

## Excursion to Blessington Forest

WHEN the members of the Society and their friends met at Ballyward property of Blessington Forest on Sunday, July 22nd, 1962, it was unfortunate that, due to a number of counter-attractions, there was a relatively small turn-out. However, an interesting afternoon was enjoyed by all those who did attend, and the rain, which was much in evidence all morning, held off.

The convenor, Mr. N. O'Carroll, introduced the Forester-in-Charge of Blessington Forest, Mr. M. Leonard, who welcomed the party on behalf of the Minister for Lands. The leader for the day, Mr. N. Morris, then outlined the background details regarding the acquisition of Ballyward, and its subsequent growth statistics. Mr. Morris, who had obviously gone to a good deal of trouble with his preparations, told us that we were having our first stop outside the Property boundary so that we could see what the land probably looked like before planting and also to give us a good idea of the site with regard to exposure and relative elevation. Another valuable innovation was his use of a 6-inch O.S. map of the Property, on which we were shown the roadage and general layout of the plantations.

Ballyward, which consists of 520 acres, divided into 19 Compartments, was valued in 1931 at £1,960. The whole Property was planted up in the years 1932 and 1933 using mainly Sitka spruce, Scots pine, Douglas fir, Norway spruce, with smaller amounts of *Pinus contorta* and European larch. Mixtures were much in evidence, comprising more than 50% of the total area planted.

During the recent Census of Woodlands, the assessment of Ballyward was carried out during July and August, 1958. An overall ocular estimate of 810,000 Hoppus ft. was arrived at for the Property, giving an average volume per acre, at 26 years of age, of 1,557 H. ft. Allowing for an increment % of 10.4, the present volume, less thinned and blown material, probably stands at around one million H. ft.

The *Pinus contorta* all suffered to a greater or lesser degree from

windblow and was removed. The area planted with pure *Pinus contorta* appeared to have been worse affected than where it was mixed with Sitka spruce.

The first stop inside the Property was in a pure crop of Sitka spruce which, with a volume of 3,200 H. ft., is a good deal better than the average for the area. The demonstration here was mainly concerned with sample plot technique, quality class assessment and the correct use of yield tables. Mr. Morris emphasised again the importance of using only Top Height (the mean height of the 100 largest girthed trees per acre) as a means of placing the crop in a particular Quality Class in the B.F.C. tables. In reply to Mr. Durand, who was worried about leader-break upsetting the age-height relationship, Mr. Morris said that no correction-factor had yet been arrived at to cover this contingency.

A short distance away we had a demonstration of a technique which was new to most of those present. Mr. Morris had placed vernier growth-bands on two trees ten days before our visit so that we could read-off the increase in girth of these trees, in the period. Assessment Section have 81 of these bands in position throughout the country, in order to take readings which will enable them to know at what periods various species are putting on increment, so that census and other mensurational work during these times can be adjusted with confidence. The vernier scales, which can be read to the nearest hundredth of an inch of girth, are made by Assessment Section and kept in place by coil springs of specified tension. Readings to date indicate a start of growth in the first week of May, a climax in mid-July, and a cessation in the first week of October. It was mentioned that a Scandinavian authority stated that growth started when the mean daily temperature rises above 45° F. and stops when it falls below that level again. In the course of an experiment at Kinnitty Forest this figure of 45° F. was also found to be the stopping point for growth. The increase read on the two trees at Ballyward was 6/100 and 7/100 of an inch in the 10 days.

At the next stop we saw another crop of Sitka spruce, but this one was a little below the average for the species in Ballyward. The discussions here centred around the laying-out of plots, measurement techniques and instruments. The Spiegel-Relaskop was demonstrated and the means whereby one arrives at a basal area per acre with it was explained. We also had a discourse on the Schneider formula for determining increment % and the Assessment Section modification to the formula which is applied to readings in young crops (see 'Irish Forestry' Vol. XVIII, No. 1. 1961. L. P. O'Flanagan "A comparison of Methods used in obtaining Current Annual Increment").

On the question of sampling for choosing trees for height measurement, raised by Mr. Mooney, Mr. Morris listed various methods, but is of the opinion that taking the mean basal area tree is still the safest method.

At the third stop, in a 30-year old Douglas fir stand, we were

shown one of the best demonstrations which we have seen on a day-trip of the Society. In order to better explain stem-analysis, Mr. Morris had taken sections out of a felled Douglas fir at 5-foot intervals, halved them and laid the halves flat-side uppermost beside their original cuts. The annual rings corresponding to each other on each section were joined by coloured tapes to show cross section of the entire length of the tree at various stages in its life. The age-height and volume graphs were also shown and explained.

The party then moved to a nearby road to join their wives, children and friends in a picnic tea, which is becoming a pleasant social feature of these day excursions.

In summing-up, the Convenor thanked Mr. Morris for his well prepared and documented afternoon and also Mr. Leonard for preparing our route and arranging for the tea-break.

A.M.S.H.

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