendation for the manner in which they have carried out their duties.

In many ways the Forests Department is pioneering forestry development on new and original lines. This means that all phases of practice have to be carefully examined to test their effectiveness and new methods evolved to meet changing conditions. Out of this research work on the silvicultural side, a number of important discoveries have already emerged, and on the utilisation side considerable help has been given to the sawmilling industry in

the matter of improved sawmilling practice, better seasoning methods, and standardised grading rules.

FIREWOOD AND MINING TIMBER.

During recent years the expansion of the goldmining industry in areas where the pastoral industry is established has given rise to a conflict of interests between firewood and mining-timber getters and pastoralists. The mines require timber for the purpose of fuel and for timbering in shafts; the pastoralists need trees for shade and for top-feed during drought conditions and timber for wells, fences and buildings. The department has been successful in bringing these conflicting interests together, and I gather that the decision reached is eminently satisfactory to both parties, each of them recognising that the other has rights in the matter of these natural resources. When I tell members that half-a-million tons of firewood is used on the goldfields each year, they will appreciate what a large number of trees have to be cut to permit of the industry being carried on. From the standpoint of fuel, the interest of the mining industry must be conserved. A long-range policy has been adopted, and although the industry has been carried on for 40 years, resources of timber are still available for its use.

GROWING NATIONAL ASSET.

The general position may be summed up by stating that, during the past 20 years, forestry in Western Australia has emerged from a position of complete neglect to one of the most important functions of government organised on sound and economical lines. The great change that has been wrought in our forest estate has been helped to a very considerable extent by the generous grants from State and Commonwealth relief funds, but this expenditure, in addition to providing healthy work for the unemployed—1,500 were employed at the peak period—has created a great and growing national asset which, in the course of years, will provide an ever-widening field for industrial activities. We hope the time is not far distant when we shall see factories established to convert the thinnings from our forests into pulp and cellulose products for the manufacture of paper, cellophane, artificial silk and similar articles. This work of converting the product into marketable commodities is being carried on in collaboration

with the Forests Products Laboratory established by the Commonwealth in Melbourne. This is a possible development to which the Government is giving careful attention. In time I am sure that the timber resources of this State will be utilised for paper making and allied industries.

When in the Eastern States I had an opportunity to visit the new paper mills established about 100 miles south-east of Melbourne. A large factory has been built that will make Victoria almost independent of importations of paper.

Mr. Sampson: It will be much appreciated now.

The MINISTER FOR FORESTS: Yes. That factory was not established to manufacture writing paper; a branch of the industry for that purpose exists in Burnie, Tasmania. Away out in the forests is a factory with about 300 employees engaged in the manufacture of printing paper. Here is an industry established in what was an unsettled district in East Gippsland.

FOREST FINANCE.

In reviewing the immense amount of work done by the department and the asset that is being built up for the State, the public might well wonder where all the money comes from. Most members are aware that under the Forests Act passed in 1918, provision was made for three-fifths of the net revenue of the department in every financial year to be placed to the credit of a special account at the Treasury known as the reforestation fund. Money from this source has been the chief means of enabling us to proceed with our reforestation work on systematic lines for the last 20 years. Previous to the passing of that legislation, every penny that could be extracted from the timber industry was paid into Consolidated Revenue. Nothing was put back into the industry; no conservation was undertaken. The expenditure from the fund last year amounted to £49,760, and there is a credit balance in hand.

The expenditure on pine planting throughout has been a charge on loan fund: and where money has been provided from State loan funds, interest and sinking fund have been charged to the reforestation fund before the three-fifths was taken for forestry purposes. The other two-fifths, of course, goes into revenue.

ASSISTANCE TO TIMBER INDUSTRY.

To meet difficult trade conditions arising out of the depression and to explore new markets for Western Australian hardwoods, the Government in 1931 arranged that the Forests Department and Railways Department should act in unison in assisting the timber industry. That industry, from the exporting point of view, almost went out of existence, and in order to cheapen costs and encourage export, a 20 per cent. rebate of royalty on log timber obtained from Crown lands was made. This rebate was continued until the 31st December, 1937, when it was reduced to 16 per cent. under an arrangement for a gradual reduction on a sliding scale over a period of four years. Unfortunately, prosperous times for the industry came to an end, and we discontinued the gradual reduction. At present the rebate on royalties and railway freights is about 12 per cent. Further assistance was given from the 1st July, 1934, by way of a special rebate of 5s. per load on sawn timber from Crown lands exported beyond Australia. This special rebate was reduced in July, 1936, to 2s. 6d. per load, and was discontinued in December, 1936. A rebate of 25 per cent. on inspection fees on sawn timber approved in 1931 and extended in 1933 to include hewn timber for export is still in operation. Rebates on royalties and inspection fees allowed to the 30th June last amounted to £156,147. That amount represents the rebate over the eight years. Similar assistance has been rendered by the Railway Department which, in July 1931, granted a rebate of 12½ per cent. on railway freights on sawn timber for export. When any Government department gives away revenue, the result is reflected in the finances of the State, and this is one of the reasons why the Railway Department has experienced difficulty in making ends meet. If rebates are taken off and deductions are allowed, it is very difficult to have them restored when an industry gets into trouble.

Mr. J. H. Smith: Do not you think rebates in this instance are warranted?

The MINISTER FOR FORESTS: Reductions in railway freights and taxation, reductions in other charges such as stamp duties and in other directions, are all warranted but, if they are allowed, no money is left in the Treasury.

Mr. J. H. Smith: The timber industry should not have been exploited.

The MINISTER FOR FORESTS: A good deal has been done for it.

Hon. C. G. Latham: It has provided a great deal of revenue.

The MINISTER FOR FORESTS: Yes. The industry is paying considerably towards the conservation of supplies so that it may be carried on indefinitely. The total rebate on timber freights allowed up to the 30th June last was £124,000. I think the industry was worth it. We would have been in greater trouble regarding employment but for the fact that the timber industry was able to provide a considerable amount of remunerative work for the people of the State.

Hon. C. G. Latham: And the Federal Government helped the State with that work.

The MINISTER FOR FORESTS: I have said so. We have created an asset represented by 10,000 or 11,000 acres of pine forests that will fetch a great deal of money as time goes on, say in 10 or 15 years.

REVENUE.

The estimates for the coming year call for very little in the way of detailed information. The revenue of the Forests Department last year was £145,000, considerably lower than it was for the previous year owing to the fewer sleeper orders from overseas, and the falling off in sandalwood export due to the Japanese operations in China. The Government has co-operated with both industries in seeking to meet their difficulties, and some measure of success has resulted. First of all the Minister for Agriculture paid a visit to Ceylon, to deal with fruit, the fruit fly pest, and to inquire into forestry operations. That was followed by a visit on the part of the Conservator of Forests. Shortly afterwards Western Australia obtained an order for 150,000 sleepers. Since then further visits to Ceylon have been paid by our forestry experts, and these have resulted in further considerable orders for sleepers being obtained for Western Australia. There was serious danger that we would be supplanted altogether by the Douglas Fir trade of Canada, whose special type of sleeper that is used in damp areas seemed to be advantageous to the Ceylon Government from the standpoint of price compared with our own jarrah supplies. Because of the representations made on our behalf, and the experiments that were carried out, we succeeded in maintaining at least

half of the sleeper trade, and this in a few years' time will amount to many thousands of pounds.

A DIFFICULT PERIOD.

The timber industry is passing through a difficult period. There will be all the dislocation caused by war, the dislocation of shipping, etc. The Forests Department, in conjunction with the saw milling firms and timber using industries about two weeks ago had a conference at which I presided. All concerned are co-operating with a view to retaining for Western Australia a considerable amount of the export trade we have enjoyed for many years. We hope to obtain sufficient orders to keep the industry going in a profitable market. The expenditure charged against Consolidated Revenue last year was £29,215, an increase of about £740 compared with the corresponding period of the year before. This was due principally to increases in salaries on account of the new classification and the basic wage increases. The figure covers the administrative costs of the Department, the revenue-producing activities such as timber inspection and refore-

tation work being charged against the reforestation fund. Particulars of the expenditure proposed from this source have been laid upon the Table of the House and will be covered by items in the Appropriation Bill.

I have endeavoured to give members some idea of the activities of the Forests Department and have dealt with what it is doing on the scientific and practical sides, the measure of assistance rendered to it, the importance of the industry to Western Australia, and the fact that the industry is not leaning on the State for all moneys for conservation and fire-fighting, but is providing out of revenue received a fund designed to keep the industry going, to conserve the forests, and carry on the silvicultural and regeneration programme, etc. Now, 20 years after the original Act was passed, the timber industry has been placed in a position where, instead of being a rapidly diminishing asset, its future can be said to extend into perpetuity, and it will always remain a source of potential wealth to Western Australia and be carried on greatly for the benefit of the State, I hope, forever.