

Excursion to Ossory Forest

MEMBERS assembled on Sunday, 14th July, 1963, at Glendine Property, Ossory Forest. The convenor, Mr. N. Morris, introduced the subject for the day—the comparison of two good quality stands of Norway and Sitka spruce.

The party proceeded to the first stop, the Norway spruce stand. The stand stood at 7,800 ft. altitude. Slope was 15°. A 1/10 acre plot, representing the stand, which we were told was due for felling, had been measured.

Crop particulars were as follows:—

P/yr.	S.P.A.	B.A. Sq. ft.	Mean tree Q.G. ins.	Top Ht. ft.	Mean Ht. ft.	Vol. H. ft.	C.A.I. H. ft.
1919	380	146	7½	73	63	4,520	217

These figures were compared with the figures for a B.F.C. yield table quality class I.

285	161	9	74½	70½	5,450	280
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The difference from the B.F.C. quality class I stand, in the larger number of stems per acre and smaller standing volume was mentioned, as was the 10 ft. drop in mean height.

A discussion on C.A.I. and M.A.I. arose, and on the optimum length of retaining a stand on the ground. It was noted that C.A.I. and M.A.I. crossed, in the case in question, at about 50 years. This indicated the advisability of early clear felling.

Professor Clear referred to the necessity of early felling due to windblow danger.

The potentialities of Sitka spruce on the same site was mentioned.

The aspect of different rotation types was also brought up by Professor Clear.

- (1) Financial rotation
- (2) Rotation of maximum production
- (3) Technical rotation
- (4) Silvicultural rotation

—and their applicability to stands such as we were viewing.

Various factors involved in the manipulation of rotation for the maximum benefit were broached on. The land expectation value, the indicating % for thinnings, the financial yield graph were all mentioned as important considerations. The Professor did a rapid calculation to determine the interest at present being earned by the spruce in which we were standing based on figures for land, timber and increment and an expected price of 2/6 per cu. ft. for the final crop. The crop was earning about 5%.

Other points concerned the critical stage at which the crop now was by Mr. Morris; the financial cost of windblow mentioned by Mr. O'Carroll. Mr. Sharkey mentioned two conflicting aspects from the

timber trade point of view: the necessity of getting certain size categories of timber—and at the same time the greater necessity of having timber constantly available.

A discussion on the merits and demerits of the 40% rule, the 16% rules and the mean basal area tree method of timber sampling arose.

The prices for saw timber versus pulpwood were discussed by Messrs. Stagg and Sharkey and the possibilities of growing timber to certain price and size categories.



The necessity of an integrated timber industry was stressed—for the smoother and more efficient working of all sectors.

The party then proceeded to the second stop. A 35 year old stand of Sitka spruce which according to British Forestry Commission yield tables was quality class II. Crop data were:—

Age	S.P.A.	B.A. Sq. ft.	M. Girth in. Q.G.	M. Vol. H. ft.	M. Ht. ft.	Vol. H. ft.	C.A.I. H. ft.
Stand 35	240	126	8 $\frac{3}{4}$	18.8	75	4,570	460

B.F.C.

Q.C. II. 35	255	136	9	18	74	4,800	300
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Size of average tree removed in stand 0.7 H. ft.

B.F.C. Q.C. II 1.4 H. ft.

The C.A.I. — M.A.I. graphs for quality class II Sitka spruce, we

were told, crossed at 40-45 years. It was mentioned that a heavy thinning early on, reducing the capital of the crop somewhat, could prove economic.

Using the same technique as in the case of the Norway spruce crop, the interest % of the Sitka crop showed to be 6%. It was generally considered that the crop should be kept at least to 40-45 years.

Again wind problems and allied dangers were brought forward, but remedies by various thinning treatments were considered practical—for example, a lowering of form factor by substantial opening of the crown.

The feasibility of different initial espacements, and the possible advantage of wider initial planting with corresponding lower costs, and perhaps subsequent protection from a more stable crop were discussed.

The progressive deterioration of the weather rather dampened a very stimulating discussion which otherwise would have gone on considerably longer and members reluctantly, withdrew from the ground to more sheltered surroundings and tea. A vote of thanks was proposed to the District Officer, Mr. Prior, and to the Forester, Mr. Maguire, for their co-operation and interest and to Mr. Morris for the choice and comprehensive coverage of an interesting subject.

G.J.G.

Excursion to Clonsast Bog

ON Sunday, July the 14th, the Society visited Clonsast Bog where we were introduced to the interesting subject of peat-structure and pollen analysis by Dr. Neil Murray.

Pollen analysis he told us formed the backbone of his investigations. For those not already acquainted with it he outlined the principles of this study. It was well known that the remains of former vegetation were preserved in peat. It must also be long observed that all peat was not the same, varying from place to place and also at different depths. The first methods of investigating late quaternary changes of vegetation made use of larger fossils e.g. timber, leaves, seeds, etc. Positive identification of much of this material required the use of magnification with the resultant discovery of smaller fossils, inter-alia pollen grains. It appeared that the first pollen grains observed were found in pre-quaternary deposits about 1836, but, as far as known, the first to use systematically the occurrence of pollen grains in post-glacial deposits was a German called Weber in 1893. The first percentage calculations were made it seems in 1905 by a man called Lagerheim but the first to realise the full potentialities of the method was the Swedish geologist, Lennart von Post, who presented the first modern percentage pollen analyses in 1916. From the middle twenties pollen analysis had been the dominant method for investigating late quaternary vegetational and climatic development but it was also used in the investigation of older