

39th ANNUAL STUDY TOUR 1981

SLIGO/FERMANAGH/LEITRIM

Tuesday, May 26th — Lough Gill Forest

Pat Finnerty, Divisional Inspector; Pat O'Malley, District Inspector; Tommy Gallen, Forester.

Carns Property. It is intended to replant a YC 22 Sitka spruce stand at present being clearfelled with ash, because it is considered aesthetically more desirable than spruce in this amenity area and because it meets a requirement for hurley ash. While it was agreed that on economic grounds Sitka spruce must be the first choice, the other considerations were felt by most to be overriding on this site.

The party travelled by lake cruiser on Lough Gill to the second stop, Killerry Property. The question faced here was the treatment of a P/61, YC 10 Lodgepole pine stand of inland provenance. The stand had not been thinned and the management decision was not to thin because of silvicultural (post thinning invasion of ground vegetation) and economic factors. Many took the view, however, that as crop form was very good and quality Lodgepole sawlog an attractive product, a strong argument could be made for selecting the main crop now and following a policy of thinning and high pruning.

Dromahair Forest

Michael O'Brien, Forester.

Tullinawannia Property. Thinning had been unavoidably delayed and was several years overdue in a P/60, YC 27 Sitka stand at present being thinned for the first time. The decision to thin now was a gamble particularly as the soil was a peaty gley. Extraction alternatives, cable and horse, were seen and discussed. While direct comparison of costs was not possible, horse extraction is attractive for small size material over 100-150mm. It causes more crop damage than skidding but less than cable. Cable extraction costs were discussed at length and the high cost of using obsolete equipment in this area of rapid technological advance stressed.

Lough Gill Forest

Diffreen Property. Thinning is at present in progress on a P/52, YC 26 Sitka spruce stand on a gleyed soil. This is considered a high-risk windblow area and the wisdom of thinning seven years before clearfelling was questioned both on silvicultural and economic grounds. The vulnerability of this fine textured gley to traffic damage was pointed out and the suggestion made that cable systems might have to be used on such sites in the future.

Wednesday, May 27th — Ballintempo Forest

Cecil Kilpatrick, Chief Forest Officer; John Phillips, Regional Officer West; Bill Wright, District Forest Officer; Pat Carlin, Head Forester; Dave Dickson, Chemical Research Division, Department of Agriculture; Stan Milner, Forest Research Officer.

Nutritional Requirements of Sitka Spruce. In addition to phosphate, Sitka spruce on high-level blanket peat, such as at Ballintempo has shown a requirement for nitrogen. In the experiment we visited, Yield Class of the P/63 crop was 12 without added nitrogen whereas with nitrogen it was 16. Two sources of P were compared, coarse rock phosphate which up to 10 years after planting was the more effective form and basic slag which in recent years has given superior growth even without nitrogen.

Respacing trial on Sitka spruce. Where a decision has been taken not to thin because of high windthrow risk, respacing is seen as an attractive alternative. The advantages of reducing stem density to 1500 to 2000 stems per ha are to give a larger mean tree attracting a higher price, to reduce felling and extraction costs and to offset the problem of dealing with dead trees, the result of self thinning at clearfelling. Pruning was not envisaged in respaced stands. The opinion was expressed that the respacing was not sufficiently drastic to increase mean tree size significantly. The possibility of following the respacing with a thinning to waste was suggested.

Lodgepole pine provenance trial. Nine provenances are being tested in this trial established in 1964. Performance measured in terms of mean height and basal sweep showed that the south coastal provenances had both the best growth and by far the highest incidence of basal sweep. The discussion was wide ranging covering the question of whether Lodgepole or Sitka was the best choice of species on such sites, the likelihood that the basal sweep problem could be lessened by better nursery and planting techniques and the possibility that a satisfactory main crop could be selected from the trees not affected by basal sweep.

Drainage/ploughing experiment: Drain depth, and spacing treatments were superimposed on SMB and DMB ploughing in this experiment. Deep SMB ploughing was almost as good as the most intensive drainage treatment. It was suggested in discussion that the effect of drainage was shortlived and that nitrogen application would probably be more cost effective.

Cultivation and liming experiment: This experiment while it was only established in 1977 generated a useful discussion. It represents an innovative approach to site preparation in an effort to find the best means of minimising two major problems on deep, oligotrophic peats, nitrogen deficiency and stability. DMB, SMB and tunnel ploughing are being tested in combination with liming and rotovation. Discussion covered the importance of lime incorporation, the merits of disc harrowing in place of rotovation and the long term value of liming for site improvement and nitrogen mineralisation.

Thursday, May 28th — Ballyfarnon Forest

D. M. O'sullivan, District Inspector; Tony Mannion, Assistant District Inspector;

Michael Donnelly, Forester in Charge; Eugene Hendrick, Research Inspector; Joe Freeman, Research Forester.

Cultivation of gley soils: This experiment was established in 1975 on an abandoned drumlin farm. The soil is a surfacewater gley with a stony subsoil which makes moling ineffective. Growth differences under a range of cultivation treatments are small, as yet. If it gives satisfactory growth, ripping would be the preferred treatment. It gives an unbroken ground surface which should increase stability and ease of extraction. However, grass cleaning, which is minimal under doublemouldboard ploughing assumes greater importance with the ripping treatment.

A brief lunchtime stop was made at Lough Key Forest Park where the group heard an account of the development of the park.

Drumhierny. Estate of Mr. A. O'Rahilly.

Professor Clear; Ted Lynch, Research Inspector.

The influence of wide spacing on volume production and timber quality in a highly productive Sitka spruce stand was examined. The YC 26-30 stand was established in 1950 at an effective spacing of 2.6 x 2.6m. Standing volume is now 614m³ of which 86% is sawlog material as compared with 439m³ and 62% sawlog in the nearest equivalent stand (YC 24) in the Forestry Commission tables. Published Forestry Commission management tables are not appropriate for application to the spacing and thinning regimes practised in such stands nor is the range of yield classes quoted adequate. Grading rules and even the concept of stress grading were criticised also. The stability of this stand established on a gley soil without any mechanical site preparation was commented on and the suggestion made that it might be attributed to the initial wide spacing and the fact that thinnings when carried out were light.

Arigna Valley

Jerome Dufficy, John Duffy, Acquisition Officers.

A brief discussion was held on the problems of acquisition in the district.

The Society's Annual Dinner was held in the Sligo Park Hotel.

Ted Farrell.

STUDY TOUR PARTICIPANTS

*Lyal Collen, *Effie Collen, Donal Crowley, Jim Dillon, Jim Dooley, Joe Doyle, Michael Doyle, Declan Egan, Jim Fanning, Dr. Ted Farrell, John Fennessy, Mel Friel, Lily Furlong, Dr. Jack Gardiner, P. J. Lehané, John Madden, Jim Maguire, *Frank Moran, *Brid Morrissey, Thomas Murphy, Michael O'Brien, John O'Driscoll, Brendan O'Neill, Con O'Shea, Denis O'Sullivan, Tom Quinn, Brendan Riney, *Henry Sisk, *Jane Tottenham, *Robert Tottenham, Cornelius Warren, George Beirne, Michael Burke, Charlie Crowley, Jim Crowley, Noel Cullinan, Gerry Cunningham, Tony Daly, Michael Donnelly, Pat Doolan, Frank Drea, John Duane, Jim Feenay, Tony Finnerty, Pat Finnerty, Noel Foley, Joe Freeman, John Hanley, John Harte, John Haughey, Pat Helbert, John Hogan, *Brian Hussey, Tim Hynes, Kevin Hutchinson, Richard Jack, Christy Jeffers, Barry Lambe, Eamonn Larkin, P. J. Lyons, Tony Mannion, G. Mawn, Geoffrey Michael, John Murren, Paddy McEneaney, Joe McEvey, John McLoughlin, Thady McTernan, James O'Connor, Seamus O'Domhnaill, Jim O'Dowd, Rory O'Driscoll, Tim O'Regan, John Phillips, John Regan, Martin Ruane, Frank Rushe, Nicholas Ryan, John Higgins, Michael Ward, Pat White, Sean White. — *Associate Member.