

1. Forest

Area additions and disposals:-

<u>Acquisitions</u>	<u>Plantable</u>	<u>Unplantable</u>	<u>Total</u>
Tannachy	17		17
Saughwells	<u>42</u>	<u>6</u>	<u>48</u>
	59 acs.	6 acs.	65 acs

Disposals

Nil (Transfer to Aultmore Forest to be shown in F.Y. 60.)

Present Position

Plantations

Acquired	2,138 acs.
F.C. planted	<u>7,268 "</u>
Total	9,406
Bare Plantable	1,792
Agricultural	
F.C. 28 acs.	
D.O.A.S. <u>337</u> "	365
Unplantable & Other	<u>897</u>
Forest Total	12,466 acres.

2. Year's Work

Snow and ice with long travelling distances causing loss of time all contributed to higher costs in planting.

Draining was carried out amidst deep snow, with hard frost, since there was little else which could be done. Costs were therefore high. It was also found that the estimated chainage of drains required was very low.

The all absorbing item throughout the very dry summer was Fire Protection which cost a mighty lot of money. In 20 outbreaks (excluding 49 railway fires) we lost only 1.07 acs. and so long as the Saints and good water supplies are with us we would hope to continue on these lines.

Whins are still a serious feature of the weeding problem here and, apart from those on gravelly soils, they have kept growing consistently throughout the dry summer.

A feature noticeable in the ploughed areas, in contrast to unploughed areas, was that a faint moisture could still be found in the soil in the bottom of the furrows even towards the end of the drought period. This was particularly apparent on Slorach's Hill where the fine ploughing had such a marked effect on drainage.

High pruning is now being done in some of the finer stands of S.P. at about 160 trees per acre. The intention being to prevent the formation of 'Black knots' in what would otherwise be good quality S.P.

The marking of thinnings in Aulthash section which was to have been completed in August will not now be completed until late October. The delay being due mainly to the loss of a Forester on sick leave and the transfer of an Assistant Forester to Glenlivet. The replacement of the Assistant Forester by a Forester from Glenlivet did nothing to ease the position since his full-time was spent taking over Aultmore forest. This is simply an explanation of why the estimated date was so far out.

3. Way Payments

A/c 101 - Scrub clearing was overspent by £272 (a bad underestimate on steep slopes). Burning was overspent but the cost was less per acre than was estimated. Advantage was taken of the good conditions to burn some of the future planting areas.

A/c. 105. - Planting and manuring - overspent by £540 - steep slopes in gullies with long travelling distances contributed to this. In manuring an effort was made to scrape the manure into the soil around the plants. It cost money and I am now told that it is no longer necessary.

A/c. 110 - Drains new - Heavily under-estimated for quantity - being overspent by £1,192 of which £505 was saved from drains repair.

A/c. 112 - Fences new - overspent by £43 mainly caused by acquisition obligations.

A/c. 130 Beating up - overspent by £312. A great deal of turfing was necessary for this operation, much of it unestimated for.

A/c. 134 - Weeding - Overspent by £1,911. This was the overlasting whins which we now plan to treat with 'Spontox'. Double whin weeding was needed on some of the previous year's beating-up areas.

A/c. 160 - Fire Protection - Overspent by £1,245 - the weather explains.

A/c. 165 - Other Protection - Underspent by £1,186 - trappers used to a fair extent on fire protection.

Net overspending is £1,949.

Money spent on other forests - loans of labour &c. £2,707.

4. Local Supervision

G.S. Stewart	Forester
G.O. Mackintosh	"

Recently transferred to Glenlivet - L.C. McCallum Assistant Forester.

Staff at end of year -	1	Head Forester	
	2	Foresters	adequate for work in hand.

5. Labour

Summer staff	56
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Winter staff	79
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Gangers /

Gangers	4	
Grade I	22	
" II	5	
" III	42	(includes 29 fishermen)
Boys	3	
Clerkesses	2	(includes District office)
Cleaners	1	(District office)

The labour commitment on this forest must now begin to go down in order to bring it to reasonable levels by the end of two years. The future planting programme is 150 acres. per year following this year's 284 acres. Whin weeding may come under control more quickly than was expected if, as is suggested, 'Spontox' can be used fairly freely amongst conifers without harm. We shall know the answer to this question by early Spring and if the answer is favourable next year may be decisive in the control of whins.

6 (a) Forest operations

- Scrub clearing - estimate 80 acs. @ 95/- Actual 80 acs. @ 160/-
Wishful thinking for a steep slope.
- Heather Burning - Estimate 282.5 acs. @ 10/- - Actual 696 acs. @ 6/-
I took advantage of good burning conditions to clear the way for future work.
- Ploughing - Estimate 282.5 acs. @ 25/5 - Actual 350 acs. @ 19/4
Part of this extra ploughing was planted but the weather really permitted the extra to be done for future planting. 14 acs. were done on contract.
- Planting - Estimate 303 acs. @ 77/3 - Actual 337.5 acs. @ 95/8 per ac.
Cost too high for many reasons but must be brought down.
- Manuring - Estimate 303 acs. @ 20/- - Actual 337.5 acs. @ 23/8 per ac.
This cost is high through spreading and scraping the manure into the soil for better results. I am instructed to stop this.
- Drains (New) - Plough Estimate 1400 chs. @ 2/- - Actual 1562 chs. @ 6d
The weather again allowed us to do more but the increase was required. The quality of the drains was not too good due to the uneven surface of the peat.
By Hand - Estimate 945 chs. @ 19/3 - Actual 2076 chs. @ 19/4
Irregular surface caused more drains to be required than was at first thought necessary.
- Fences (New) - Estimate 55 chs. @ 20/- - Actual 87.5 chs. @ 20/8 (Stock) and 14 chs. @ 9/4 (Temporary group fencing)
We are at the beck and call of Crown Lands for boundary fences but most of this was due to acquisition obligations.
- Beating-up - Estimate 164m @ 57/- - Actual 180m @ 80/- per ths.
Turfing required which was not included in estimate.
- Weeding - Estimate 905 acs. @ 74/- - Actual 1307 acs. @ 80/- per ac.
Persistent whin growth. Two arwas required weeding twice.
- Drains (Repairs) - estimate 2935 @ 7/8 - Actual 555 chs. @ 22/- per ch.
Only the very worst drains were done - an attempt having been made to save as much money as possible for Drains (New).
- Fencing (Unkeep) - Estimate 191 chs. @ 15/2 - Actual 32 chs. @ 1/3
Again only the urgent work was done. The balance has still to be done.

Protection - Fire Estimate £1320 - Actual £2,565

Protection Other Estimate £2,935 - Actual £1,749
Trappers used on fire protection.

(b) Plantations made in the Year under Report

337 acres were planted - main species being P.C., S.F., and J.L. for fire breaks. Some of the smaller P.C. planted on Cairnty Moss have died from drought. Planting commenced 23/11/58 and completed 24/5/59. Preparation was mostly Cuthbertson ploughing on peat with some of the draining done by plough and the rest by hand. Planting was mostly on top of the turf. Age of plants used was 1+1 and 2+1. Regeneration is not too successful here.

Previous Year's plantations

- (a) Beating-up is normal for this area but requirements fluctuate due to droughts, vole attacks &c.
- (b) Weeding is excessive and is likely to remain so for around another two years. Spontox spraying of whins must help in the future.

Clearing and brashing are minor operations at present on this forest. Pruning to 20-22 feet on good quality Scots pine is being done. The aim is S.P. free from Black knots.

- (c) Progress in establishment of plantations. Whin weeding still causes many plantations, which would otherwise be classed as established to be left out.
- (d) Thinning progress is being maintained according to plan with the exception of the proposed sale at Aulthash which is likely to be 3 months late.

Silvicultural Consideration

The main consideration is as follows:-

To establish and maintain a woodland condition on the present poor sites available to us. This we are doing by using P.C. on the poorer areas and in order to get the best production which the low fertility on these areas will permit. We are mixing 200 P.C. per acre in some cases, singly and in others, in groups of five. In F.Y. 60 groups will be mixed in the line 2 x 2 S.S. P.C. at 7 groups of 10 S.S. per acre within a matrix of P.C. on the better peats. I believe more S.S. could be grown in mixture with P.C. on a short rotation crop, but insufficient conclusive evidence is available.

Yields - Yields are coming out very close to planned figures but extra care has now to be taken to assure that we have the essential growing crop on the ground and some amendment of future forecasts may be necessary.

Seed Collection

None was required and very little would have been available. For F.Y. 60 again very little is available and we have been instructed to collect 200 bushels S.P.

Fire Protection

The fire hazard has been very high throughout the whole season. Twenty outbreaks have been reported having burned a total of 1.06 acs. Forty nine small railway fires were dealt with. Costs have been very high having increased approximately 150% over the previous year.

Cost in F.Y. 58 2/-½ per acre.

Cost in F.Y. 59 5/5½ per acre.

Recommendations:- The fire protection resources of Aultmore, Rosarie, Teindland, Lossie and Speymouth should be pooled and worked from one control centre. This would give Foresters definite duty weekends which would be known in advance.

Since pooling of forests is unlikely to take place, a possible saving in money could be made by asking the Fire Service to fit a water tender to the Fochabers unit and Speymouth could then use it as a first aid. It could be followed by one of our lown lorries with a 600 galls. tank and the Fire Service could use the Hathaway Pump with our supply until their own unit started pumping water. The Fochabers Fire Service can turn out seven men inside five minutes and seven men with water and hoses in the early stages of a fire are usually all that is needed.

Other Protection

Rabbits killed	1,317
Brown hares killed	288
White hares killed	44

Myxomatosis is still prevalent but the disease is not now so virile. Clean rabbits are found amidst heavily diseased ones. Rabbits are now selling at 1/8d per lb. which is an encouragement to owners to have them around.

No new diseases have been found in trees and no identification of the die back of S.P. branches sent in a year ago has been received.

No grey squirrels exist on the forest and Red squirrels are only rarely seen. No damage from Red squirrels has been seen on trees.

Roe deer have done some damage in group plantings in the Deer Park. The number of deer will be considerably reduced this winter.

(X)

Fencing

As a test of costs 6 chains of rabbit netting were erected around a group of plants in the Deer Park. The netting was double height to deal with Roe Deer. The netting was supported mainly by the standing trees and was salvaged material from old fences. Cost of erection was 9/8 per chain.

New Fences - 87.5 chs. (stock fences pig netting and barb)

Upkeep 32 chs. (stock)

Cost of fencing generally - Pig netting and barb make a good stock fence which can be erected cheaply. Out costs 20/8 per ch.
Effects of myxomatosis on fencing - Nil here, we have no rabbit fences of any consequence.

(XI)

Fellings, thinnings and Sales of Produce

Fellings and thinnings are up to date and details are in the R.O. forms. Standing sales are the normal method of disposal and we deal only with scrub areas.

Area felled	54 acres (scrub)	Area thinned	428 acs.
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Mechanical

Mechanical Equipment

Equipment in use:-

McConnell sawbench
Jo-Bu Junr. power saw
Allan autoscythe
2 Hathaway pumps
2 Scammel pumps (emergency use)

Fordson Diesel tractor
Bedford 5 ton lorry
Fordson 10 cwt. van
Fordson Major tractor
Land Rover with Allan Pump
Trojan Diesel personnel transporter.

Maintenance and repairs are mostly done by mobile mechanic. Lesser jobs, when necessary, being done by local garage. There are no P.C. repair workshops in the vicinity. An outside ramp with a fall-away to the Pochabers Burn is used as an inspection pit and wash-bed. Refuse returns to the burn and the full use is made of daylight. Repairs are generally smartly and efficiently done.

9. Development in Techniques and Equipment

The collar and sheer-pin on the drawbars of Guthbertson plough is no longer necessary. This idea started with wooden pins to save the ploughs from being damaged and has mistakenly been increased in strength to iron pins along with the strengthening of the plough. Much time is wasted in punching out broken sheer pins in order to replace them. I have threaded a drawbar and added a heavy nut with a locking split pin and this unit has worked for 4 months undamaged. Previously it was breaking up to 3 sheer pins in one day.

The addition of a small hook, wide enough to take a plough rope, to the top of the drawbar pin on a ploughing tractor, makes it possible to withdraw the pins when no other method will do so. The machines sometimes get bogged with the tractor tail and the plough nose both pointing downwards jamming the drawbar pin. On the B.T.D. 6, the plough rope can be pushed down into the hook on top of the pin and the pin withdrawn by the winch, thus releasing the plough. On the D.4 a loop of the plough rope is pushed down between the tractor and winch and into the hook on top of the pin. Again the winch is used to withdraw the pin. The difference in technique is necessary because on the D.4 the drawbar is much further under the winch than on the B.T.D. 6.

Suggestion:- Surely our mechanical people can produce an efficient manure spreader to work from a tractor or even from the plough. In the case of the tine plough the spreader could put the manure in the bottom of the furrow, and on peaty areas it could spread it under the turf. G.M.P. I am assured lasts in the ground for 3 - 4 years. We spread around 20/- per acre putting on manure and, I think, we do not do it very efficiently.

Head Forester.