

DAY EXCURSION TO CAMOLIN

Report by Peter Butler, B. Agr. Sc.

An excursion to Camolin State Forest was held on the afternoon of October 2nd, 1948, by kind permission of the Minister for Lands. The attendance of over forty again proved the popularity of the local excursions and fully justified the efforts of the Council, Covener and Forestry Division Staff. The members and friends present were as follows :-

O. V. Mooney, (Divisional Inspector), D. McGlynn (District Inspector), E. Munnelly (Forester), M. O'Beirne, (President), T. Clear (Secretary), T. McEvoy (Covener), Mrs. Hughes, Mrs. Keane, Miss W. Grey, Mr. and Mrs. Scally, Mr. and Mrs. McNamara, J. Deasy, M. Sharkey, N. Morris, J. Crammond, J. Galvin, M. Connolly, J. J. Shiels, W. Morris, J. Hanahoe, H. M. FitzPatrick, M. Dooley, T. McCarthy, J. Doyle, M. Smith, F. McMahan, T. Prior, M. Swords, J. Rouine, P. Grace (U.S.A.), P. Harte, J. O'Hara, J. T. Wassink (Holland), T. Kelly, L. F. Brannigan, P. B. Casey (Editor: *Drogheda Independent*), P. Ryan, Wm. Shine, P. Butler.

Members were welcomed by the Covener and by Mr. Mooney on behalf of the Minister for Lands. Mr. Mooney outlined the history of the estate,—explaining that it was one of the Department's earliest acquisitions. In the early days the intention was to manage it on similar lines to Avondale. About 190 acres were bare land and 450 under mature mixed Hardwoods. Nearly all the ground was ideal for timber production,—the drier slopes for the more exacting trees and the wet low-lying flats for Spruces. Only the better known species were used in the actual planting which began in 1909. Mr. Mooney mentioned that several members present had been in charge of the forest at one time or another and their first-hand knowledge proved extremely interesting in discussing individual plots later.

To-day the forest is a series of remarkably fine stands. Unfortunately the party had to move rapidly but, in passing, such outstanding plots as that of *Abies Grandis* was commented on. The trees are exceptionally clean and tall, with smooth bark and only a few light twigs interrupting the view of the upper crown. This plot was planted in 1919. The present average stocking is 500 stems per acre with an average dominant height of 55 ft. Although the stand had been thinned some two years previously, most members considered that thinning was again due, especially as this species tends to become a crop of "whips", easily broken in a storm, if neglected. A vivid illustration of the greatly increased costs of afforestation was provided by some quotations from the forest records of that period—a typical example being: in 1916/17, 16/- per week for labour, £1 per 1,000 for plants and the total cost of labour and plants per acre approximately £3.

Interesting examples were seen of Adelges-ridden Douglas fir, which had been subjected to a heavy crown-thinning, resulting in a considerable improvement in health and vigour of the crop. It is now very open and a vigorous growth of briars and grasses have invaded the ground. The figures of a one tenth of an acre plot from one such area were supplied, and are as follows :-

Age: 39 years. Stems per acre: 270. Quarter girth at half height of 40% tree: $5\frac{1}{2}$ inches. Total height: 65 ft. Timber height: 50 ft. Volume per acre: 2551.5 c.ft. According to the British Yield Tables this plot compares in height growth with 4th Quality Class.

Areas of Douglas Fir which were badly infested with Adelges and beyond reasonable hope of recovery, were clear felled recently and planted up with spruce.

The history of larch as a nurse species here, runs on parallel lines to Avondale. It was successful in some cases but in others suppressed the intended main crop. An instance of the former was well demonstrated by a very fine crop of Larch and Spanish Chestnut, about 27 years old. The Chestnuts are now beautifully tall and clean and the last of the larch, having outlived its usefulness as a nurse, are now marked to come out. As an instance of the nurse suppressing the intended main crop, an area was seen where *P. Strobilus*, attacked by rust, was dying out and larch was now left. The larch in turn has been underplanted with Lawson Cyprus to keep the ground clean.

Many lowlying areas were laid down to spruce plots. One such, "The Snipe Bog"—as the name would imply—was a badly drained and frosty site. Both Norway and Sitka occur in intimate mixture and, though showing signs of having been severely checked for a long period early in their life, they are now growing very vigorously. Most of the members who worked in the area in the early days attributed most of the damage to the late frost of 1912, the same frost that is recorded to have badly damaged many similar plots in Avondale. The following are representative figures for the crops on this "Snipe Bog" area, and are taken from one-tenth acre sample plot of N.S. Age 38 years. Q.G.O.B. at height of 40% trees: 6 ins. Total height: 55 ft. Timber height: 43 ft. Number of stems: 48. Volume U.B. of 40% tree: 9.68 c.ft. Volume U.B. per acre 4,646 c.ft. The thinning which had been recently carried out was not taken into account. This plot compares favourably with Quality Class II of the Yield Tables which shows a height of 58 ft. at 40 years, 400 stems per acre and a volume of 4490 c.ft.

On a drier site, 38 years old Sitka spruce, which originally had been mixed with European larch, gave excellent growth figures. The larch has been completely removed giving a pure but open crop of spruces. Measurements from a one-tenth acre sample plot are as follows :-

Total height of 40% tree: $80\frac{1}{2}$ ft. Timber height: 63 ft. Number of stems per acre: 280. Q.G.O.B. of 40% tree at half timber height: 7 inches. Tree volume U.B.: 19.29 c.ft. Volume per acre U.B. 5401 c.ft. The height growth here is directly in line with first

Quality British Yield Table figures, but with 305 stems per acre the normal B.Y. Tables give a volume per acre of 7,090 c.ft. A good deal of discussion arose from this case on the merits or demerits of wider planting spacing as the spruce for a great part of its life has grown as if planted at 12' x 12' owing to the early suppression of the larch.

In the old woodland areas soil profiles had been specially prepared. These showed a very deep "brown earth" derived from Silurian rocks,—an excellent site for oak and beech. Members had an interesting discussion on the methods used in renewing this part of the forest, where rather open old oak woodland predominates. Circular openings varying from $\frac{1}{2}$ to 2 acres have been made and planted with oak and beech. Owing to the heavy ground vegetation of briars, bracken and grasses, little natural regeneration, except of birch, is present. This presented a striking contrast to another area where many conifers, including Sitka, Scots, Larch and Weymouth, were regenerating freely and establishing themselves under a light stand. The ground vegetation is sparse, Erica, Calluna, Gorse and Polytricum mosses being most in evidence. It appears that regeneration followed a ground fire a few years back.

Members were also interested in several promising groups of *Macrocarpa*, the result of direct sowing of the seeds in openings and also in the very rapidly growing groups of *Eucalyptus* (*E. Mullerii*).

A flying visit was paid to the nursery. In all, about 14 acres are cultivated, containing good seedbeds and excellent transplants. Soil and situation are very favourable and members were impressed by the layout and cleanliness.

Members assembled before parting to express, in so far as words could, their thanks to the Minister, the Society and especially to the officials, messrs. Mooney, McGlynn and Munnely, who spared no effort to make the occasion both pleasant and instructive. The excellent luncheon arrangements were particularly appreciated.

