

F.Y. 19 48 to 19 49Forest Fetteresso.FOREST
YEAR

GENERAL PROCEDURE AND OBSERVATIONS

1948. Prep. Ground. 382 acres of advanced ploughing for P.49 was done on the Glenbervie Section of the forest. This ploughing covered most of C.s 93 to 111.

Prior to ploughing, 588 acres of heather were burnt.

Draining. 1292 chains of new drains were opened up. Most of these were in the P.49 area.

139 chains of drains up-keep was carried out.

Fencing. 55 chains of new fence were constructed to enclose the Hill of Baulk which will be planted in F.Y.49. 45 chs. of old fences were repaired. This was small in view of the great length of fencing on Fetteresso and Glenbervie. Petty repairs were carried out by the trapper and neighbouring proprietors repair a proportion of all march fences.

Planting. 387 acres were planted by the first week of May. The choice of species on the difficult peats presented serious problems. For the most part, the S.P. and S.S. mixture was used on the plough but wherever the plough turned up a clayey subsoil, S.S. was planted pure. Pure S.P. was limited to dry knolls and to a few experimental peat areas.

These experimental plots of P.Cont. in mixture with S.S. were laid out making about 5 acres altogether. In these P. Cont. and S.S. 1 year seedlings were used. S.P. seedlings were also used in some of the pure S.P. areas, principally in C.80. In C.89 Corsican pine was planted on a sandy knoll. The C.P. plants used were 1 + 1.

In Compts. 16 and 17 extensive use was made of S.P. and S.S. seedlings on plough. The deaths among the S.S. seedlings have been high but the fact that many of them were infected with *Botrytis cinerea* may well account for this.

Beating Up. 167 acres in P.47 were B.U. with S.S. & S.P. The number of plants used was 22. thousand.

Weeding. P.47 - 197 acres.

P.48 - 191 " " (S1965) Wt.P.1293/1491 100 Pa.2 2/40 A.A.E.W.L.L. Gp.686 /The
 Acquired Pln: - 15 " " (S1965) Wt.P.1293/1491 100 Pa.2 2/40 A.A.E.W.L.L. Gp.686

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F.Y. 19 48 to 19Forest Fetteresso.FOREST
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GENERAL PROCEDURE AND OBSERVATIONS

1948. The weeding in P.48 and 47 was mainly heather, bracken and grass. In the Acquired Plantations - scrub birch.
- Cleaning. 14.5 acres of scrub birch and rowan were cleaned in C. and 16.3 acres brushed in C. The latter operation was carried out when inclement weather made planting impossible.
- General. All the spruce planted on P.48, Glenbervie, were given a dressing of Ground Mineral phosphate at the rate of 2 ozs. per plant.
- As an experiment, some of the S.P. planted pure in C.80 were planted at the bottom of the furrow and others on a step half way up the ridge. Examination at the end of the year showed those in the furrow bottom to be slightly larger than those on the step.
- The late May frosts killed off quite a high proportion of the S.S. seedlings. The only flushing N.S. planted in the juncus flushes along the Burn of Finglennie were also slightly damaged.

F.Y. 194⁹ to 19Forest FetteressoFOREST
YEAR

GENERAL PROCEDURE AND OBSERVATIONS

F.Y. 49 Prep. Ground

188 acres of heather were burnt in preparation for ploughing.

Ploughing.

473 acres of ploughing were completed in F.Y. 49. Of this total 60 acres on the Hill of Baulk were for P.49 and the balance for P.50.

Compartmenting was done ahead of ploughing on the P.50 area and the rides laid out primarily for extraction purposes.

The ploughing of 413 acres was completed within 3 months with very few stoppages.

Draining

711 chains of Advance draining by Cuthbertson Plough was done to prepare wet areas for ploughing. The operation was very successful. 640 chains of permanent drains were dug by hand in the P.49 area.

Fencing.

The entire Trusta Hill area, with the exception of the Clachan Shiels Grazings, were enclosed. 200 chains of wire netting were hung on existing fences; 107 chains of new rabbit fence erected and 100 chains of new sheep-cum-rabbit fence were completed.

Fencing Upkeep

Carried out as required by the Trappers except for 31 chains near the Hill of Baulk which had been washed out by floods.

Planting

408.9 acres were planted. Of this total about 350 acres were on ploughed ground. The principal sps. used were S.P. and S.S. with N.S. in the flushes. The S.P. and S.S. were generally in mixture but opportunity was taken to plant the/

F.Y. 19 49 to 19Forest PetteressoFOREST
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GENERAL PROCEDURE AND OBSERVATIONS

Planting contd.

S.S. pure where the ground looked favourable.

S.S. and P.C. in mixture were used on the "tougher" parts and on exposed situations on account of scarcity of P.C. transplants, seedlings were used for the most parts.

At the end of the year extensive damage to the P.C. by Red Deer was noticed.

Manuring

Ground Mineral Phosphate was applied over the whole area planted at the rate of 2 ozs. for spruces and 13 for pines.

Beating Up.

P.47 182 acres.

P.48 35 "

Weeding

On account of the very warm summer this was heavier than had been anticipated. The following areas were weeded:-

P.47 103 acres.

P.48 218 "

P.49 43 "

Acq. Pln. Cpt. 7 4 "

368 Acres

Cleaning

3 acres on Cpt. 3. Consisted in the removal of harmful H.Ws. and in that portion of the thinning which was uneconomic.

Brashing

24.5 acres in Cpts. 3 and 6 were brashed to allow access for marking and thinning.

Drainage Upkeep

65 chains of drains were maintained in the P.47 area.

Thinning.

12 acres on Cpt. 3 were thinned; 960 cu.ft. of H.S. Thinnings were extracted and utilised to give 1515 Proctor's Poles/

F.Y. 19~~47~~⁴⁸ to 19 ~~48~~⁴⁹Forest Petteresso.FOREST
YEAR

GENERAL PROCEDURE AND OBSERVATIONS

Thinning contd.

Poles; 4.5 tons of long Pitwood and 100 Garden poles plus Firewood.

March Fencing

17 chains erected between Clachanshiels and Cpt. 4.

Roads.

The road from Clauch-head to the Sand Quarry was completed by grading and rolling. The Fire Break along the S. Boundary or the Glenbervie Section which had been bulldozed on F.Y. 48 was rolled and graded.

A new dry weather road which is to run from Hobsest to the Hill of Rough bank was started. This road will be for Fire Protection and to cheapen planting costs.

F.Y. 1949 to 19 50.

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GENERAL PROCEDURE AND OBSERVATIONS

F.Y. 50

A large planting programme was carried out (523.7) and in accordance with current policy, much of this was on plough.

Choice of species was broadened from that hitherto: although the "standard" S.P./S.S. mixture was employed over a considerable area, attempt were made to boost the numbers planted of N.S., both pure and in S.P./N.S. mixture. Use of J.L. was extended, much of it being regarded as a useful pioneer crop on dry shistose, "calluna peaty" ground as well as just the conventional "fire belt".

Amenity was catered for, many exotics being planted, on a small scale, with S.P. intended as a "nurse"..... they include D.F., Thuya, Tsuga, plus the hardwoods Syc. & Be. Along Cowie Water the choice for certain exotics was accompanied by the plan to retain existing birch for over-wood.

Ploughing. Very interesting work has been carried on in connection with ploughing. Ploughs in operation included R.L.R., Cuthbertson (S.F.) and new Tine. Very good results were obtained by using a D.F. Cuthbertson with centre cutting disc removed and S.F. Cuthbertson mould-board. The 3 ft. turf so produced gave a good smothering effect on heather. The Tine was not used except on a small area of hard ground where deep subsoiling was reckoned to be of benefit.

The planting was done "on top" (i.e. through the slice). Standard Mixture S.P./S.S.: - 3: 3.

Manuring of J.L. and P.C. at rate of $1\frac{1}{2}$ ozs. was carried out on difficult sites.

The policy of setting down experiments was continued. Manuring (Friar's No. 8), seedling v. transplants (S.S.

F.Y. 19 50 to 19 51

Forest Fetteresso (contd.)

FOREST
YEAR

GENERAL PROCEDURE AND OBSERVATIONS

F.Y. 50 P.C.), cull v. accepted plant, broom and M.P. experiments were all laid down.

The practices of brashing only prior for thinnings, and clearing completely smothering whins were continued.

F.Y. 51 The policies currently held were continued, and the use of J.L., H.L., N.S. and S.P./E.L. were even on a greater scale.

In all 481 acres were planted.

Ploughing was continued..... owing to wet, boggy conditions, the hydraulic lift plough was not the success it was hoped. Hardwoods and exotics were again introduced where possible.

Direct sowing and further experiments were laid down.

F.Y. 1950 to 1951

Forest FETTERESSO

FOREST
YEAR

GENERAL PROCEDURE AND OBSERVATIONS

- 1950/51 RESEARCH & EXPERIMENT (1) (JOINT) Comparison of survival % & rates of growth betn. 1 yr seedlings of 1+1' & 2+2' - in Burn o' Day area. (2) (CONSERV.) Fison's No. 8 on P.C. seedlings (1 yr.) - Cmpd 134. (3) (") A Test of use of M.P. 2 yr seedlings on spaced sites (C. 112) (4) (") A Cull Experiment - Cmpd 134 to ascertain what results would be obtained by using both 1+1 S.S. and the culls. Also two broom expts. were initiated in Cmpds 109 (where, in a P. 69 area, broom seed was sown direct) and Cmpd 35 (where broom branches were set down over ploughing). Results have been poor. ROADS. Hobbs - Roughback road (2 mls) was completed.
1951. PREP. GROUND. PLOUGH. 368 ac. were ploughed w. R.L.R., Solotrac, Cuckbiton & Hydraulic Lift Tine. A wet season made the job slow & not too satisfactory. Ploughing took place on P 52 ground - on Craigmore & Roughback. HEATHER BURNING. 155 ac. only were burned, due in no small way to the slow late start. CLEARING SCRUB. 14 ac. whins were cleared (Swanley Hill boundary). DRAINS - NEW. By hand: - 696 ch. By Plough 550 ac. w. 650 p.d. running. FENCES NEW. 303 ch. Rabbit fence. PLANTING 481 ac. were planted on the Bog of Trusta area round to Water Hill, plus Cmpds. 11, 12, & 13 at Swanley, which required completing. Greater use was made of J.L., H.L., & E.H./S.P. and again amenity species & hardwoods were planted, many among birch at lowie side. BEATING UP. In total, about 123 ac. were beat up. This included 30 ac. in Cmpds. 23 & 27 which had been ravaged by Pine Weevil, cleared of whins & ploughed with disc. Also 5 ac. of C. 33, recently burnt, and a strip of J.L. & P.L. on plough in Swanley Hill ~~are~~ included. Some manuring w. G.M.P. was done on P. 38. S.S. seedling planting.

F.Y. 1950 to 1951

Forest FETTERESSO

FOREST
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GENERAL PROCEDURE AND OBSERVATIONS

1950
TO
1951

PREP. GROUND. PLOUGH. 241 ac. were ploughed on Cowie Water side of Trusta Hill, and Water Hill, using R.L.R., S.F. Cuthbertson and Time.

HEATHER BURNING. 410 acres of heather were burned.

SCRUB CLEARING. Some 6½ inch scrub were thinned out by Forest staff, while 20 ac. were disposed of by sale to firewood merchant. This was carried out along Cowie Water at the foot of Trusta & Water Hill, and was in the nature of a heavy thin out - leaving many of the better stems for amenity or as overwood to an underplant.

DRAINS NEW. By hand:- 769 ch.; by plough:- 410 ch. plus some 50 ch. pre-draining.

FENCES NEW. 471 ch. (178 ch. between Fetteresso & Durnis repaired and retty hung on).

PLANTING. In all, 523.7 ac. were planted largely in two areas (1) Glenharvie section, on S.E. slope of Craiginnor, or to north of Fingleny burn. Also in this section a wide strip was planted W.T.L. across previous plantings making an intended firebreak. (2) South and South East faces of Trusta, and Telf Hill, largely on plough. Species used included the S.P./S.S. mixture but with a tendency to increase the use of M.S. & J.L. on larger scale, and of exotics such as Tunga, Thuja, Beech & Lye. in patches among the Pine & J.L. matrices, where soil & exposure allows, frequently using the Pine as a nurse.

BEATING-UP. This extended over P. 47, 48 & 49 to the extent of 3.7 acs, 275.6 acs. & 109.3 acs. resp.

WEEDING. P47:- 101 acs.; P48:- 156 acs.; P49:- 262 acs.; ACPRA PLANT:- 4 acs.

CLEANING. About 4½ acs. of Cmp. 3 & 4 were given a cleaning

BRASHING. about 5½ acs. were brashed.

THINNING. about 5½ acs. were given a 1st thinning (M.S. & S.S.) producing about 1300 c./ha

DRAINS WPKEEP. 216 ch. were cleaned out throught acquired Plot 10, & P48.

F.Y. 1951 to 1952Forest FETTERESSOFOREST
YEAR

GENERAL PROCEDURE AND OBSERVATIONS

1951

WEEDING Weeding was extensive this year, due to the wet favourable conditions. Of the 606 acres which were done, 116 ac. were of whins smothering an existing planting (along S. boundary of Swanby Hill).

CLEANING About $7\frac{1}{2}$ ac. were prethinned in Cnpts. 6 & 5. While in Tillybrake, racks were put in through 9.9 ac.

THINNING From the thinning of $5\frac{1}{2}$ ac. in Cnpts. 4 & 6, some 738 c.ft. of Splase was produced.

DRAINS UPKEEP 263 ch. were re-cleaned.

NURSERY The nursery this year held 1110 m. lines & 675 m. in beds. Much credit must go to the handling of the lining-out plough by the staff, for the programme to be completed.

EXPERIMENTS Leading experiments & direct sowing experiments were laid down by the Research Branch on the base of Tronsta, above Cnpts. 4-6.

GENERAL A trial of sheep grazing amongst establishing plantations brought forth much doubt as to the feasibility and wisdom of continuing the practice, following the discovery of damage, both by rubbing and browsing.

F.Y. 19 51 to 19 52Forest FetteressoFOREST
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GENERAL PROCEDURE AND OBSERVATIONS

52

Planting Programme:- 518 acres.

No real departure has taken place from past Silvicultural policy. Peats and hard podsolised ground were ploughed (in all, 306. acres were on ploughing by Cuthbertson, Cuthbertson Tine, R.L.R. and Hydraulic Tine) prior to planting. The planting took place on both sides of the head of the Cowie valley and fairly long hard weather led to a rather late completion of the programme. The species and mixtures most used included N.S. (in low frosty flushes) S.S. (in more exposed grass, juncus and bracken flushes) S.S./S.P. and S.S./P.C. 3/3 in the row mixture on peats - P.C. replacing S.P. on poorer peats and in greater exposure, J.L. and H.L. on a variety of grounds - ranging from fertile, moist lower slopes to more exposed harder slopes. S.P. was planted on drier less exposed mineral slopes. More exotic conifers and hardwoods were planted along the Cowie Water under scrubby birch which had been heavily opened up; D.F., Ts., Ab. Gr. & Nob., Picea Omorika, Oak etc. were all represented. Planting on plough saw a gradual swing in favour of bottom of furrow planting especially on tining. Otherwise it was all on top of the turf. The S.S./Pine mixtures and J.L. and P.C. on poor and exposed ground received 2 ozs. G.M.P. each plant.

Beating up was carried out over Ps. 50 (losses largely due to sheep grazing), 49 (ditto) and 48 (checked S.S. - 3 lines J.L. introduced in every 6).

The prep. ground for P.53 included 326.5 acres ploughed by Cuthbertson, Cuthbertson Tine and Hydraulic Tine. Some 780 chains were drained and this included predraining up to P.56.

F.Y. 52 also marked the commencement of the amenity plantings of Dunnottar, very near Stonehaven. A small area was netted hard on the heels of the fellers who were clearing

F.Y. 19 51 to 19 52Forest FetteressoFOREST
YEAR

GENERAL PROCEDURE AND OBSERVATIONS

52
(contd) completely the crop of over-mature hardwoods, and planted late in the Spring. Species used included Poplars (Robusta, Gelrica, Serotina), Ash (with and without N.S. nurse) Beech, Sycamore, Sessile and red Oaks, D.F., Ts., Ab. Nob., E.L. S.P., and many shrubs. Subsequent weeding had to be repeated continuously throughout the Summer and some of the products were used to mulch the Poplars.

F.Y. 19 52 to 19 53Forest FetteressoFor
Year

GENERAL PROCEDURE AND OBSERVATIONS

F.Y. 53

The Forest planted one of its highest programmes - 541 ac. of this 326 ac. was ploughed during the preceding Forest Year. The ploughs used were Cuthbertson, Cuthbertson Trine & Hydraulic Trine. Planting was for the most part on top, but some seedlings, some SP/EL, + TL, were set in the furrow of Trine ploughing. The prolonged drought gave rise to worry for plough planting but it does not appear to have hampered establishment unduly. Bad weather descended repeatedly, but the projected programme went through. At the Roughbelt, a few acres were ploughed by the disc - using the tool primarily as a screening agency to facilitate hardwood planting. Another planting continued at Dunrother. No great departure from the (by now) orthodox Fetteresso choice of species was made. SP was the main species, pure, also SP/EL, SP/PC, SP/SS, 3/3+3/1. Further uphill & on the worst peats P.C. was used in place of Scots, 2.4. P.C., PC/SS. J.L. & H.L. & J.L/SS were all used - also N.S. & NS/PC. Some exotics were planted - P. om. in C 228, Pinus strobus in cmpts 228 & 229, D.F. in cmpt 228, SP/Beech, Speman/Beech, & NS. oak are all to be found in cmpts 227 & 228. * A 50 ac. was planted in cmpts. 230 & 231 on the Anderson Group system. More full records of the trial were prepared. J.L. was used extensively as a fire break along roads. Nearly 200 ac. - an "emergency" programme - of the poorer ground with P.C./SS & J.L. received 2 qts G.M.P. Weeding had to be extensive, and much of the bracken covered PS3 was included. Over 500 ac. were treated from P. 1.48 to date.

The nursery had over 1½ million imported seedlings lined out, and this is probably the last year it will serve as a nursery. Weeding was extensive because

* →
Wider spacings
than normal were
introduced for this
year's planting.

F.Y. 1952 to 1953

Forest FETTERESSO

FOR
YEAR

GENERAL PROCEDURE AND OBSERVATIONS

F.Y. 53 (cont.) of wet weather during summer. The entire programme, except for a few beds, was lined out by plough. No green cropping was put in but artificial applied prior to lining-out.

The windblow also caused damage at Fetteresso and the initial policy of clearing & pre-thinning the acquired plantation had to be abandoned in favour of clearing up the mess. 16,700 cu. ft. had been taken off foot & sned before the end of the F.Y. and represented the bulk of the blow.

The Dumnastar woods contributed to the total but Comp 3. (N.S.) yielded the most. Most of the produce went as Welsh pit props - some also as pulp & lorry pitwood etc. while some mill logs remain and one or two 'lots' of small off-cuts returned to the Drumtochty mill for conversion into sawn mining timber.

Ploughing for P54 took place during the summer of F.Y. 53 and 311 acs. were ploughed - nearly the entire part of the plating programme in the Dumar / Glenhouse area. Cuthbertson, Cuthbertson Time were augmented by two interesting ploughs - (1) the Double Mouldboard, Hydraulic "Tool Bar" Time, and (2) a Double furrow Cuthbertson.

The job made by the first named did not seem any improvement over the Cuthbertson drawn Time. The slice of the Double furrow plough was on the narrow side, an extra 4-bins would have been welcome.

It is felt, however, that much of the peat bogs & hard stoney ground would have been almost unplantable without ploughing.

F.Y. 19____ to 19____

Forest Petteresso

1. Description.

<u>Year of Planting</u>	<u>Acquired Plantation</u>		<u>Compt. 2</u>
	<u>Area of Compt.</u>	<u>Area of Acqd. Plantn.</u>	<u>Species</u>
1937	30.5	30.5	N.S.

Treatment

F.Y.47

Birch scrub cleared over the whole area.

F.Y. 19____ to 19____

Forest Petteresso

1. Description.

Acquired PlantationCompt. 3Year of
PlantingArea of
Compt.Area of
Acqd. Plantn.Species

1928

21.0

21.0

N.S., D.F.

TreatmentF.Y.47

Scrub birch cut back over whole area.

F.Y.48

Approx. 5 acres were brashed during hard frost.

F.Y. 19____ to 19____

Forest Fetteresso

1. Description.

Acquired PlantationCompt. 4Year of
PlantingArea of
Compt.Area of
Acqd. Plantn.Species

1932

40

40

N.S. & S.S.

Treatment

F.Y. 19____ to 19____

Forest Petteresso

1. Description.

<u>Year of Planting</u>	<u>Acquired Plantation</u>		<u>Compt. 5</u>
	<u>Area of Compt.</u>	<u>Area of Acqd. Plantn.</u>	<u>Species</u>
1928	21	21	N.S.

Treatment

F.Y. 46

21 acres cleared of birch scrub.

F.Y. 19____ to 19____

Forest Petteresso

I. Description.

<u>Year of Planting</u>	<u>Acquired Plantation</u>		<u>Compt. 6.</u>
	<u>Area of Compt.</u>	<u>Area of Acqd. Plantn.</u>	<u>Species</u>
1928	30.5	30.5	N.S.

Treatment.

F.Y. 46

Scrub birch cut out over total area of
plantation.

F.Y. 19____ to 19____

Forest Petteresso

1. Description.

Acquired PlantationCompt. 7Year of
PlantingArea of
Compt.Area of
Acqd. Plantn.Species

1939

55.5

45

N.S.

NL. & S.S.

Treatment

F.Y. 45

45 acres weeded and blank areas beaten up.