REPORT OF THE SECRETARY FOR AGRICULTURE ON THE REDGUM FORESTS OF GUNBOWER AND BARMAH.

PRESENTED TO BOTH HOUSES OF PARLIAMENT BY HIS EXCELLENCY'S COMMAND.

By Authority:
JOHN PERRES, GOVERNMENT PRINTER, MELBOURNE.

No. 50.
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REPORT.

Department of Agriculture,
Melbourne, 20th July 1878.

Sir,

I have the honor to transmit herewith plans of the redgum forests of Gunbower and Barmah, both of which are situated on the south bank of the River Murray; also a plan of the Goulburn River from its junction with the Murray to Shepparton, showing the redgum flats on both banks.

The plans have been prepared with a view to show approximately the present condition of the forests in respect to the quality and quantity of the timber growing in them. The different kinds of timber, as well as the various qualities of the same description of timber, are shown by different tints.

If we refer to the plan of the Barmah forest, it will be seen at a glance that the timber on the river bank, and back for an average distance of two miles, has been either partly or entirely worked, and that the mills which were laid down, with the exception of the Cornella mill, owned by Messrs. McCulloch and Co., have been abandoned on that account. The forest which lies between this worked portion and the Tullah Creek may be looked upon as virgin forest, a few of the finest of the trees only having been cut. The only reason why this portion has remained unworked is the unfavorable nature of the country, which renders the working of the timber from the Murray side both difficult and expensive. As the settlement of the Goulburn valley, however, proceeds northward, the whole of the timber in this part of the forest will be required for railways and other works; and it will be worked doubtless from the south side of the forest.

The Gunbower forest contains large quantities of box and other timbers besides redgum. The majority of the eastern half of the forest consists of box forest, more or less dense, redgum being found only in the lowlying and swampy portions. The western half of the forest, however, except small patches near the Gunbower Creek, consists almost entirely of redgum. The Gunbower forest, like the Barmah forest, has been pretty well worked along the entire Murray frontage, while the back portions, with the exception of a few small pieces, have been picked over more or less. This forest contains very little virgin redgum.

The forests on both banks of the Goulburn have been all partly worked. A very large quantity of timber has been cut on this river during the last two years, the proximity of the forests to the banks and the contour of the surface having been most favorable to the working of the timber.

The length of time that our redgum forests will last, at the present rate of consumption, is variously estimated at from four to six years. Mr. Erington, who was put forward by the working men of Echuca to represent their interest in the redgum trade at the meeting held by the Honorable the Minister of Lands and Agriculture at Echuca, on the 22nd March last, and who is himself a bush hand of much experience, stated in evidence that he did not consider there would be any redgum timber left in the Echuca district in five to six years if cutting were continued at the same rate as it was proceeding before the forests were closed. The caretakers have estimated that the forests will last from four to five years under the old system of indiscriminate cutting under license, and ten years under the system of granting special areas to mill proprietors. Mr. Mackintosh, of Echuca, who acted as spokesman for the sawmill proprietors at the meeting above referred to, stated that he required an average of 1,000 logs per week to keep his mills going. At that rate the Gunbower forest, about 75,000 acres, which is estimated by Mr. Blackburn to contain 120,000 trees fit for milling purposes, would be exhausted by Mr. Mackintosh alone in little more
than two years. I am disposed to think, however, that Mr. Mackintosh rather overestimated the consumption of his mills, and that the average cutting capacity of the whole of the mills in the Echuca district does not greatly exceed, if it reaches, 1,000 logs per week. A log is estimated to contain 1,000 feet super.

In conclusion, I desire to state that I do not think we need have any apprehension for the early exhaustion of our redgum forests if sufficient measures are taken to regulate cutting and to conserve the young growth. But I am also disposed to think that we have not more redgum in Victoria than will be required to supply our own wants.

I transmit for perusal copy of a circular that I issued to the caretakers of the redgum forests and their replies thereto, the numbers of which are given in the margin.

I have the honor to be, Sir,

Your most obedient servant,

A. R. WALLIS,
Secretary for Agriculture.

The Honorable Peter Lalor, M.P.,
Commissioner of Trade and Customs, Melbourne.

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Department of Agriculture,
Melbourne, 23rd July 1878.

Sirs,

As I understand there is some misapprehension as to the concluding paragraph of my report, dated 20th July 1878, on the redgum forests of the Echuca district, I desire to explain that what I wished to convey was that our redgum forests, in my opinion, are not more than sufficient to supply our own wants, and that if the drain upon them was limited accordingly, and sufficient measures were taken to regulate cutting and to conserve the young growth, I did not think we need have any apprehension for their early exhaustion.

Measures have been taken already to regulate cutting, by granting special areas (not exceeding 1,000 acres) to sawmill proprietors, and closing the remainder of the forests. If, in addition to this, a charge per 1,000 feet for the timber in the log were imposed in lieu of a monthly or annual license fee, the Crown, in my judgment, would obtain a largely increased revenue, while the system would be fairer to all parties concerned. It is exceedingly difficult to fix a fee under the present system.

On the other hand, if we are to return to the old licensing system, and to allow our redgum forests to be drawn upon for the supply of the other colonies and India, it will, in my opinion, be only a matter of time—probably only a few years—when we shall have to look to New South Wales for timber for our own wants. I think it will be absolutely necessary to retain the duty on all large-sized timbers, and to allow only the waste and small sizes to be exported duty free. It is a comparatively simple matter to cut down a forest, but a most tedious process to cultivate one.

I may mention incidentally, as an indication of the quantity of timber required for our own wants, that applications have been received for seven sawmill areas on the Goulburn River, and it is within my knowledge that four of these have been taken up for the express purpose of cutting sleepers for the Goulburn Valley railway.

I have the honor to be, Sir,

Your most obedient servant,

A. R. WALLIS,
Secretary for Agriculture.

The Honorable Peter Lalor, M.P.,
Commissioner of Trade and Customs.
Enclosures to Report of 29th July 1878.

Department of Agriculture,
Melbourne, 19th June 1878.

Sin,

I have the honor to request that you will furnish the following information respecting the State forest, marking neatly on the tracing in your possession each kind of country referred to, and furnish the same to me before the 27th instant, as it will be required on that day by the Honorable the Minister of Lands and Agriculture:—
1. Country timbered with box, mark (a).
2. Redgum forest worked out, mark (b).
3. Redgum forest partially worked out, mark (c).
4. Virgin forest, mark (d).

You will also be good enough to ascertain, if possible, dates when the several mills were laid down, including those now in work and those which have been abandoned, and give estimate of time that the forest will last at the present rate of consumption.

I have the honor to be, Sir,
Your most obedient servant,
HENRY DUDLEY,
For the Secretary for Agriculture.

No. 26.

Sin,

I have the honor to state, in forwarding my map of the Barmah and Yelgim State forests, that the part marked A on the south-east border is mixed with box and redgum, and with regard to the part marked B, which is considered worked out by the mill-owners, there is still a few trees remaining fit for utilizing, but all the forest has abundance of young timber growing in it; the part marked C is further back from the river, and has not so many trees felled; while the part marked D, which is considered the maiden part of the forest, has had some trees felled by Buxton and others some two years ago; the most of which still remains in the forest. I also beg leave to state from information received that Mr. Whiteley commenced to work his mill at Barmah in the year '69, and abandoned it in the year '74; Mr. Mackintosh commenced to work in the year '69, and abandoned it in the year '70, and removed further up the river, as shown on map. The part marked A at the south angle of the State forest has no redgum. In my opinion, as to how long the forest will last, at the present rate of consumption, is five years, unless a difference in diameter is named on licenses.

I have the honor to be, Sir,
Your most obedient servant,
W. H. JOHNSON, Forester.

The Secretary for Agriculture, Melbourne.

No. 432.

Sin,

In obedience to instructions conveyed to me in your letter of the 18th instant, I have the honor to forward estimate of time that the redgum timber in Gunbower State forest will last at the present rate of consumption. The map of the south-eastern half of the forest I have not marked, as you will see at a glance that box timber covers a large proportion of its area. This part of the forest, owing to its comparative proximity to Echuca, has had its patches of redgum timber well cull'd. Mr. Mackintosh last year obtained between four and five thousand logs between the commencement of the Gunbower Creek and the forester's cottage. A few isolated groups of redgum trees yet remain on the Gunbower Creek; but it would, I think, be very hard at the present time to get five thousand logs fit for a sawmill in this half of the forest. The map of the north-eastern half of Gunbower I have marked as instructed, and you will doubtless be surprised to see what a small portion of virgin forest remains.

The areas marked C (partially worked out) will yet furnish a large quantity of timber. The nearest approach that I know of to worked-out country is in the vicinity of Messrs. Blair and McIvor's sawmill. As timber gets scarce this worked-out country, as it is now considered, will be again cut over. In a report on Gunbower State forest (19th August 1877), allowing for increased timber consumption, I assigned five years as the time that it would take to work out the whole of the forest. Carefully considering the subject now, I see no reason to change my opinion. I am intimately acquainted with the whole of the forest, and I think its resources have been over-estimated, as far as regards a present supply of timber. The young trees are growing thick and healthy, and if Gunbower is kept as a State forest and carefully conserved, it will undoubtedly supply a large quantity of timber in future years. The trees fit for felling now do not, I think, average more than six to an acre. Out of the 37,000 acres in Gunbower, not more than 20,000 produce good redgum. This would give a total of 120,000 trees. Allowing 40,000 as the number already used, there would remain at the present time 80,000. As the consumption last year by sawmill owners and others was fully 12,000 trees, the forest would last only six or seven years, at the same annual rate of timber falling. If the demand increased it would not last over five years. It may be argued that I am not making any allowance for the annual growth of the
timber; but the time in which the forest will be worked out is so short that it is hardly worth while considering the question. The great demand for piles has removed most of the timber that would have been valuable for sawmill purposes shortly. It would take 40,000 acres, instead of 20,000, to stand a continual drain of 12,000 trees yearly, without intermission, calculating upon the supposition that redgum trees are fit for the sawmill at the age of forty years and upwards. Areas denuded of all mature timber ought to have at least twenty years allowed to produce another crop of similar character.

I have the honor to be, Sir,

Your most obedient servant,

JAMES BLACKBURN.

The Secretary for Agriculture, Melbourne.

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No. 667. Forester's Cottage, Gunbower State Forest, 18th August 1877.

In accordance with instructions conveyed to me in your letter of the 6th instant, I beg to forward report on the Gunbower State forest and Murrabit timber reserve. I have endeavored to perform the task allotted to me carefully and to the best of my ability, and trust that my views with regard to the timber question in this district will meet your approval.

I have the honor to be, Sir,

Your most obedient servant,

JAMES BLACKBURN.

The Secretary for Agriculture, Melbourne.

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REPORT ON MURRABIT TIMBER RESERVE AND GUNBOWER STATE FOREST.

Murrabit Timber Reserve.

I should think this reserve contains about four thousand acres of land, on which redgum is growing at present. With the exception of a few hundred acres north-west and east of Evans's selection, the timber is inferior to that growing in the Gunbower State forest. A variety of causes may be assigned for this. Bush fires apparently have been of frequent occurrence, and have done great damage. A furious storm last year left a wide track through the reserve, which can be traced for miles by uprooted trees and broken branches. This forest has also been drawn upon heavily for fencing material for the adjacent plains, saplings having been cut largely and indiscriminately. Towards the lower part of the reserve the timber gets poor and stunted, as if it had reached the limits assigned to it by nature, and that certain conditions essential to its growth were wanting. I do not see that anything can be done with this reserve at present, only to use vigilance in stopping sapling cutting. No doubt sawmill owners will be glad in a few years time to use the second-class timber growing here, when they have exhausted the supply furnished by other localities.

Gunbower State Forest.

There are about four natural divisions of soils and localities in this forest growing timber, namely—sandhills, covered with Murray pine (Callitris); dry flats, on which box grows; elevated plains, producing inferior redgum; and low swampy flats, banks of rivers, creeks, and lagoons, growing redgum fit for sawmill purposes. At a rough approximation, not more than one quarter of the forest produces this valuable class of timber, and under the present system of indiscriminate felling all the best of the timber will be gone in two or three years. Gunbower forest was originally rather thinly timbered, but the action of floods has been to deposit seed in all the low ground, and now the young timber looks magnificent and promises well for the future if taken care of. From the appearance of large areas of saplings, I think they must have been sown by the great flood of 1870, as they range from forty to sixty feet in height, and from nine to twelve inches in diameter at two feet from the ground. As trees from fourteen to sixteen years old furnish first-class piles, a large supply can be drawn from this forest in a few years time, and the future forest for supply of sawn timber be greatly benefited. At present the great demand for piles has a very injurious effect.

I am in favor of granting sawmill owners certain areas in this forest, for the following reasons:—It will stop indiscriminate felling of timber; trees will not be cut down until required. A small firm in the sawmill trade will be protected from powerful rivals; and, if sawmill owners are made to pay according to the timber they cut down, revenue will, I think, be available for the purpose of helping nature in restoring the forest.

JAMES BLACKBURN.
To illustrate the evils of the present system of unrestricted timber cutting, I cannot do better than take the case of the Messrs. Robson, sawmill owners here. They have invested a considerable amount of capital, and employ a large number of men; and I may state that they have used the forest hitherto with economy, not felling more timber than they actually require.

J. Mackintosh, of Echuca, has cut down timber largely on blocks 31, 32, 37, 38, and 39; and Blair and McGrowther has, at the present time, 800 to 1,000 trees felled on 29, 34, 35, and 36 (see map). The consequence is, that Messrs. Robson naturally feel that they are suffering a great injustice in losing all the timber near their mill. It is certainly a pity to destroy the forest in this manner, for, if healthy trees are felled years before they are wanted, it entails a great amount of loss, as the trees would be increasing in size and value if left standing. I am fully aware of the importance of the redgum trade in Echuca, and cannot recommend that sawmill owners there be debarred from getting a supply from this forest; I therefore suggest that any firm (not having a site in this forest) be allowed for the present to cut timber on that part of the forest between the wire fence near forester's cottage and the eastern end towards Echuca (see map). J. Mackintosh has, at the present time, about 7,000 logs on the bank of the Murray, in this upper part of the forest. I would recommend that the country between the wire fence and a line drawn midway between Blair and McGrowther and Messrs. Robson, be granted to the latter firm as a mill site, and to be used exclusively by them for getting a supply of timber. I think this block of country would last them five or six years. It would not do to let them have it at an annual rental, as their trade may increase largely and the forest be worked out in say three years; the best system would be to charge so much a log according to contents in feet. If these areas are secured to them, sawmill owners can well afford to pay an increased revenue. They should not be allowed to cut piles unless under proper supervision, and as provided for in the Regulations for Forest Boards, at a high valuation or licence fee. They should also have their areas marked off into square miles. After they had exhausted the available timber on one square mile, it should be closed to them, and another square mile opened; then, if funds were available, the work of assisting nature to restore the area denuded of timber should commence.

All areas between the Gunnawarra boundary fence and the junction of the Gunbower Creek and Murray. The rest of this part of the forest could then be reserved for a time. I have indicated on the map a site for Mr. Thrum, but as so much timber is now being felled in this locality it might admit of alteration. The best timber is fortunately protected at present by swamps. So many interests have to be considered in a report of this kind, that I have found the task a most difficult one. The best part of the forest extends from here (forester's cottage) down to Gunnawarra, and I think the system of closing areas gradually, as they are denuded of sawmill timber, will act well for the future of the forest. If necessary, before any steps are taken in this matter, I could visit Melbourne, perhaps state my views more clearly, and have the benefit of your advice on this subject.

I have the honor to be, Sir,

Your most obedient servant,

The Secretary for Agriculture, Melbourne.

JAMES BLACKBURN.

Echuca, 25th June 1878.

I have the honor to report, in answer to correspondence No. 433, that I have marked the tracing of the Gunbower State forest as requested.

1. The country timbered with box, marked A.

This commences at the south end of this forest, and extends as far as section 48, along the Gunbower Creek, but on the frontage of the river and creeks there are strips of redgum, also are the swamps that I have marked; this timber is principally used for posts and rails, and firewood for the steamers on the river.

2. Redgum forest worked out, marked B.

The portion that I have marked is at the north end of the forest, at the junction of the Gunbower and the Murray. Although I have marked it with a B, there might be as much timber got from the blue line to the junction as would keep a small mill working for twelve months; or the whole could be let in one area to clean up.

3. Redgum forest partially worked out, marked C.

This is situated between the two blue lines, also other small portions marked, in box forest. This being the best portion of the forest is the only portion where falling areas have been applied for. I have marked in red the areas of Messrs. Robsons, also Thomas Buzz, and Messrs. Blair and McGrowther; I have also W. White's men getting piles under a special authority from the Honorable the Minister of Lands and Agriculture.
4. Virgin forest, marked D.

I have only one portion of the forest that would come under this head. There is scarcely any portion of this forest that has not been thinned of some of the best of the redgum. In the Murrabit forest I have not marked the plan, as it consists only of redgum timber, and has only been used for posts and rails for selectors till recently, when it was thrown open to cut under license. When the mill erected by Mr. Thos. Buzza is supplied with logs from this portion of the forest, there is only a strip of timber along the river bank, in no place over half a mile in width.

The first mill erected in this forest belonged to Messrs. Blair and McGrowther, and commenced working on the 13th May 1872; and was burned down on the 12th February 1874. This mill has not been re-erected. Messrs. Blair and McGrowther's present mill was erected and started work about April 1873, and is at present in full work. Messrs. Robson's mill was erected and started in July 1876, and is now in full work. Mr. Thomas Buzza's mill has just been erected, and has only been at work for a few weeks. A mill site and timber area was granted to Mr. Thrum in the Murrabit timber reserve, but he has not begun operations as yet. These are the only mills that have been erected in this forest, but for years timber has been cut in it to supply mills in Echuca.

I estimate this forest to last under the area system, and at the present rate of consumption, ten years; but if the former system is fallen back upon, and people allowed to cut anywhere and everywhere, I believe there would be no timber left in four or five years; at the same time there are acres of young trees that in a few years would come in to be useful.

I have the honor to be, Sir,

Your most obedient servant,

The Secretary for Agriculture, Melbourne.

JAMES KENNEDY.

No. 89.

Kotupna, 27th June 1878.

I have the honor to acknowledge receipt of yours of the 18th instant (No. 431) only now. The post had been delayed on account of the floods, the creeks being impassable and the country flooded on the road to Kotupna, therefore I could not return the tracing, as requested, in time for to-day. The redgum country is marked by dotted lines on the tracing, as well as can be done without surveying it. I have marked all the redgum country C, except one place that has been cleaned out; it is near Buzza's old mill site, near "Kinnon's" punt. Outside of the dotted line is box and plain, marked A. There is no virgin forest, as men have been cutting all over the Goulburn. Take the forest as a whole, it has only been partially worked out, more or less, in every bend and swamp. The trees that mill-owners refused to take previously they will yet be glad to get, although it will cost more to obtain them. As regards the dates when the several mills were laid down, I have no papers to show, but will endeavor to forward the information as soon as possible. As to the time the forests will last, that is rather a difficult question to answer. I should say about ten years under the present area system.

I have the honor to be, Sir,

Your most obedient servant,

The Secretary for Agriculture, Melbourne.

DAVID C. FORREST.

No. 90.

Kotupna, 4th July 1878.

I have the honor to report the different years when the following mills commenced operations:—

Messrs. Collier and Barry, 1864; but was only used while cutting sleepers for the railway.

Amos and Co., near Stuart's Bridge, 1864; not now in existence.

Mackintosh, Echuca, 1868; now working.

Lath, Echuca, 1874; now working.

Whitely, Echuca, 1875; now working.

Blair and McGrowther, Echuca, 1872; now working.

Barlow's, now McCulloch and Co., Echuca, 1877; now working.

Mundell's, or Buzza's, Kanayella, 1879; removed to Gunbower.

Quiggins', Mooropna, 1877; now working.

Taylor and Co., Kotupna, 1877; now working.

There are two or three more mills, but I have not got the date as yet; but will forward them.

I have the honor to be, Sir,

Your most obedient servant,

The Secretary for Agriculture, Melbourne.

DAVID C. FORREST.

By Authority: John Fennan, Government Printer, Melbourne.