## Excursion to Townley Hall

A LTHOUGH we were assured that about 40 ins. of rain falls every year at Townley Hall, rain could hardly have been further away when some 40 members and friends arrived there on Sunday, April 29th. Unlike the weather for the Society's last visit to Townley in 1960, this, the opening day of the 1962 season, was a meteorological fair or fine with above average temperatures. The assembled party was greeted by the leader for the day, Dr. N. Murray, who welcomed us on behalf of the Kells Ingram Farm Management Committee of Trinity College, Dublin.

Townley Hall, an elegant limestone structure, was designed by Francis Johnston and built in 1794. Long the family seat of the Balfours, it is now undergoing reconstruction as part of an overall plan to foster better agricultural training for Dublin University agronomists. At our first stop Dr. Murray outlined the main silvicultural problems of the area. While the estate held many quality hardwoods, mainly beech and sycamore, at the time of taking over in 1957, the woods were generally under-stocked, with much scrub and undergrowth. Costs for clearing such terrain need not be necessarily high should bulldozing equipment be employed. However, such machinery work was not possible where we stood and suggestions were invited for inexpensive methods of clearing. Mr. O'Driscoll suggested ammonium sulphamate as a possible chemical and added, if purchased in large quantities and sprayed on the undergrowth (laurel, briar, etc.) control, and possible eradication, might be achieved. Mr. McCool thought that selling off the good timber with the bad to locals on an area basis at reasonable prices should bring about an economic clearing. Mr. McEvoy favoured a mechanical clearing with bulldozer, heavy chain (links up to 56 lbs.) and ball, but there was difficulty with the supply of such equipment.

The question of the replanting species brought about a lengthy

discussion. Douglas fir in the view of many, would undoubtedly grow well on the ground in question, but doubts were expressed by members of the timber trade about its suitability for joinery. Brittleness of the timber was the main complaint in the sawmills, a fault which was thought due to the comparative immaturity of our Douglas fir stands. Mr. Mooney, in answer to a question, suggested that the coastal variety of Douglas would prove a much better provenance than the inland variety.

Dr. Murray then lead us to an area which was planted in the first week of May 1958. Overlying Silurian shale, the soil was a heavy clayey loam and was clearly suffering from drainage impedance. The area was flat and previously held a scattering of commercial trees in a matrix of scrub and briars. The clearing of this area is described in the April 1959 edition of Irish Forestry. The 14 acre plot was pit-planted, mostly with Norway spruce and a small percentage of Sitka spruce. Juncus spp. was dominant amongst the ground vegetation and the Norway spruce is already showing signs of going into check while some (fortunately few) had actually died as a result of water logging. When asked about the desirability of manurial treatment for the crop, Mr. N. O'Carroll said that it was likely that drainage was the limiting factor in the growth of these trees. This was made quite apparent when the party moved over to the edge of a drain which was opened in 1958. Norway spruce was planted on the spoil of the drain and this, coupled with the improved rooting medium, was in all probability responsible for the healthier colour of the spruce. Better results would have been got, Mr. McCool thought, had a plough prepared the ground for planting or in the absence of a plough, resorting to the time proven mounds would have produced much improvement.

Mr. McEvoy brought up the interesting point of introducing Alder (Alnus glutinosa) even at this stage not only for its nitrogen fixing properties, but also as a means of improving drainage channels in the soil. The opening of new drains would be inevitable, Mr. Morris thought, if further checking was to be avoided.

Our next stop brought us face to face with the problem of grass-land afforestation. The area was planted in 1959 with large 2 year Scots pine which to a large extent failed. The area was beaten up the following year with Norway spruce and Lawson cypress. Mr. Mooney thought that the ground was admirably suited for short rotation (30 years) ash crops established in groups. Although the pH was in places a doubtful 6, the ground was fertile with a high lime status. Mr. Morris when asked about poplars for the area doubted if the ground was fertile or deep enough for this species. The deep rooting system of poplars demanded a good supply of moisture which he though the site could not supply.

In an area dominated by mature beech, oak, sycamore and silver fir we were introduced to a most promising young crop of naturally regenerated beech. The crop contained 2,290 Hoppus feet with 72 stems per acre. While it was agreed that much of the hardwood could fetch a handsome price on any market, there was a need to remove first the poorer quality stems. This would not only enhance the monetary value of the main crop but would also encourage the verdant carpet of young beech seedlings. Mr. Joyce thought that this naturally regenerated crop was at the stage when it needed extra light and that it was silviculturally necessary to remove some overhead cover. Many stagheaded plants of 5 and 6 feet bore evidence of the poor light value at present. Many feared that increased light would, *ipso facto*, produce epicormic shoots on the veneer quality oak but we were quickly reminded that the production of epicormic shoots depended on the occurrence and density of dormant buds which needn't necessarily be present on veneer quality logs. Mr. McEvoy remarked that the ground vegetation bore out the suggestion of a high lime status in the soil and that quality hardwoods would inevitably be produced if there was a gradual removal of the poorer overhead shade.

After a most enjoyable tea on the lawns in front of Townley Hall, Mr. N. O'Carroll, our Convenor, thanked Dr. Murray and his associates on behalf of the Society for making such a pleasant day possible, for which the Society was deeply indebted.

F.M.