5. THE YEAR'S WORK:

General review of operations: scope, degree of success and completion, weather and outstanding points.

All planting and nursery programmes were met, and in fact the planting programme ~~exceeded~~ was exceeded by a small but noticeable margin. The winter was fairly open, but a very poor early spring hampered nursery work (frosts and rains) and made seed-sowing later than it should have been. Lining out went on into the first half of May.

Thinning programmes are most backward at Glenurquhart, where shortage of labour is acute. Cleaning and brashing (or raeding) is also behind-hand at Glenurquhart.

At other units cleaning, brashing, and thinning are either up to schedule or will be by the end of this forest year (51).

Housing:- The completion of six permanent houses at Struthconon has resulted in the closing of the Bothy there. Four permanent houses have been completed at Munlochy for Kilroy Forest.

Labour has been short at Urray, Reelig, ~~[illegible]~~, Boblainy, Ginsecham and Glenurquhart.

Standing sales of timber have eased the labour position at Craigphadrig and may do so at Glenurquhart. At Craigphadrig the shortage of labour is only noticeable in the sense that any saving in labour at Craigphadrig (the parent unit) means that men can be diverted to Reelig (the sub-unit).

13. PLANTATIONS MADE IN YEAR OF REPORT:

(Appendices 1 and 2 will be prepared at Headquarters)

Observations.

The target figure set for each forest was reached and in some cases passed by a margin of up to 12½ % of the original target. This was made possible only by the mild winter, as in three forests (Murray, Battand and Glenurquhart) the work required to be done preparatory to planting and the assembly of planting squads was not completed until well into the Forest year.

At the end of FY 50 no large scale failures have been noticed in FY 50 plantations. The biggest damage has been caused by rabbits in areas where fencing immediately preceded planting ~~and~~ or where trappers were not available until the last minute, (due to factors outside the control of the Commission in all cases). One exception to this was at Millbine where C.P and EL especially suffered in the early Autumn Planting Experimental area; although the number of plants affected is high in proportion to the number planted, the total number of plants to be replaced is small.

14. PREVIOUS YEAR'S PLANTATIONS:

(a) Beating up
Observations, whether up to date, etc.

(b) Progress in establishment of plantations
details in appendix 111 and summary in table V.
Observations, including special notes as to areas scheduled as unsatisfactory.

(a) Beating up

With the exception of Kilcoy and Millbuie forests beating up was not extensive. At all forests the position is satisfactory as at 30 Sept 1950, with the possible exception of Millbuie where most of the Sitka Spruce areas are not making headway. Assuming that Beating Up means the replacement of dead plants and not the assistance of cheeked plants still alive (as e.g. SS at Millbuie) the position is satisfactory and up to date in the district.

(b) The only areas of significance which are not yet established and which are in check are the SS. areas in Millbuie forest dating from the earliest plantations made at Millbuie. These areas are small compared with the total planted area on Millbuie.

Observations

Special urgency :- ① brashing or racking of plantations in Glenurquhart, including cleaning in several blocks.

② Treatment of Scrub areas at Guisachan for P52 onwards.

③ Thinning and cleaning at Findon.

15. PLANT SUPPLY DURING YEAR:

General review.

Observations as to suitability of home and imported stock large imports and/or exports, stocks destroyed.

Generally the complaints received from all forests, other than those supplying their own plants (notably Guisachan) and those planting mainly on ploughed land (notably Kilcoy and Millbrie), were to the effect that plants were too small.

Due to shortages in all species of the ages and sizes demanded by foresters plants were allocated from home and other Conservancy nurseries of ages and sizes below those demanded by units in the district.

In areas of heavy vegetation, notably all Strath Conon, parts of P50 Glenmorephant, and parts of P50 Beltan and Urray, these complaints were no doubt justifiable complaints. Probably, however, the plant supply position was such that no other ages/sizes of plants were available.

17. SEED SOWING AND LINING OUT:

Observations: Seed. Quality, home collection, germination, growth.

Lining out. Suitability of stock lined out, losses, growth.

Seed

The quality of seed received this year varied from very good seed of high germination and purity (eg. on lot of N.S. was as good as can ever be expected in practice) to seed which proved to be of "NIL" germination (larches eg.).

Seedling Growth

This has been a poor year for all species, the ~~most~~ critical factor, I think, being the low moisture content of the soil just at sowing time and the dry spell following sowing. Those seedlings which germinated normally did so in patches in the wetter areas. Those seedlings which missed this normal germination no doubt lay dormant in the soil and germinated somewhat later than usual. When they did germinate their progress has been well behind that of the "normal" germinating seedlings.

Broadly speaking, however, only S.S. in the wasteland nurseries and E.S. and some Jap. Larch in established nurseries are definitely not liftable at 1 year. Other species are liftable but only just so, with the exception of the Pines which have done reasonably well all things considered.

2 yr JL + 2 yr SP have made very good growth indeed.

Lining Out

Age ~~to~~ of seedling lined out has been no criterion of quality of transplant

and, not unusually, one plus one transplants are commonly better than 2+1 transplants of the same species (in Scots Pine, PC & SS, for example).

Losses have been highest in backend L.O. due to flooding and flooding plus frost-lift.

The worst losses have been in EL, PC, SP, NS in the Colony Nursery, both backend & spring L.O. The Colony seems unsuitable at the moment for back-end L.O. & this may be due to poor tilth due to lack of bacteria etc in previous years, so that cultivation could not be ~~[illegible]~~ carried out to the specifications considered necessary. This year as much cultivation to follow, as was possible with the equipment available, was done, and the results can only be awaited.

Growth in the Breakfast nurseries at Finden seems to have improved since the deep ploughing done by Mr Dixson.

18. STOCKS:

NIL.

19. PLANTATION WORK:

(a) Outstanding points affecting regeneration and establishment, especially choice of species, age and type of plant, preparation of ground (turfing and ploughing, etc.), drainage, planting, weeding and B.U.

(b) Silvicultural considerations in respect of cleaning, thinning and felling operations.

(a) Choice of Species and Age of Plants

Lack of good 2+1 E.W. has limited the use of this species in areas of heavy bracken e.g. Strath Conon, and N.S. was used in lieu.

The lack of good 2+1 S.P. was also felt in areas of heavy herbage e.g. Glenurquhart, Urray, Strath Conon, on unploughed land.

One year DF ex Littlebeum wasteland at Kilroy appear to have done better on ploughed land on the hill than in the nursery at Blackstand. Presumably there was more shelter for these large & somewhat bush seedlings on the hill than in the nursery.

Prep. Ground.

Birch scrub has been difficult to sell at stump in forests where labour did not permit its extraction e.g. Strath Conon - no sale standing, Glenurquhart - difficult to sell ~~at~~ felled at stump.

Ploughing was completed on all areas scheduled for ploughing except at Urray where the many large stones lying close to the soil surface

made ploughing with the normal outfits virtually impossible. Planis Killefer might have dealt with this area, but it was not available in time.

Weeding

Heavy weeding was required at Strathconon. In some areas 3 weedings were required during the season - all of bracken.

B.V. It is very difficult to get suitable plants for B.V. Usually plants are too small except for ploughed areas. The shortage of large plants for BV is most felt at mists of heavy ground vegetation eg. Strathconon.

(b) Cleaning and thinning. Silviculturally Glenmarkhart presents the most pressing problems.

20. NURSERY PRACTICE:

Reviewed from the point of view of raising correct numbers of suitable stocks at the lowest prices, protection, maintenance of fertility, etc.

① It seems that the main difficulty yet to be overcome is the sowing in wasteland nurseries of good seed which will definitely give one year useable seedlings fit for lining out. ② Thereafter the problem is to ~~and~~ confine L.O. to spring - if the L.O. plough is successful in the spring of 1951 then this might be the answer to the L.O. problems.

Some of the difficulties associated with ① may be overcome by the use of greater second & subsequent applications of hops than hitherto in certain nurseries suspected of being low in nutrient contents e.g. Mt Eagle and Red Sank Nurseries.

Bedding out parallel to the ~~beds~~ length of the beds with tractor excavation of the alleys for back-end L.O. seems to be successful. At Guilbrie the alleyways were taken out by plough with the Ferguson tractor after the bedding out had been done at a saving of 6/- per 1000 on L.O. piecework rates less a very small amount for tractor work required in addition.

The rotavator for seed bed preparation promises well, though trials & use to date have been to scanty to provide

accurate costing data.

The Senn plant lifts again promises very well, but use to date has been limited in the district, since not much lifting has been done since the tool was received.

Sand-spreaders in use at present seem to be ineffective and have not been used this year.

21. EXPERIMENT AND RESEARCH:

Deductions made and work done during the year, suggestion and proposals for future Divisional Or Research experiments.

Research Experiments Proposed.

① The development of a large - wheeled four-wheeled-drive four-wheeled-steering tractor similar to that produced in Italy before, and at the beginning of the 1939-45 war. This vehicle is capable of good road speeds with a cross country performance closer to that of a tracked-tractor than any other machine I know. The Italian machine was used as a gun tractor in the Western Desert.

② The development of a tracked tractor with the operator sitting in front of the engine for use with front-end ploughs as eg. the Disc.

22. FIRE PROTECTION:

Observations as to fire hazard during the year, as to adequacy and cost of preventive measures, exceptionally dangerous units, recommendations.

During the year there were no exceptionally long and dangerous periods of fire danger as eg. in the summer of Forest Year 49.

The main dangers are in the spring at those forests where neighbours were making muirburn eg. Kessock, Reelig, and Inisachan. Only at Kessock was it necessary, however, to turn out a force of men disproportionate to that employed by the landowner making muirburn. It appears that it will be a long time before neighbours will realise the risks involved to Commission (and Private) woodlands, when they make muirburn on adjoining lands. As the law is never enforced regarding adequacy of control by proprietors over their muirburning operations in this part of the world it is difficult to see how this danger can be avoided.

It also seems quite impossible to stop the general public* from lighting fires indiscriminately on land which is not F.C. land but which adjoins it eg. public roadsides.

* Including Contractors, roadmen and so on

P.T.O.

New Equipment.

Mr John Mackenzie has suggested the use of "sprinkler roses" to be inserted along the line of hose which would normally be set out on hilly country. Hoses would be provided with a suitable number of ~~two~~ three-way valves ~~and~~, each valve having a quick-~~fit~~ coupling to the sprinkler.

Water to flow either from A to (1) B only
(2) C only
(3) B and C.

23. OTHER: PROTECTION

Record of important events, assessment of damage done, measures taken, animals, insects, fungi, meteorological factors, etc.

Order of importance

Rabbits, hares, roe, red-deer, capers and black-cock, pigeon; voles and sheep none (except due to a gate being left open at Guisachan, for which Eves, Contractors, paid up).

Chermes

Attacks appear on EL and JL Millbrae, JL (stem) Kessock, to name two forests only. Chermes appears to be on the increase?.