

Report of the third Annual Excursion

By MALL Ó MUIRGEASA

The third annual excursion of the Society of Irish Foresters was to Killarney. It was held on 4th, 5th and 6th June, 1946. The following members attended:—Messrs. H. M. FitzPatrick (*President*), M. L. Anderson (*Convener*), T. Clear (*Secretary*), M. Bogue, L. F. Branigan, Mrs. C. Doherty, Miss N. Brunner, Miss S. Cahill, Messrs. J. Canning, W. Chisholm, L. Condon, M. Connolly, R. Crerand, J. J. Deasy, V. Deeney, J. Galvin, Captain J. Hamilton, J. P. Harte, H. R. Langley, T. McCarthy (Mallow), T. McCarthy (Athy), T. McEvoy, D. McGuire, M. MacNamara, J. J. Maher, D. P. Mangan, n. Ó MUIRGEASA, O. O NÁRAGÁIN, P. Ryan, Capt. R. C. F. Ryan, P. J. Sheils, M. O Beirne, J. Saunders, W. F. Cusack, J. Doyle (Forester in Charge, Killarney Forest), G. McCool (District Inspector), S. M. O Sullivan (Inspector). M. Swords (Inspector) represented the Forestry Division.

TUESDAY, JUNE 4th.

On this first day the weather was not too kind. Mist wreaths hung suspended over the hills for most of the day and there were frequent showers of drizzle. The majority of the party was prepared for such an eventuality and so lost but little of the enjoyment and interest which the day's programme provided.

The excursion party assembled at the entrance to the Department's nursery where they were addressed by the President, Mr. FitzPatrick. He said it was very cheering to the Council to see such a good turn out of members on this, their third annual excursion. As on previous occasions they were indebted to the Minister for Lands for the permission to visit the State Forest and they all looked forward to a most interesting tour through the nursery, plantations and woods of Killarney Forest and to hearing instructive details of management from the forester in charge and the inspectors who were accompanying the party.

Mr. FitzPatrick contrasted Killarney with the State properties seen on the occasions of the first two excursions. At Clonmel they had inspected a forest of scattered woods acquired from many proprietors and strung together for the purpose of management. Aughrim Forest, the venue of the second excursion, was built up laboriously over the years by the purchase and planting of contiguous blocks of sheep grazed mountain land. Here in Killarney the main part of the forest was in Muckross property. Originally the property of the O'Sullivans, Muckross had always been worked as a single estate. In the eighteenth and nineteenth centuries it was the home of the Herberts who did much planting of woods as well as carrying out many improving works. Many of the present magnificent trees date from the time of their ownership. Later the place was bought by Lord Ardilaun who was responsible for some of the younger plantings and from him the property passed to Mr.

Vincent who continued the care of the trees and woods which had been a characteristic of the estate for over two centuries. Mr. Vincent presented Muckross as a gift to the nation and the woodlands were now in the charge of the Forestry Service.

Mr. S. M. O'Sullivan representing the Minister for Lands, welcomed the members to Killarney State Forest, and hoped they would enjoy their tour. He did not agree with Mr. FitzPatrick's description of him as "the last of the O'Sullivans," preferring, he said, to describe himself as "the most recent of that clan."

Dr. Anderson spoke briefly on excursion arrangements and on the precautions to be taken during the excursion.

THE FOREST NURSERY.

The party then entered the Muckross nursery. It was started in 1933. Severe droughts were said to occur because of the light soil. For this reason seed-sowings were confined to pines and hardwoods. The stocking was largely of hardwood transplants, e.g., sycamore, elm, ash, alder, maple and oak which had been lined out in the previous February and March. There were some beds of ash, lime and oak seedlings. The ash seedlings were from seeds with delayed germination.

DOUGLAS FIR STAND (Compt. 2).

Passing from the nursery the party went to a twenty years old stand of Douglas Fir. Planting had been at 6 ft. x 6 ft. No treatment had been given since planting save a recent, combined weeding and thinning. Growth was rapid but a high proportion of crooked stems occurred.

Questioned as to the utilisation of the thinnings, Mr. Swords said that the rougher stems were suitable for fuel only. Tops were useful as pea-stakes and heavier butts could be sawn into box-boards. There was a variety of uses for the straight poles.

In response to questions concerning the canopy, Mr. McCool said that thinning was not yet complete. The policy was to thin gradually for some years to come.

It was stated that prior to planting the site carried a dense crop of nettles. Mr Clear sought opinions as to whether Douglas Fir would be planted on such a site to-day. Mr. McCool was of the opinion that a mixture of Douglas Fir and Spruce would be more likely to-day, while others plumped for hardwoods.

CARRIGAFRE LANE WOOD.

In this wood an example of the group planting of Oak was seen. Some trees of the previous oak crop remained on the ground. They were retained because of their amenity value and also in the hope that natural regeneration might be obtained. This hope was not realised, however. Dr. Anderson explained the group method to the party. Instead of spacing the plants evenly over the ground at 3 x 3 ft. or 4 x 4 ft. the hardwood species were planted close together in groups set in a matrix of a conifer species. The conifer acted as a nurse and was removed according as the development of the hard-

wood rendered it necessary. In the groups the plants were set 18"-24" apart—each group having 13-21 plants. The distance between the groups (centre to centre) varied, but he thought that 18 ft. x 18 ft. should be the maximum, as wider spacing might result in an insufficiency of trees for a final crop.

Mr. O Beirne asked why not plant at 3 x 3 ft. or 4 x 4 ft. in the groups. Dr. Anderson replied that the closer planting in the groups ensured cleaner stems. This method of planting was still in the experimental stage, however, and so far it was not certain that the results hoped for would be obtained, i.e., that each group would provide one well-shaped tree for the final crop.

THE POOL WOOD.

The party crossed an open field to enter the Pool Wood. En route a veritable sea of tree-tops stretched out in varying hue to ascend the distant slopes and become lost in cloud. This prospect, together with others seen later, disproved in a most convincing way, the accusation that State forestry does not give sufficient consideration to the amenity value of woods in the beauty spots of our country. While working ceaselessly to harness the productive powers of these forest lands the greatest care is also taken to ensure that nothing of the charm which trees lend to the scenery is taken away.

The Pool Wood consisted of a sixteen year old stand of European larch. The height growth and form of the stems were extremely good. Mr. O Beirne thought immediate thinning was not necessary. With this Mr. Bogue agreed, but suggested that an occasional dominant could profitably be removed. On the other hand Mr. FitzPatrick held that further thinning was necessary, as some of the stems were inclined to be whippy. Mr. Clear pointed out that no serious damage can be done to larch by over-thinning except—as Mr. O Beirne observed—by allowing excess light to the floor and thus encouraging unwanted ground vegetation. A sample thinning had been carried out in one area to give members an opportunity of seeing what the canopy would look like after such treatment.

On the question of canopy preservation Dr. Anderson said that correct thinning helps to maintain the canopy, because it enables the trees to build up proportionate and well-balanced crowns. It also firms the trees' hold in the soil. Mr. Swords told the party how thinnings would be disposed of.

The terrain in this area might be described as rolling. The soil is sandy and deep. Mr. O Beirne said that on such ground Scots Pine would do better than Larch on the ridge tops. On these the water-table sank too low in dry weather to provide the Larch with a sufficiency of water. This retarded its growth and rendered it liable to fungous diseases. Scots Pine on the other hand was adapted to such conditions, he said.

THE LACA WOOD.

Leaving the Pool Wood the party followed the public road up to Laca Wood. Before studying the stand, however, members

forgot silviculture for a moment. Turning westwards they were silent while the reflected lights from Killarney's lakes met their gaze. From this vantage point they enjoyed what must have been their loveliest view of Killarney with its verdant forest and shimmering waters.

The Laca Wood was planted in 1917, with Scots pine and Corsican pine at a spacing of 3 ft. x 3 ft. Growth was good, the Corsican pine especially looking fine and healthy. As regards the timber of Corsican pine, Mr. Bogue said that its uses were many, especially when high quality was not essential.

THE MOSSY FARM WOOD.

In one part of this twenty-nine years old wood there was an irregular mixture of Scots pine, European larch, Sitka spruce and Norway spruce. Elaborate mixtures are generally difficult to deal with when thinning time arrives. This stand was no exception, the light requirements and rate of growth of the four species varying widely. The Forestry Division held the view that the site was best suited to Scots pine and hence the treatment being applied aimed at its preservation for the final crop.

In the other part of the wood there was a pure stand of Japanese larch. In 1924 this was planted as a 50 % mixture with Scots pine, the two species being in alternate lines five feet apart. To-day, except for a marginal line of Scots pine the stand is pure Japanese larch. It was not known when the pine disappeared. Such information as was available, however, indicated that the pine had succumbed to heavy weevil attacks in early life, thus leaving the larch to fend for itself at a spacing of 4 x 10 ft. The larch formed a very pleasing crop of straight clean poles.

THE NATIONAL PARK.

After lunch at the Muckross Hotel the party visited the National Park. Along an avenue known as the Queen's Drive members saw some fine specimen trees of Scots and Monterey pine and European larch.

COMPARTMENT 18.

In this compartment members saw two twenty-five years old stands, one of Sitka spruce and one of Douglas fir, growing on similar ground. Height growth of both species was good—dominant stems averaging 50-60 ft. Both stands had been thinned in 1936/37 and 1941/42. The Sitka had been thinned again in the current year. Mr. Crerand considered the recent thinning of the spruce not too heavy, while Mr. McCarthy said he would like to see more of the "wolf" trees removed from the Douglas fir crop. Mr. O'Sullivan pointed out that some marginal trees had been removed in the recent spruce thinning. Dr. Anderson said that normally, marginal trees would not be removed lest a grassy vegetation should spread into the stand and use up the humus on the floor. In this case there was no such danger as there was side shade from a younger crop adjoining.

Mr. Bogue asked why was it, that the Douglas fir planted in Ireland about a century ago had such good stem form, as compared with that of more recent planting. He proffered the suggestion that it might be due to the use of seed of different origin. Dr. Anderson agreed saying that the original Douglas fir seed was imported from the Vancouver Island region while the more recent importations were from the Washington area. Of late, the Forestry Division has been trying to import seed from the more northerly end of the range.

COMPARTMENT 30.

This fine sixty year stand of European larch was being thinned for E.S.B. line poles. The present thinning was normal, but later the stand would be divided into a number of parallel strips at right angles to the prevailing wind. The crop was to be opened up by heavy thinning and Silver fir, Norway spruce or Douglas fir were to be underplanted, beginning at the leeward end and working into the wind in strips.

All the thinnings from this stand were not accepted by the Electricity Supply Board as some had heart-rot. Mr. Mangan, who selects poles for the E.S.B., said that pre-war specifications were very exacting. The war-time shortage of material rendered a certain "watering-down" of specifications necessary. The principal modifications were in regard to straightness and general form.

Mr. McEvoy spoke a few words on the floor vegetation in the stand, saying that the Woodrush (*Luzula*), which was the dominant species, found conditions under a deciduous exotic tree, i.e., larch, similar to those prevailing under the indigenous oak.

The party then made its way down the winding path to the top of Torc waterfall. Here members took time to contemplate the majesty of the scene. Some were reminded of Tennyson's "Splendour Falls":—

" The long light shakes across the lakes,
The wild cataract leaps in glory,"

as the roar of the tumbling water echoed and re-echoed amongst the trees.

Mr. O'Sullivan pointed out to the party that the white "X" marks so frequently seen on trees in this area were put there to ensure their retention from felling and so preserve the beauty of the scene.

Mr. FitzPatrick gave an account of the planting of this area. Ratcliff's *Survey of Kerry* stated that in 1801 Torc mountain was planted with Scots pine, oak, ash and sycamore. The pine was only intended as a nurse but did so well that in 1812 more of it was planted where some of the hardwoods did not thrive.

WEDNESDAY, JUNE 5th.

On Wednesday the weather was dull and at times there was light rain—which, however, did not interfere with the progress of the excursion. A strong wind blew for most of the day and brought the "white horses" out on the lakes.

The National Park was the venue. Mr. O'Sullivan led the way to an old stand of mixed species. It contained European larch, Scots pine and Monterey pine, beech, etc. The intention here was to open up the canopy gradually and encourage natural regeneration of hardwood species. All the species present showed specimen stems of great dimensions, and members spent some time estimating their volumes and debating the results obtained. Needless to say the sawmillers and the foresters were not always in agreement! As the material was being neither bought nor sold, however, their parrying served to bring an air of joviality into the proceedings.

The larch and Scots pine ranged from 80-100 ft. in height. A sample tree of larch measured 16" Qr. girth at breast height. This tree was estimated to have a volume of 70 to 80 cu. ft. of timber and therefore to be worth £4 5s. at present prices.

A sample Scots pine measured 16½" Qr. girth at breast height. It measured 70 ft. (approx.) to timber height and had an estimated volume of about 80 cubic feet.

GOLLEN WOOD.

Taking a pathway along the lake-margin, the party came to Gollen Wood. Here members saw twenty-five year old stands of Sitka spruce and Scots pine which had not been treated since planting. Height growth was good, but the lack of thinning had resulted in a large number of compressed crowns. The site was flat and wet. Dr. Anderson pointed out that thinning would have to be very carefully carried out on this shallow wet alluvium.

Along the margins of the wood several species of silver fir had been planted. On the windward side it was noticed that *Abies brachyphylla* did better than either *Abies pectinata* or *Abies nordmanniana*.

THE MUCKROSS PENINSULA.

On this limestone peninsula several of the rarer herbs and shrubs for which Killarney is noted, were seen. *Arbutus* and yew were abundant in their natural habitat on the bare windswept limestone of the lake margin while whitebeam and madder (*Rubia peregrina*) were also found among the rocks. In the interior some scattered clumps of naturally regenerated oak were noted. One particular clump was ten to fifteen feet high and was situated under the spreading limbs of a large pine where abundant side light entered. Various theories were put forward to explain why this dense growth of oak should arise underneath a pine tree. Dr. Anderson said that natural regeneration was successful on the peninsula because the light conditions were correct and because stock was excluded.

An extremely large Douglas fir was the next item of interest. Without proper side shade it naturally had grown very branchy. Estimates of its volume were only very approximate—ranging from 275 to 350 cubic feet. It was interesting to see such growth of Douglas fir on limestone since it is generally regarded as a calcifuge species.

A massive oak of 48 ins. Qr. girth was estimated to contain 160 cubic feet of saw timber and 9-10 tons of firewood.

On reaching a handsome rustic bridge of cedar wood the party halted and some of the members occupied the interval before returning to take photographs.

On the way back to lunch members spent a pleasant half-hour in visiting Muckcross House and its beautifully laid out rock garden.

After lunch at the Muckcross Hotel the party returned to the National Park. The first item of interest was an eleven years old stand containing two species of Eucalyptus (*E. mulleri* and *E. viminalis*, coastal and mountain types, respectively) together with Lawson's cypress and Douglas fir. The Eucalyptus was doing well—averaging 25-30 ft. in height. Mr. O Beirne gave members an interesting account of the eucalyptus—its origin, its importation into Ireland, the methods adopted in its cultivation here and of the success of the various species here.

Close by the gate lodge were some fine specimen trees of Monterey pine (*P. insignis*), Scots pine and European larch. One Scots pine stem measured 28 ins. Qr. girth (Breast height) and was 50 ft. to timber point. A stem of European larch measured 31 ins. Qr. girth and was 55 ft. to timber point.

JAPANESE LARCH AND BEECH MIXTURE.

This sixteen years old stand of Japanese larch and beech had about one fifth of the larch stems removed in order to free the beech which had largely been suppressed. Originally the larch had been intended as a nurse for the beech. It had not been removed in time, however. Mr. Clear questioned the necessity for the nurse species in this instance as beech was able to draw itself up and produce clean stems. He also said it was useless to endeavour to rescue hardwoods which had been suppressed unduly in early life.

In passing the party visited the famous Muckcross Abbey where lie some of the great poets and chiefs of Munster. The tombs of Aodhagan O Rathaille and Eoghan Ruadh O Suilleabhan were seen.

In the cloister the party gathered to the five centuries old yew tree. It measured 29½ inches quarter girth at breast height and was 58 ft. high (approx.)

Mr. FitzPatrick gave members a resumé of the history of the Abbey.

Turning again to forestry the party visited a fine old stand of sessile oak. This particular stand was said to be the best in that part of the country. Mr. McEvoy said that the soil was deep and the vegetation it carried indicated it to be fertile, the principal species represented in the ground vegetation being Enchanter's Night-shade, Herb-Robert, Blue bell and the Male, Broad Buckler, Prickly Shield and Hart's Tongue Ferns. The two latter indicated a high lime content in the soil. The Yellow Pimpernel, which was present indicated a moist site. There were approximately forty-five trees per acre. This spacing was unusually wide for an Irish oakwood.

To conclude the day's proceedings members visited a thriving ten years old plantation of Hemlock (*Tsuga heterophylla*). The

spacing had been $4\frac{1}{2} \times 4\frac{1}{2}$ ft. The crop averaged 15-20 ft. in height and the stems were of very good form.

THURSDAY, JUNE 6th.

On Thursday a visit was paid to the property of Colonel The McGillicuddy at Beaufort. As members assembled at Beaufort House the sun shone brightly.

Colonel The McGillicuddy welcomed the party. It was a pleasure, he said, to see the members of the Society of Irish Foresters at Beaufort. He carried on forestry on a small scale, regularly planting small areas. He kept a small forest nursery because the cost of commercial stock was so high, the supply was not regular and also because the plants were frequently in bad condition when received. Of 6,000 nursery trees which were planted out last autumn many failed and hence the practice of transplanting natural seedlings was being adopted. Boys were employed to dig up the seedlings around the estate.

Referring to State forest policy he said that Ireland was following the traditional English methods, i.e., planting was being done by the State and by large land owners, but nothing was being done by the small farmers. When small farmers do carry out some planting they seldom give the trees any further assistance and hence they fail to grow properly if at all. He suggested that such people, on contracting to plant a prescribed minimum area should have the services of a trained foreman available to them in that and subsequent operations.

THE NURSERY.

The party was then shown the Estate Forest Nursery. It was a long and narrow strip about one tenth of an acre in extent and lying on the south side of the garden wall and well stocked with a variety of species. There were *Cupressus macrocarpa* seedlings and thriving Monterey pine (*P. insignis*) transplants. Colonel The McGillicuddy pointed out a bed where eighty selected Spanish chestnuts had been sown and where only nine germinated. Mr. O Beirne said that the failure might have been due to the depredations of rats or to poor ripening of the seed. There were transplants of oak, beech, Lawson's cypress and Scots pine also. Five thousand natural seedlings of oak, ash, sycamore and birch collected on the estate were lined out.

THE FLOWER GARDEN.

The spacious and well stocked garden was managed by Madam McGillicuddy whose hobby it is. It did her credit on that fine morning. The lupins, pinks and columbine were in full bloom, joining with the blossoming cherries, peaches and apples to give a pleasing display. In the rock garden likewise, where the party spent a pleasant hour, the colour scheme was exquisite. Flowering herbs and shrubs of many species were effectively arranged to give the most pleasing harmonies and contrasts of colour.

Before departing Mr. Fitzpatrick thanked Colonel The McGillicuddy on behalf of the Society, for inviting its members to so beautiful and interesting a place.

DUNLOE CASTLE AND GROUNDS.

After lunch the party travelled to Dunloe Castle, Miss Pettit's property, where members spent a most interesting and enjoyable evening. The sun shone brightly, seeking as it were, to be forgiven for its neglect in the early stages of the excursion. Entering by the main avenue, the party was met by Mr. Moriarty, Miss Pettit's head-gardener, who, in the unavoidable absence of Miss Pettit, acted as guide.

Miss Pettit's comprehensive collection of trees and shrubs is unique amongst private arboreta. Outside a botanic garden one would not expect to come by such a variety of rare exotic trees and shrubs. In fact several species not usually seen out of doors were growing excellently, testifying to the mild local climate. As Mr. Moriarty led the party from one species to another members had many opportunities of testing their knowledge of identification. With great enthusiasm did they do so. Such species as *Cryptomeria japonica*, *Cedrus atlantica* (glauca), *Quercus rubra*, *Robinia pseudacacia*, the tulip tree (*Liriodendron*) and the maiden-hair tree (*Ginkgo*) presented little difficulty but such species as the liquidamber (which produces the satin-wood of commerce), hornbeam-leaved maple (*Acer carpinifolium*), the Siamese maple (*Acer griseum*), and *Tricuspidaria lanceolata* were not so well known. The latter species with its brilliant scarlet, Chinese-lantern-like flowers attracted much attention.

In the garden members had an opportunity of seeing a yew tree measuring 36" Qr. girth B.Ht. It was said to have been an old tree when the Muckross Abbey yew was planted. When the evening's programme was complete Mr. FitzPatrick thanked Mr. Moriarty on behalf of the Society.

The excursion then officially concluded.
