

C O P Y

In accordance with instructions received I made an inspection of the Forest country to the East of Albany, called the Denmark Settlement. The time at my disposal being limited, I was unable to see the whole of the country in question, but with the help of the settlers and Road Board officials I inspected what they considered was an average of the whole. I went as far West as Hell's Hole, and examined in fair detail the settlement along Scott's Dale.

PAST HISTORY

Denmark was originally held by Millars' Timber Co. as a sawmilling concession. In 1904 the Government purchased it together with the 28 miles of railway at a cost of £50,000. Millars had by that time exploited a large percentage of the marketable timber, but, and this is of particular interest from a forestry stand point, they did not cut the timber out in the usual way adopted at Karridale and in the Jarrah forests. The procedure they adopted is, I think, unique in the annals of sawmilling in western Australia, for they ringbarked the Karri forests on a face, and that is to say, they killed all the living trees; what they considered were merchantable they then felled and the remainder they left standing dead.

I have not as yet found out why they adopted this course which, on the face of it, would seem to have been an expensive one from their standpoint, but I have no hesitation in saying that from a forestry standpoint it was justified, for the splendid even regrowth of seedlings which sprang up formed a new forest which, in time to come, would have provided a fine even stand of marketable timber. The photographs herewith show what a remarkably good growth the Karri has made in 14 years.

Unfortunately there is very little of this first regrowth left, the reason being that the Government of the day decided to convert the forests of Denmark - forests which would have yielded in perpetuity a revenue to the State and given em-

ployment to a large number of timber workers - into an agricultural settlement.

The method employed to destroy the forests and convert them into so-called agricultural land was briefly as follows :- The seedlings growth which had sprung up after Millars had ceased operations was slashed down, while the country was sub-divided into a number of holdings. Millars' old tram tracks offered an excellent basis for the sub-division, and these were reserved as roads and the holdings surveyed so as to have a boundary on these roads. The cost of the above work amounted to, it seems, £109,806.

The condition of the forests after the slashing had been effected must have been deplorable, for it is obvious that for every seedling Karri that was slashed down 4 to 6 suckers grew up. Indeed this is well shown on the areas that have not been taken up, such as Karri Sucker Hill, which adjoins Manner's property. The photograph herewith, though a poor one, gives some idea of the resulting thicket.

That the steps taken to convert this forest country into an agricultural settlement was open to criticism is shown by the opinion expressed by Mr. A.R. Richardson, Minister for Lands, in a letter to the Premier (file 7128/96) :-

"That there is not a very great extent of first class land in the Concession, but that a certain amount of settlement would follow the acquisition of the property by the State, but the heavy initial expense of clearing and getting the soil into a good condition of cultivation would retard selection to any large extent."

From my inspection of the area I should say that it would have been quite possible to have picked out all the really good agricultural land and alienated it without damaging to any great extent the Karri forests.

The lots were thrown open in 1909 and 119 settlers took them up on certain conditions, and at prices ranging from £15 to £400 a lot. The conditions were not observed, and very little

of the rent in most instances was paid. Today of the 119 settlers there are 50 in occupation, and 28 holdings are abandoned.

In 1916, owing to the deplorable condition of the settlements, a board was appointed to report. It included Mr. Lefroy and Mr. Canning, men whose knowledge of land values and farming in general is beyond dispute. The report of the board (1945/13) is of such great interest that it should be read by all interested in land settlement in the extreme South West. Here are a few excerpts :-

"It has been forcibly impressed upon the Board that the expenditure by the State in scrubbing and grassing has proved valueless to the selector, owing to the fact that during the interval which elapsed between the date of burning off and effective occupation a more dense second growth of scrub and young timber took place."

"The late Surveyor General in Corres. 2471/08 p.76, states: 'The expenditure in question has proved an absolute failure.'"

"Our investigations go to show that the unsatisfactory condition of affairs is directly due to three main causes, viz., (a) heavy initial cost of clearing and want of funds; (b) lack of experience and adoption of wrong methods of procedure; (c) want of stock and the fact that the quality of soil is such that it requires heavy fertilising before satisfactory crops can be grown."

"The Denmark country is certainly the most heavily timbered and expensive area in any portion of the South Western Division to bring under cultivation.

"By the testimony of individual settlers, it costs from £20 to £30 per acre to thoroughly clear this heavily timbered Karri and scrub land; in one case we were assured the cost reached £40 per acre."

"The Board was frequently assured that the soil, although apparently of good quality, is lacking in fertility. It is claimed that no returns can be obtained without heavy manuring, and even then the yields ~~xxxxxx~~ were produced at a loss. In some instances, selectors who had had experience in Gippsland (Victoria) and the Northern Coastal District of New South Wales, claimed that the results from Denmark were very disappointing, especially in regard to the fact that after a good burn in the places mentioned, grasses etc. can be sown and a good growth is immediately available for stock, while in the case of Denmark, although the same method was tried it was an utter failure, and it was found necessary to cultivate and manure the soil before any satisfactory results could be obtained, thus adding to the expense of development and thereby using up the financial resources of the selector before he could get a return."

"In the case of W. Love who holds Location 448, the Board was requested to submit a special report setting forth the unsatisfactory position in which he is situated

cut from an acre by the State Saw Mills at Pemberton, on virgin forest, so states that he has occupied his holding 6 years, has expended thereon the sum of £736 including an estimate for Agricultural Bank advance of £100, and the whole of his 6 years' labour. The sale of produce during 6 years only amounts to £15, although he had made repeated efforts and given the soil heavy cubic feet applications of manure." over 23. This is the

cost value failures, and he goes on to state: "I have exhausted all my means in the endeavour to develop this land, addition to have followed the advice of Professor Paterson and the Manager of the State Farm at Denmark all to no dues which purpose. I was told by land officials in Perth that this block was a good one, whereas it is absolute- timber is only worthless as shown by analytical test No. 271/16, dated 18/3/16, made by the Government Analyst." The believes the Board is of the opinion that the lessee's contention is unfortunately justified by the analysis quoted of the hard which we saw of the world, will be sharper than in

"We also perused the lessee's Savings Bank the past. Account Book which discloses the fact that the funds amounting to £558 had been withdrawn by Love since years, and he began operations on his land, estimating its value

100 years hence if "The Board found the hopeless conditions, primarily due to unsatisfactory crop returns; the price of the land is hardly a contributing factor of the present state of affairs. In support of this view, from which it is only necessary to instance the fact that in the majority of cases only nominal sums on account of rent unmarketable have been paid. At the same time we admit that there is justification for complaint against the existing with its values placed on the land, especially the loading for of all future is in the opinion of the Board a reasonable value for the land, will not give in most cases immediate relief, again I will it will lift a prospective burden from the most progressive settlers and perhaps enable them to obtain piles and further financial assistance. In some cases the settlers stated that if a substantial reduction in value the purchase money was not granted, they would be reluctantly compelled to leave their holdings."

This is the case. The recommendations of the Board resulted in a sweeping reduction in the price of the land, in some cases from £12 to £1/8/- per acre. In other words, the greater part of this large sum of £109,806 has been written off. Now it has been demonstrated that Karri land without any expenditure of money whatever, with nor care or forestry treatment, will grow this valuable timber at the rate of 100 cubic feet per acre a year. The age of maturity of the species has not yet been ascertained, but it may be put down at a maximum of 100 years. We may therefore expect, without any expense or silvicultural operations, 100 x 100, or 10,000 cubic feet of timber (200 loads) to the acre at maturity. Much more than this has been actually

developed, e.g. Nornalup, the question of the value of the land from a timber point of view should be thoroughly investigated.

As to the future of Denmark, the settlers I interviewed are in doubt regarding the Karri land that still remains. They realise the cost of clearing in this country when the suckers form a dense thicket and they asked me if nothing could be done to find a use for the young timber. It might have a value for paper making, and I^{am} making enquiries in this direction, but I am not very sanguine as to this solution of the difficulty. No doubt if there is a sufficient area of this country still remaining it would pay to treat it on forestry lines. It would entail a certain amount of expenditure in thinning operations to put it in a sound condition, but this work would, I gather, be very acceptable to the settlers who, as has been shown in the Board's report, have little chance of making a living on their farms.

Such a course would entail the excising of this sort of country from the lots that are occupied and the reservation of all lots that have not been taken up on which Karri regrowth is established. Some settlers I saw stated they would be glad to be rid of those areas on their farms which were still covered with regrowth; that they had quite enough country cleared and were paying rent on what was no good to them. I am unable to say whether a sufficient number of settlers are of the same opinion. It is obvious that unless it is possible to get a number of adjoining settlers to agree to this course, it will be difficult, if not impossible, to obtain sufficiently large and at the same time compact areas for the purpose in view. In view of the great value of Karri timber, and the fact that the ground is unsuitable for farming, I think it would be desirable to sound the opinions of the settlers on this matter.

RECOMMENDATIONS

1. That the report of the Board that enquired into the Denmark Estate be published in the press. (See Lands 1946/13).
2. That an enquiry be made with a view to finding out whether it is feasible to reserve and reserve sufficient Karri land in the Estate for the purpose of re-establishing a forest there.

26/3/1918.

(Sgd.) C. E. Lane Poole.

I		II		III	IV	V	VI	VII
Loads in round		Loads in square 40% recovery		Export Val. @ £7/10/- per ld. of sawn timber f.o.b.	Gross saleable wealth which settler must produce <u>per annum</u> to equal this off 100 acres on which he is established at a cost of £1000			
per ac.	per 100 ac.	per ac.	per 100 ac.		for 5 yrs.	for 10 yrs.	for 15 yrs.	for 20 yrs.
				£	£	£	£	£
2.5	250	1	100	750	186	102	71	53
5	500	2	200	1500	319	159	103	73
7.5	750	3	300	2250	452	216	135	91
10	1000	4	400	3000	585	273	167	114
12.5	1250	5	500	3750	718	330	200	135
15	1500	6	600	4500	851	387	232	155
17.5	1750	7	700	5250	984	444	264	175
20	2000	8	800	6000	1118	501	296	196
22.5	2250	9	900	6750	1251	558	329	216
25	2500	10	1000	7500	1384	615	361	237
27.5	2750	11	1100	8250	1517	671	393	257
30	3000	12	1200	9000	1650	728	425	277
32.5	3250	13	1300	9750	1783	785	458	298
35	3500	14	1400	10500	1916	842	489	318
37.5	3750	15	1500	11250	2049	899	522	338
40	4000	16	1600	12000	2182	956	554	359
42.5	4250	17	1700	12750	2315	1013	586	379
45	4500	18	1800	13500	2448	1070	619	400
47.5	4750	19	1900	14250	2581	1127	651	420
50	5000	20	2000	15000	2714	1184	683	440
75	7500	30	3000	22500	4044	1753	1005	644
100	10000	40	4000	30000	5375	2322	1328	848
125	12500	50	5000	37500	6705	2891	1650	1052
150	15000	60	6000	45000	8036	3460	1972	1256
175	17500	70	7000	52500	9366	4029	2294	1460
200	20000	80	8000	60000	10697	4598	2616	1664
225	22500	90	9000	67500	12027	5167	2938	1868
250	25000	100	10000	75000	13358	5736	3261	2071

I		II		III	IV	V	VI	VII	VIII	IX	X	XI				
Loads in round		Loads in square 40% recovery		Export val. @ £10 per 100 lbs. of sawn timber f.o.b.	Gross saleable wealth which settler must produce <u>per annum</u> to equal this off 100 acres on which he is established at a cost of £1000.								Present value of timber discounted @ 6%			
per ac.	per 100 ac.	per ac.	per 100 ac.		for 5 yrs.	for 10 yrs.	for 15 yrs.	for 20 yrs.	for 5 yrs.	for 10 yrs.	for 15 yrs.	for 20 yrs.				
				£	£	£	£	£	£	£	£	£				
2.5	250	1	100	1000	230	121	82	60	747	558	417	311				
5	500	2	200	2000	408	197	125	87	1494	1116	834	623				
7.5	750	3	300	3000	585	273	168	114	2241	1675	1251	935				
10	1000	4	400	4000	762	349	211	141	2989	2233	1669	1247				
12.5	1250	5	500	5000	940	425	253	169	3736	2792	2086	1559				
15	1500	6	600	6000	1117	501	296	196	4483	3350	2503	1870				
17.5	1750	7	700	7000	1295	577	339	223	5231	3908	2921	2182				
20	2000	8	800	8000	1472	652	382	250	5978	4467	3338	2494				
22.5	2250	9	900	9000	1649	728	425	277	6725	5025	3755	2806				
25	2500	10	1000	10000	1827	804	468	304	7473	5584	4173	3118				
27.5	2750	11	1100	11000	2004	880	511	332	8220	6142	4590	3429				
30	3000	12	1200	12000	2182	956	554	359	8967	6700	5007	3741				
32.5	3250	13	1300	13000	2359	1032	597	386	9714	7259	5424	4053				
35	3500	14	1400	14000	2536	1108	640	413	10462	7817	5842	4365				
37.5	3750	15	1500	15000	2714	1184	683	440	11209	8376	6259	4677				
40	4000	16	1600	16000	2891	1259	726	468	11956	8934	6676	4988				
42.5	4250	17	1700	17000	3069	1335	769	495	12704	9492	7094	5300				
45	4500	18	1800	18000	3246	1411	812	522	13451	10051	7511	5612				
47.5	4750	19	1900	19000	3423	1487	855	549	14198	10609	7928	5924				
50	5000	20	2000	20000	3601	1563	898	576	14946	11168	8346	6236				
75	7500	30	3000	30000	5375	2322	1327	848	22419	16752	12519	9354				
100	10000	40	4000	40000	7149	3080	1757	1120	29892	22336	16692	12472				
125	12500	50	5000	50000	8923	3839	2187	1392	37365	27920	20865	15590				

METHODS OF COMPUTATION

Column I

100 leads in column II = 40%
? " " = 100%
 $100 \times \frac{100}{40} = 250 \text{ leads}$

Column II

Column III

Column II x 10 =
e.g. 100 x 10 = £1000

Columns IV to VII

To the value of the timber in column III
add for column IV £300
V £600
VI £900
VII £1200

These figures represent simple interest on
initial outlay in establishing a settler
i.e. £1000 at 6% for 5 years = £300
£1000 " 6% " 10 " = 600
£1000 " 6% " 15 " = 900
£1000 " 6% " 20 " = 1200

The object then is to find what annual return
for the respective period equals this combined
figure of timber value and compound on cost of
establishing settler. This may be worked out
as in example hereunder by using the third
column of tables given on page 261 of Chapman's
"Forest Valuation", e.g.

Export value of sawn timber	£8000
Simple interest on initial outlay for 10 years	<u>600</u>
	£8600

From tables -

£1 per annum obtained every year for 10 years
amounts to £13.1808 at the end of that period
allowing interest @ 6%.

$$\text{Therefore } \frac{8600}{13.1808} = 652.5$$

per annum each year for 10 years would amount
to £8600.

Columns VIII to XI

Present values of £1 due in respective periods
are given in second column of tables on page
261 of Chapman's "Forest Valuation" - same
example as above.

£8000 = value of sawn timber in 10 years'
time
Present value of £1 in 10 years = £.5584
Present value of £8000 " " = £4467.2

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