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FORESTRY COMMISSIONERS' TOUR

NORTH EAST SCOTLAND

23rd June to 25th June, 1954

21st June, 1954.

Commissioners' Tour

The following arrangements have been made for accommodation in Aberdeen on the nights of the 23rd and 24th June.

Douglas Hotel, Market Street, Aberdeen

Lord Radnor
Sir Richard Cotterell
Major Stirling
Mr. Lloyd Owen
Lord Cawdor
Mr. A. H. Gosling.

Imperial Hotel, Stirling Street, Aberdeen

Messrs. Longhurst, Vaughan, Bannerman,
Hamilton, McNaughton & G. Brown.

Westbourne Hotel, 438 Union Street, Aberdeen

Messrs. Ryle, Turner and Martin.

Marcliffe Hotel, Queen's Terrace, Aberdeen.

Sir Henry Beresford-Peirse
Messrs. Sangar and Ross.

Marlborough Hotel, 7 Queen's Road, Aberdeen

General Hutson
Mr. J. MacDonald.

The various establishments have been informed that an evening meal after 6.30 p.m. will be required on the 23rd and breakfast and another evening meal after 6.30 p.m. will be needed for the 24th. Breakfast only has been fixed for the morning of the 25th but since the party is divided you may wish to make other arrangements on arrival.

FORESTRY COMMISSIONERS' TOUR

NORTH EAST SCOTLAND

23rd - 25th June 1954

Itinerary and Timetable

Wednesday, 23rd June.

Darnaway Estate. North Conservancy. (Map 1)

- 9.30 a.m. Leave Inverness.
- 10.20 a.m. Arrive Earlsmill and meet the factor, Mr. Munro. Drive to Compartments 19 and 20 by Earlsmill Drive. See 500,000 cu. ft. windblow.
- 10.50 a.m. Drive to River Bank.
- 11.10 a.m. At River Bank see Darnaway Sluie Woods, in process of thinning.
- 11.25 a.m. Drive to Castle and Tearie to Findhorn Bridge.
- 12 noon Enter East Conservancy at Findhorn Bridge, driving thence by Forres and Elgin, passing Newton Nursery and Monaghty Forest (Quarry Wood) to Fochabers.
- 1.00 p.m. Speymouth Forest. East Conservancy. (Map 2)
- Sandwich Lunch at Whitegates, in the Forest on the remaining fringe of Peeps Plantation.
- 1.45 p.m. Introduction to Forest. Rabbit control, seed stands, good pine areas. Enter lorry and drive to
- 2.15 p.m. Deer Park - thinning, demonstration of mechanical aids to timber handling used in the windblow clearance. Enter lorries and drive to
- 3.00 p.m. Slorachs, to see extensive planting of poor upland heaths, tine ploughing, erosion, fire precautions.
- 3.30 p.m. Drive to Sound Moor, untreated upland heath in process of acquisition. Extensive view if fine, of Bin, Rosarie, Elchies, Teindland and Lossie Forests. Return to Fochabers via Fochabers Burn.
- 4.00 p.m. Tea at Gordon Arms Hotel, Fochabers.
- 4.45 p.m. Re-enter bus and drive via Keith and Huntly to Aberdeen (Map 1).
- 6.45 p.m. Arrive Aberdeen.

Itinerary and Timetable (contd.)

Thursday, 24th June.

Windblown Woodlands in Deeside and Donside.
Alltcailleach Forest.

(Map 3)

- 9.30 a.m. Leave Aberdeen by bus. Drive by Crathes Estate, National Trust for Scotland to
- 10.30 a.m. Ballogie Estate. View clearance operations in progress by timber merchant.
- 11.15 a.m. Leave by South Deeside Road to Alltcailleach Forest by Glen Tanar Estate to
- 12.15 p.m. Alltcailleach Forest, Glenmuick plantations, general view of forest.
- 12.45 p.m. Linn of Muick, picnic lunch.
- 1.30 p.m. Clearance work at Linn of Muick, thence by bus down by cleared blown woods to Sawmill at Birkhall.
- 2.00 p.m. Dalliefoure Wood: Successful regeneration of Scots pine.
- 2.30 p.m. Leave Alltcailleach via Ballater to
- 3.00 p.m. Blelack Estate. Good pine stands. Clearance of windblown pine by owner (a timber merchant).
- 3.30 p.m. Drive by Tillypronie and Tornashean Forest to Strathdon, thence by Candacraig down Donside to
- 4.30 p.m. Bridge of Alford for tea.
- 5.15 p.m. Leave for Aberdeen via Pittfichie Forest (gale damage to Forestry Commission plantings). Thence by Oluny and Dunchet to
- 6.30 p.m. Aberdeen.

Friday, 25th June.

a.m. -

Technical Meeting in Aberdeen.

Drumtochty Forest

(Map 4)

- 2.00 p.m. Leave Aberdeen (in private cars if numbers are not too great).
- 3.00 p.m. Arrive Drumtochty Forest Sawmill.
- 3.30 p.m. Arrive underplantings and old nursery - Compartments 28 and 32.
- 4.00 p.m. Arrive Compartments 36 and 37 - typical of acquired Scots pine and European larch.
- 4.30 p.m. Tea at Auchendblae.
- 5.00 p.m. Leave for Aberdeen via Glenferquhar.
- 6.00 p.m. Aberdeen.

Itinerary and Timetable (contd.)

Alternatively Fetteresso Forest

(Map 4)

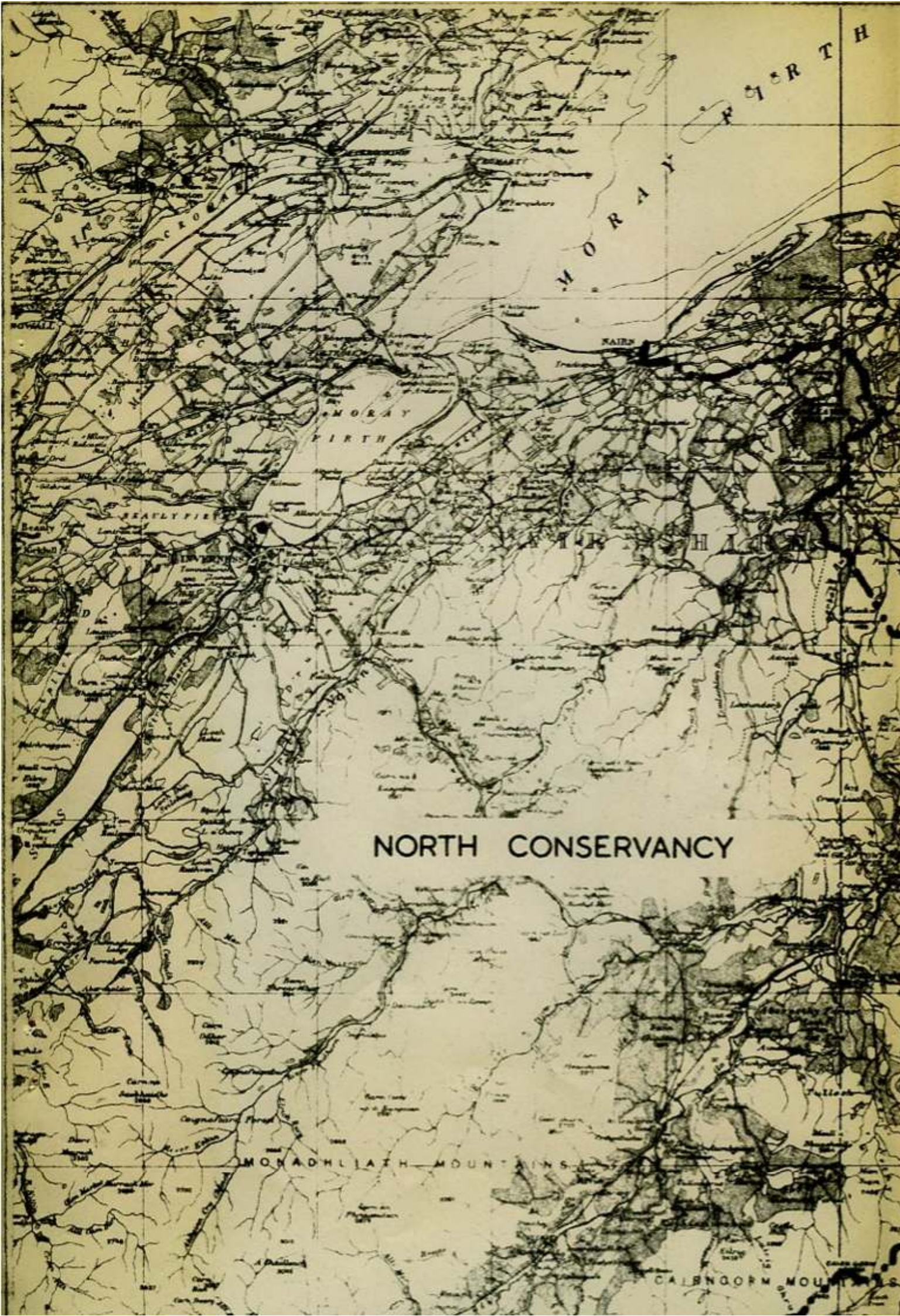
2.00 p.m.	Leave Aberdeen.
2.45 p.m.	Arrive Mergie Water.
3.05 p.m.	Arrive ploughing Compartment 197.
3.50 p.m.	Leave ploughing and return to Aberdeen via Dunnottar Woods.
5.00 p.m.	Arrive Aberdeen.

FORESTRY COMMISSIONERS' TOUR - NORTH EAST SCOTLAND

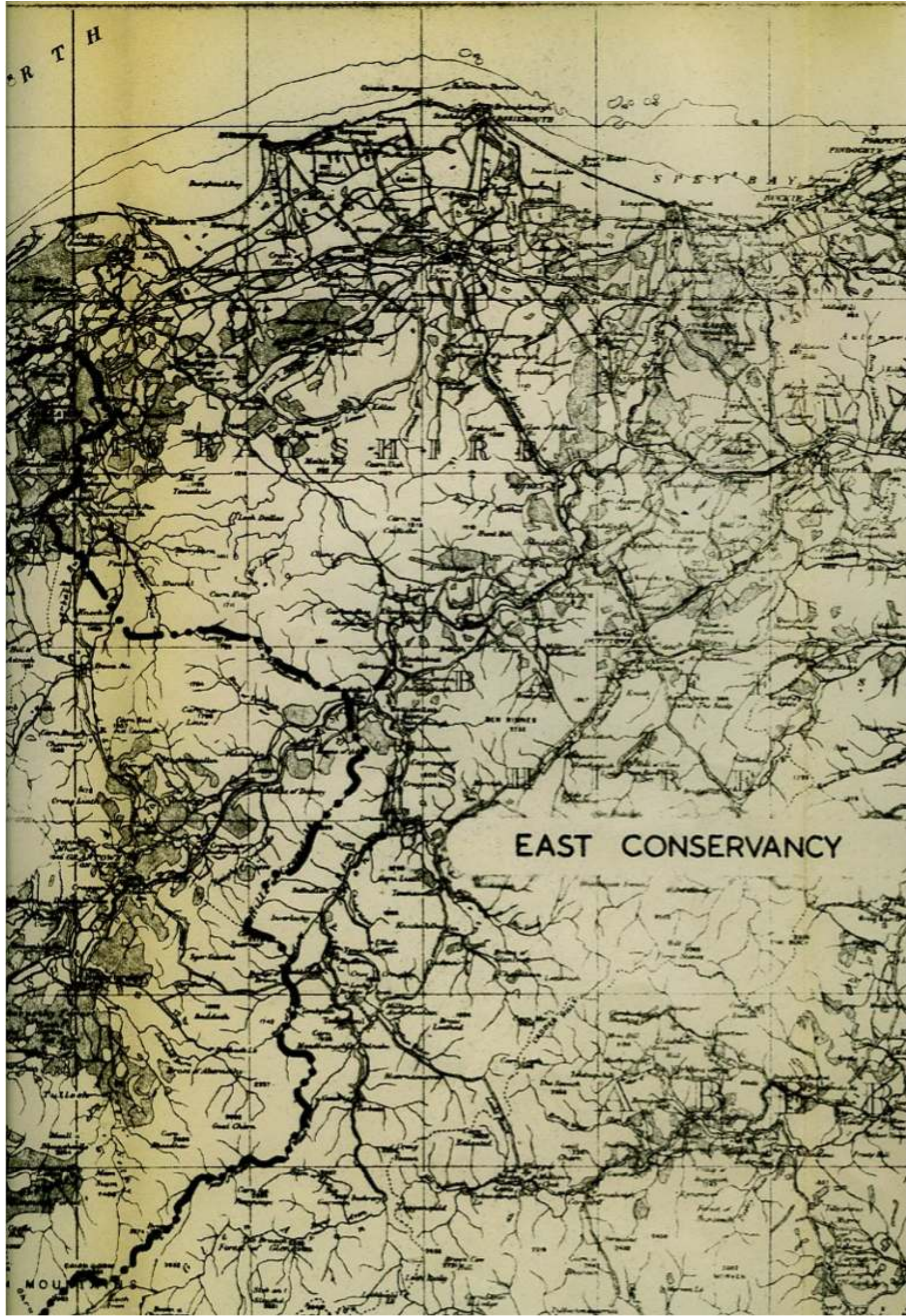
DARNAWAY ESTATE - NORTH CONSERVANCY

Wednesday 23rd June 1954

9.30 a.m.	Leave Inverness 9.30 a.m.	
10.20 a.m.	Arrive Earlsmill, Darnaway Estate Offices.	
	Meet Mr. Munro, Factor, at Earlsmill and without dismounting from 'bus travel by way of Earlsmill Drive to Compartments 19 and 20.	
Arrive 10.35 a.m. Allow 10 minutes for dismounting, re-entering and talk at C.19 & 20.		See on the way between Earlsmill and Compartments 19 and 20.
	A	Sporadic blows of large hardwoods along the drive.
	B	Natural regeneration of hardwoods along the drive.
	C	First plantation seen is of year '46, Scots Pine and larch.
	D	In small valley on left (east) of road Tsuga plantation of year '49.
	E	On left at Couperhill see Estate Sawmill with spruce shingle roof now 29 years old.
	F	On right (west) Jones' Sawmill cutting blown timber.
	G	On both sides of road plantations of years '48, '49, '50.
	H	On right (west) see natural regeneration of larch.
		Descend from 'bus at 19/20. See towards north-west douglas fir, planted in blow of year '27.
		See windblow of 500,000 cubic feet.
10.50 a.m.	Re-enter 'bus	
	Travel to River bank.	See on way - natural regeneration of beech under parent trees. At the river bank see in distance east of river the Darnaway Sluie woods now in process of being thinned.
11.10 a.m.	Arrive at River bank turning place.	
	Descend from 'bus.	
11.25 a.m.	Re-enter 'bus.	
	Travel by way of south of Castle and Tearie to Pindhorn Bridge.	
12.00 noon	Arrive Pindhorn Bridge 12 noon.	



NORTH CONSERVANCY





FOREST SCHOOL INSTRUCTORS VISIT
FORESTRY COMMISSIONERS' TOUR - NORTH EAST SCOTLAND

SPELMOUTH FOREST - EAST CONSERVANCY

Friday 17th Sept 1954
Wednesday 23rd June 1954

District Officer (I) Mr. R. J. G. Horne
" " (II) Mr. R. G. Cathie

Head Forester in
charge

Mr. R. A. Allison

Assistant Foresters

Foremen

~~Mr. J. F. Clarke~~

~~Mr. J. L. Ross~~

~~Mr. G. O. McIntosh~~

~~Mr. A. P. Thorpe~~

Area Statement

Staff

Acquired Woodland 1617 acres
Planted by F.C. 4622 acres
6239 acres

1 Head Forester
2 Under Foresters
2 Foremen

Remaining to plant
F.Y.55-58 2038 "

Forest Workers

8277 "

Maximum 70

Agricultural & F.W.H.'s 449 "

Minimum 40

Unplanted and other 331 "

Average 55

9057 "

Houses - 1 Forester's house and
7 Others.

Farms amounting to 365 acres are managed by Department of Agriculture for Scotland.

Age Class Distribution

<u>1-10 years</u>	<u>11-20 years</u>	<u>21-30 years</u>	<u>31-40 years</u>	<u>over 40 years</u>
4335 acs.	153 acs.	626 acs.	663 acs.	462 acs.

The woodland and hill ground forming the forest once formed part of the Gordon Castle Estate, and is being acquired from the Commissioners of Crown Lands. In addition, Ordiequish, 340 acres, was acquired from Seafield Estates (formerly Ordiequish Forest), Hill of Maud, 314 acres from Cluny Estate.

Further acquisitions are in process of completion on Delfur and smaller properties, and are indicated on Map 3. The probable area is 3287 acres.

Planting Programme

Thinning Programme

F.Y.55 700 acres
F.Y.56 523 acres
F.Y.57 537 acres
F.Y.58 278 acres

F.Y.51 & 52	1060 acs.	307,000 cu. ft.
F.Y.53	Nil	Nil
F.Y.54	93 acs.	20,000 cu. ft.
F.Y.55	385 acs.	94,000 cu. ft.
F.Y.56	389 acs.	89,000 cu. ft.
F.Y.57	509 acs.	106,000 cu. ft.
F.Y.58	257 acs.	48,000 cu. ft.

This will be raised to 700 acres
per annum if Delfur comes in.

A six year thinning cycle is used.

The growing ^{stock} prior to the gale was estimated as at 30.9.52. It stands now after windblow clearance with allowance for increment at 2,300,000 cu. ft. on 1328 acres of measurable timber.

Loss due to the gale of 31.1.53 was 325,000 cu. ft. and occurred mainly in the older woods.

This has now been cleared. Sixty-eight acres require replanting.

There remains on stock:-

Logs unsold	16,800 cu. ft.
Timber to be sawn locally	20,500 cu. ft.
Hardwood logs sold but not uplifted	<u>8,000 cu. ft.</u>
	<u>45,300 cu. ft.</u>

General Description and Site

The Forest is situated on both sides of the River Spey along the last 6 miles of its course. It includes the plateaux of Slorach Hill (717 ft.) and Whiteash Hill (866 ft.).

The soils are mainly derived from a reddish deep till of O.R.S. origin, though there are drifts of sand and shingle on the low ground. At low levels, apart from the sand and shingle beds near Spey Bay, the soils are fertile, but as we go up the hill they become progressively poorer and are heavily podsolised. This is particularly so on Slorachs and Whiteash where leaching is very bad. This land has only grown scrub pine in the past, is frequently waterlogged and is only plantable after deep cultivation.

The climate is mild with little prolonged snow or frost. Sea blast affects the lower pine plantations. Rainfall is 28 to 29 inches per annum.

Scots pine has been planted everywhere, is naturalised and of fair to excellent form. The lower ground carries remnants of good oak, both native and English, beech, elm, sycamore and lime. There is a good type of natural birch. There is little spruce apart from some areas of SS/SP mixture planted by the Forestry Commission in F.Y.46, 47 and 48 and 49.

Fire Protection

The climate and situation render the forest a dangerous one, and for that reason it has been well supplied with roads.

Though there are many alarms during spring and summer, there has been no serious loss from fire so far. There are two fire towers on the Forest, each equipped with a G.P.O. telephone. The forest operates a fire aid unit.

Vermin

On the area east of the Spey we are attempting rabbit extermination. A squad of six trappers is employed. The Crown Lands Commissioners permit us to kill on the farm lands belonging to them. Rabbits are by no means extinct but in F.Y.52, 53 and 54 2100 acres have been planted with the use of only 100 chains of temporary rabbit fencing.

Rabbit damage on these areas is very slight.

Notes on Woods Visited

1. Whitegates (lunch stop). Peeps Plantation: The old timber is the last of the early extensive conifer plantings of the Dukes of Gordon and Richmond. Fifteen acres were blown in 1953, about 1,000 trees containing 42,000 cu. ft. T.O.B. The age is between 180 and 200 years. The pine was of good form and quality and was rated a seed stand. The beech among and around it, though rough, was sound and white. The hope for natural regeneration on the heather ground. A few good pines remain.

The birch, which is of fair quality on the lowground is under planted with tsuga. No netting is needed.

2. Hampshire Plantation: Planted on agricultural ground in 1917. The site is good - a raised beach. The first thinning was in 1952 (34 years) giving 440 cu. ft. per acre. The standing crop now is 2,600 cu. ft. per acre, current annual increment 200 cu. ft., productively Class I. The origin is unknown but quality is good. Being war time stock it is probably local.

Seed Stand: Five acres have been heavily thinned to encourage crown production and cone bearing. Prior to the gale 200 stems were chosen for good form and a heavy thinning done. The yield was 720 cu. ft. per acre. A further 330 cu. ft. were blown in the 1953 gale. The stand now carries 370 trees per acre and 1800 cu. ft. per acre. Thinning will be resumed to reduce stems further. Sycamore is coming in and some underplanting with beech has been done.

8246
3. Deer Park Compartment 204: Planted 1917 @ 2' 6" - 3' 0" spacing. First thinned 1952. Productivity Class II. Yield 1,060 cu. ft. per acre.
Present standing volume 2,600 cu. ft. per acre
" THINNING " 380 cu. ft. per acre

~~Demonstration of (i) Felling by chain saw (Jobu Junior) snedding and peeling by hand.
(ii) Cross-cutting by McConnell Sawbench.
(iii) Peeling by Bazner R.S.1 peeler.
(iv) Loading by H.I.A.B. hoist (a) a tree of about 1 ton
(b) light thinnings~~

4. Forkings: Soil erosion in Old Red Sandstone drift - Aultderg dramlach. Ploughing upland heaths with tine plough on Cuthbertson chassis.

5. Slorach's Compartment 81 P.53: Planting of Scots pine and Japanese larch on tine ploughing. Road construction.

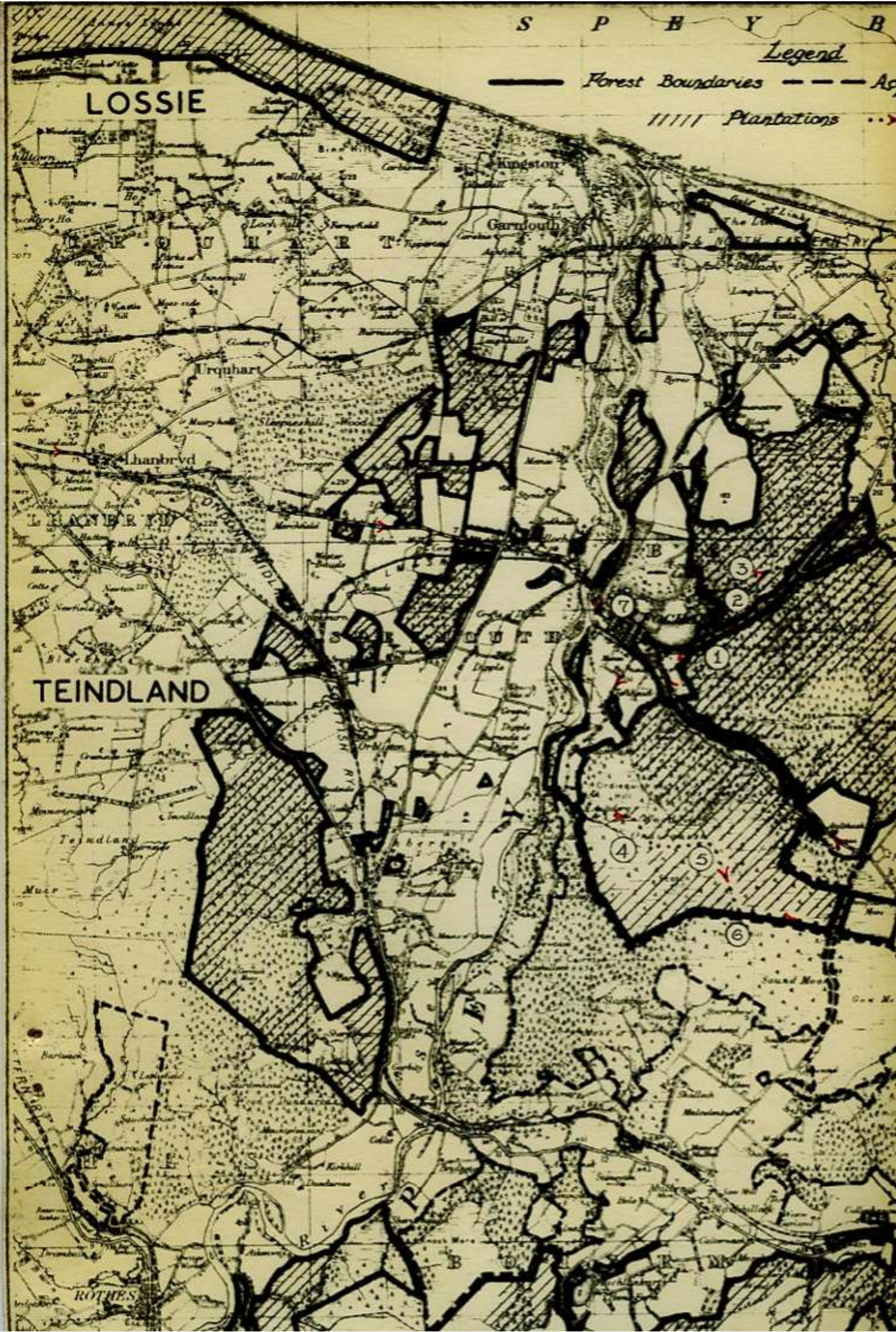
The march between extensive tine ploughed upland heath on Speymouth, and the untreated ground on Delfur Estate in process of acquisition. The planting of this type of ground was considered impossible on grounds of exposure and soil conditions. Work at Finlay's Seat on Gairland forest with cultivation and manuring has demonstrated that planting is quite possible, and economic.

The chief species used is Scots pine of local origin, Japanese larch as a fire break, and lodgepole pine to provide shelter belts within the plantings. European larch is planted at 15 ft. spacing in the pine. There is some scattered planting of beech and other hardwoods mainly in groups of five.

Legend

— Forest Boundaries — — — Ag
///// Plantations

LOSSIE



TEINDLAND

ROTHES

SPEYMOUTH FORE

SPEYMOUTH

KEITH

WINDBLOWN WOODLANDS IN DEESIDE AND DONSID

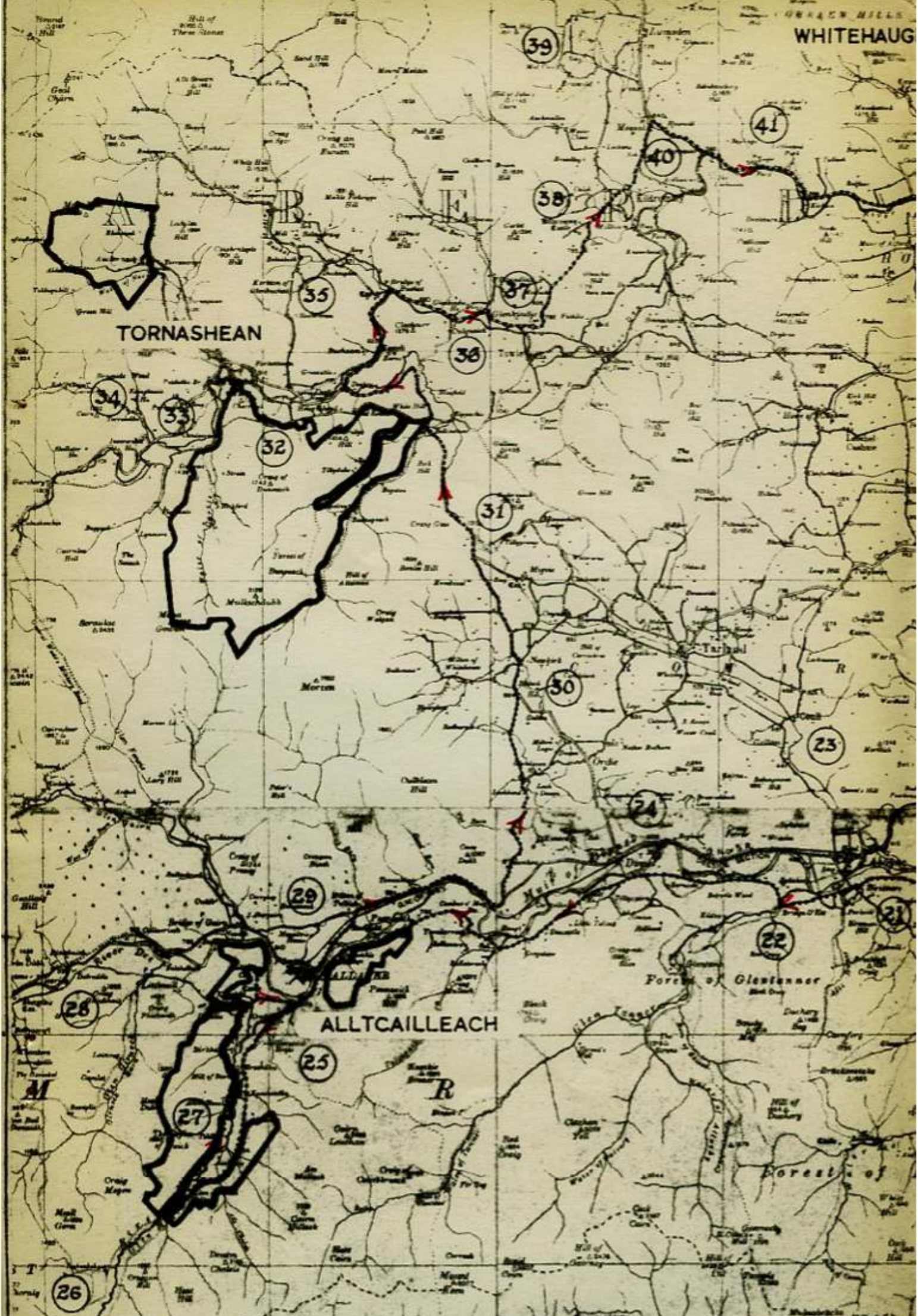
ALLTCAILLEACH AND PITFICHIE FORESTS - EAST CONSERVANCY

Thursday 24th June 1954

During the drive up Deeside and down Donside over 50 estates and forests will be seen. A commentary on the estates seen will be given during the drive and a list of these estates showing volumes and location is given overleaf. Two Forestry Commission Forests will be visited, Alltcailleach and Pitfichie.

Visit to Deeside and Donside Windblown Areas

Map Ref. No.	Name of Estate or Forest	Estimated Vol. Blown cu. ft.	Estimated Vol. Extracted to 31.3.54 cu. ft.	Remarks
1	Banchory Devenick	53,000	24,000	
2	Blairs	67,000	42,000	
3	Kingcausie	236,000	138,000	
4	Binghill	29,000	28,000	
5	Altries	25,000	11,000	
6	Drum	240,000	127,000	Dedicated
7	Durris House	18,000	3,000	
8	Durris	249,000	143,825	F.C. Area
9	Park	8,000	8,000	
10	Crathes (Nat. Trust)	696,000	280,000	Dedicated
11	Crathes	620,000	330,000	Dedicated
12	Tilquillie	113,000	90,000	Dedicated
13	Blackhall	16,000	6,482	F.C. Area
14	Cairnton	41,000	25,000	
15	Woodend	50,000	50,000	
16	Sluic	40,000	28,000	
17	Kincardine	708,000	320,000	
18	Ballogie	1,618,000	834,000	
19	Balfour	91,000	49,000	Dedicated
20	Dess	120,000	87,000	Dedicated
21	Birse	382,000	142,000	
22	Glentamar	531,000	293,000	Approved Plan
23	Coull	12,000	12,000	Dedicated
24	Kinord & Aboyne	279,000	131,000	Dedicated
25	Glenluick	200,000	95,000	Approved Plan
26	Balmoral	963,000	550,000	
27	Alltcaillieach	426,000	217,638	F.C. Area
28	Abergeldie	495,000	191,000	
29	Invercauld	483,000	194,000	Dedicated
30	Blalack	314,000	170,000	
31	Tillypronie	630,000	195,000	
32	Tornashcan	16,000	14,476	F.C. Area
33	CandaCraig	150,000	120,000	Dedicated
34	Edinglassie	41,000	8,000	Dedicated
35	Glenbuckat	90,000	20,000	
36	Culquoich	94,000	5,000	
37	Glenkindie	31,000	15,000	
38	Kildrumny	225,000	96,000	
39	Clova	80,000	77,000	
40	Ardhuncart	40,000	Nil	
41	Littlewood	81,000	30,000	
42	Whitehaugh	26,000	25,000	
43	Castle Forbes	350,000	115,000	Dedicated
44	Pitfichie	255,000	160,253	F.C. Area
45	Cluny	810,000	176,000	
46	Monymusk	366,000	122,000	
47	Linton	45,000	43,000	
48	Castle Fraser	257,000	55,000	
49	Dunecht	1,300,000	712,000	
50	Countesswells	83,000	82,462	F.C. Area
51	Hazelhead	103,000	76,000	Public Park



WHITEHAUG

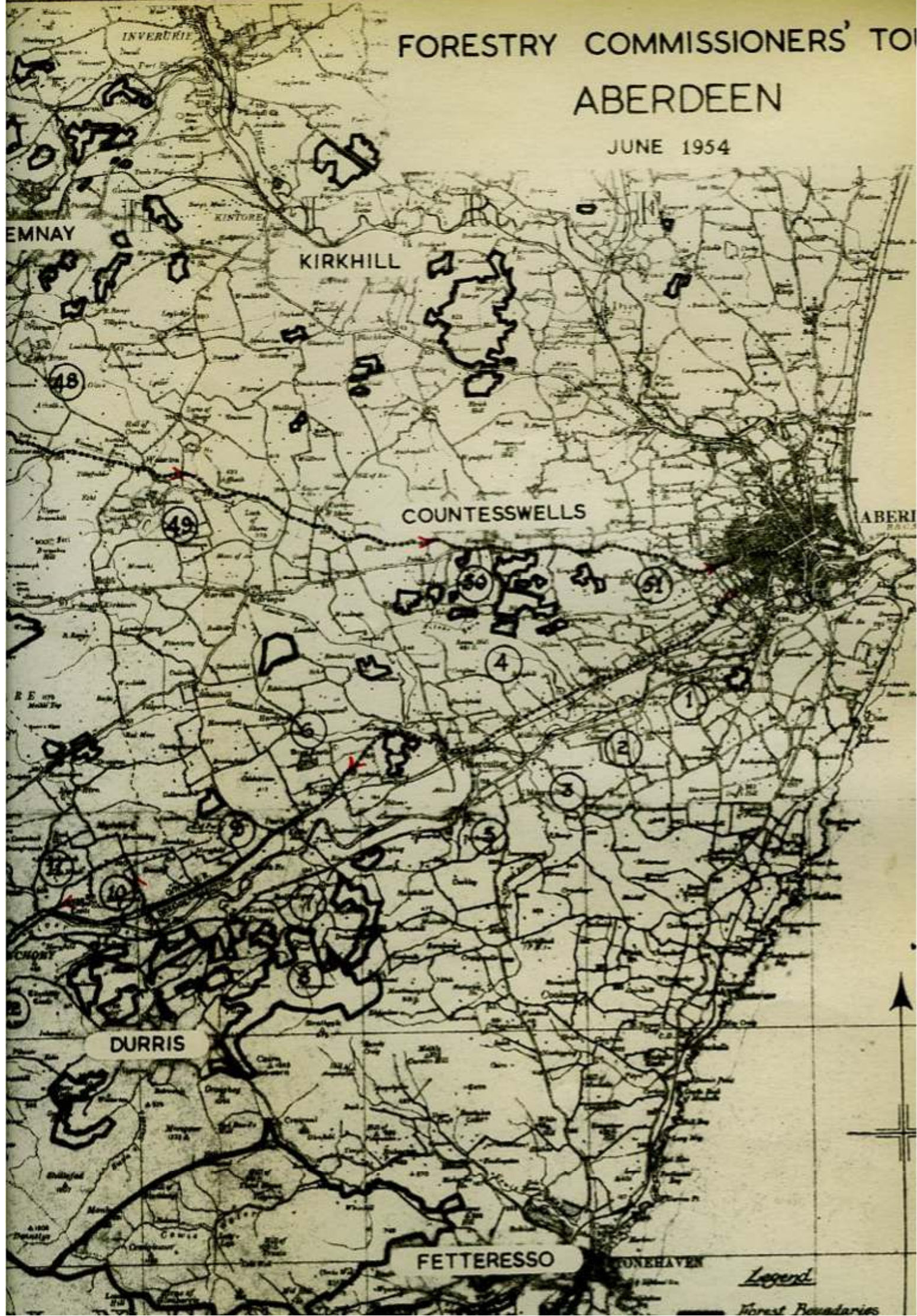
TORNASHEAN

ALLTCAILLEACH



FORESTRY COMMISSIONERS' TO ABERDEEN

JUNE 1954



ALLTCAILLEACH FOREST

District Officer - Mr. P. F. McIntyre
Forester-in-Charge - Mr. D. Marnoch.

Area Statement

Plantations	3526 acres
Remaining to plant	191 " (161 acres windblow)
	3717 "
Agricultural land	32 "
Unplantable	85 "
	<u>3834 acres</u>

Staff

Forester	1
Foremen	2
Workers	33

Housing

1 Forester's House
5 Workers houses
3 Rented houses.

Planting Programme

Owing to the risk of weevil damage replanting cannot be resumed until 1957.

Thinning Programme

The yield for the 10 years 1953-62 will be 272,000 cu. ft. from 895 acres. Windblow has caused a loss of 37,000 cu. ft. of thinnings. The cycle is three years.

Storm Damage

Total damage amounted to 425,600 cu. ft. The growing stock now stands at 1,165,000 cu. ft.

General Description

The main block lies on the west slopes of Glenmuick, rising from gravel terraces beside the Dee to the steep slopes of the Coyles of Muick. There are two marked basins or shallow glens. On the east side the land at Pannanich is steep but higher up the glen, slopes at Allt an Righ are gentler. There is an outlying block on steep ground above the Dee at Inver, overlooking the Balmoral woods.

The altitude rises from 650-700 feet at the Dee to 1800 feet at the Coyles of Muick.

The underlying rocks on the Coyles of Muick are serpentine which with the hornblend schist on the lower slopes gives rise to fertile drifts, even over the adjoining micaceous gneiss and granite. The gravels of the river sides carry podsolised soils but the majority of soils are brown, tending to gleying and impeded drainage in hollows.

Rainfall is 33"-35". Snow falls between January and April and frosts can be very severe on the low ground. Climate approaches continental and winters tend to be dry and severe. There is considerable shelter from the high hills of Lochnagar and the Cairngorms which makes high level planting possible on the good soils.

Risks are not severe. Fire danger is not abnormal and during the early summer there are relatively few visitors about. Rabbits and deer are very abundant on the adjoining Royal Estates and have re-invaded the forest after the gale. They are being vigorously repelled. Deer are numerous on our marches in winter and do some damage in young woods. They are under control however. Red squirrels have done much damage in the past and some shooting is done. There is sporadic damage from black game and blue hares.

History

The Birkhall Woods were leased from the Royal Estate in 1932 for 150 years. In the same year 496 acres were feued from Invercauld. Planting of the bare land in each area was completed in the early war years. War fellings at Birkhall were replanted by 1950.

After the war 1074 acres of felled woodland at Pannanich and Altonrea were feued from Glenmuick and planted by 1952.

The acquired woodlands of Birkhall were largely Scots pine, much of it of good form intermixed with European larch also of excellent quality with some younger lots of Douglas fir and Norway spruce. Planting has continued with pine and larch, though some of the latter in pure blocks has suffered die-back. Hybrid and Japanese larch has been used to a small extent and Norway spruce has been extensively used on the moist soils of the basins with Sitka spruce on the higher slopes.

Scots pine, European larch and Norway spruce are the most suitable species but there is some place for Douglas fir, and for the use of special conifers for high level planting. Beech grows well on low ground and birch is natural and thrives well.

Age Class Distribution

The Commission is required under the Birkhall feu to hand back in 2082 plantations extending to 1191 acres standing on the area where the plantations grew in 1932. Of these, half must be over 50 years and half under 50 years in a balanced gradation of age classes. The present situation is:-

	<u>1932</u>	<u>September 1953</u>
0-10 years	270	223
11-20 "	-	1087
21-40 "	-	263
41-60 "	319	-
61-80 "	470	218
Over 80 years	<u>175</u>	<u>165</u>
	<u>1234</u>	<u>1956</u>

Roads

There were 3.7 miles of roads in 1953. The total planned road length will be 26.4 miles or 134 acres per mile of forest roads.

Notes on Stopping Points

1. Pannanich Hill: Felled in 1939-45 war by Newfoundland Forestry Corps. Replanted between 1948 and 1950. The inaccessible remains of the old crop stand on the fringe of the Craigs of Pannanich. Scots pine, European and Japanese larch, Douglas fir and spruce form the new crop.
2. Glenmuick: Pass sawmill and proceed to Brockdmu. The Birkhall woods are seen across the glen. The older pine woods carry a desirable mixture of European larch. There are acquired woods of not very good Douglas fir. The Corrie Basin is seen behind, planted since the acquisition with Norway and Sitka spruces, Scots pine on knolls and with patches of Japanese and Hybrid larch. Lodgepole pine has been used with spruces on the highest ground.
3. Tombreck: The extent of the major windblow in 90 year old SP/EL mixture can be seen across the glen. Nearly all pine is cleared, the larch is kept back for later disposal. The undamaged part of the wood lies in the lee of a change of slope.

Notes on Stopping Points (contd.)

4. Altonrea: To the left of the road was planted in 1950/51, largely with Norway and Sitka spruce, Scots pine and European larch being used on hard slopes. The top of the plantation is fenced against deer.
5. Linn of Muick: Lunch at the Linn, thereafter extraction of 120 year pine and larch will be seen. Two elite larches have survived.

Extraction is by crawler and logger of pole lengths for conversion to boatskin larch, shore poles and large milling timber.

Limited and successful underplanting of Norway spruce has occurred. There is some advance regeneration of larch and pine. It is hoped that further regeneration will appear during the delay for weevil to disappear, though bracken tends to invade open glades and to preclude regeneration. The wood will be further thinned and gradually replaced by interplanting of spruce, pine and larch.

6. Green Road: We pass the major blow. Larch remains lying and there is a considerable amount of short pine still to cut which has been sprayed with D.D.T. in suspension to control bark beetle infestation.

7. Birkhall Sawmill: This stands immediately behind Birkhall House and is normally closed when the Royal Family is in residence. At present it is going full strength on conversion of windblown timber to battens, sleepers, sawn mining timber and fencing material. The weekly output is between 3000-4000 cu. ft. sawn, and consumption of round logs is between 4500 and 6000 cu. ft. overbark. Normally weekly output is 1000 cu. ft. of fencing and estate material for our Conservancy needs. There is a heated tank creosoting plant and a carpenter's shop.

The gale damage clearing position is:-

Total to clear	425,600 cu. ft.
Felled to 31.5.54	275,600 cu. ft.
Extracted to date	251,600 cu. ft.
Still to extract (95% E.L.)	24,000 cu. ft.
Sawmill output	131,300 cu. ft. sawn
Transferred to sawmill	171,300 cu. ft.
Sold as logs	34,300 cu. ft.
Sold as battens & crowns	77,600 cu. ft.
Consumed as posts	20,000 cu. ft.
Still to cut	150,000 cu. ft.

8. Dalliefoure Wood: 22 acres of Scots pine and European larch 140 years old have been successfully regenerated on the terrace gravels.

1940	April-October: Seeding felling.
1942	Seedlings appeared in numbers. 7 seed trees per acre blown.
1953	Selected seed trees marked to remain for some years - 33 trees - 1.5 per acre blown.

The unmarked trees will be cut as soon as the windblown timber is cleared.

PITFICHIE FOREST

District Officer - Mr. W. F. French
Forester - Mr. C. McDowall

Planted to F.Y. 54	2,839	acres
In hand to plant	484	"
Unplantable	726	"
Agricultural	1,170	"
Nursery	8	"
	<u>5,227</u>	acres

This forest together with Corrennie (1913.5 acres) and Tilliefoure (4576.0 acres) forms a considerable forest area on the slopes of the granite hills from Bennachie to Corrennie Forest.

The land is mostly old woodland, planted by the improving lairds, and the poorer higher soils above. Planting started in 1927 when part of Widmar Forest, passing to Kennay in 1934 and to Pitfichie in 1945 when the main block was acquired from Monymusk. The low farms are now managed by Department of Agriculture for Scotland. Elevation varies from 350' in the Ton Glen to 1460' on Cairn William though planting ceases about 1000' at present. Aspect is mainly easterly, exposure is considerable on the higher ground and the forest is on the edge of a region where Scots pine suffers from blast. Slopes are fairly steep. The soils are mainly drifts over granites, varying from a shallow skin over rock slabs to deep fertile loams in basins. Much is shallow gritty loam, acid but not heavily podsolised. Rooting is restricted by the compact subsoil.

Average rainfall is 30"-35", snow does not lie long and the climate is not severe.

The former woodlands were famous for good larch which was grown mixed with Scots pine.

Rabbits are numerous on our marches, and roe deer are plentiful. Fire risk is not great. A Fire Aid Unit is maintained serving five adjoining Forests.

Scots pine has been the main species planted but a considerable amount of Sitka has been mixed with it. Recent planting has been chiefly of Scots pine, with European larch mixed in when available, with Japanese larch on high ground and with Sitka Spruce and Lodgepole pine in exposed areas. Norway spruce is much used in flushes.

Ploughing has been more generally used on Corrennie and Tilliefoure than on the steeper slopes of Pitfichie. Rocks have been too plentiful for extensive ploughing until the development of the tine plough which penetrates the indurated glacial till and which is strong enough to withstand small boulders.

One step will be made at the forest office to see the extensive gale damage in the thriving pole crops of the early planting in the Ton Glen. Douglas fir has almost entirely blown, and Sitka and Norway spruces have suffered breakage as much as uprooting. The acquired Scots pine plantation (60 years old) was completely wiped out and small 25 year old pine on the ridge was badly knocked about by wet snow. The quantity felled up to 9th June is:-

	68,943	cu.ft.	Scots pine
	7,139	"	European larch
	62,105	"	Douglas fir
	57,124	"	{ Sitka Spruce
			{ Norway spruce, mainly Norway spruce.
Total	<u>195,311</u>	cu.ft.	Q.G.O.B.

There is still 60,000 cu.ft. to be cut.

Produce has been disposed at roadside to a local merchant who abandoned a standing thinning purchase, but lately 40,271 cu.ft. of Welsh props have been despatched, mainly by sea. The disposal of logs has not been easy but a sale has now been arranged.

Prices are:-

Pitwood	Other conifers	$1/11\frac{1}{2}$	per cu.ft.	larch	$2/3$	per cu.ft.	T.O.B.	F.O.T.
Crown Wood	" "	$1/11\frac{1}{2}$	" "	" "	$2/3$	" "	" "	
Millwood		$2/6$	" "	" "	$3/3$	" "	" "	
Boxwood (recent sale)		$2/8\frac{1}{2}$	" "	" "				

BLOWN TIMBER PROGRESS REPORT TO 31.3.54

County	PRIVATE WOODLANDS				STATE FORESTS		
	Estimated Vol. Blown cu. ft.	Total Extracted to 31.3.54 cu. ft.	% Extracted	Unsold cu. ft.	Estimated Vol. Blown cu. ft.	Total Extracted to 31.3.54 cu. ft.	% Extracted
Aberdeen	20,749,000	8,852,714	43%	≈604,000	1,039,530	1,022,153	98%
Angus	4,431,000	1,658,433	37%	26,000	116,000	117,682	-
Banff	4,467,000	1,578,318	42%	NIL	452,000	138,756	30%
Bigo	45,000	22,000	49%	NIL	30,500	34,187	-
Kingairdino	4,327,000	2,169,073	50%	49,000	371,000	254,460	69%
Kinross	19,000	19,000	100%	NIL	NIL	-	-
Maray	3,173,000	1,844,496	58%	NIL	831,600	689,116	83%
Porth	1,425,000	904,713	69%	35,000	230,060	217,792	95%
Totals:	38,636,000	17,428,747	45%	714,000	3,060,690	2,474,146	80%

Volume licensed at 31.3.54 = 31,895,608

*This includes one estate with a volume of 500,000 cu. ft. which is virtually sold

BLOWN TIMBER

PROGRESS SUMMARY TO 31.3.54

Conservancy	Estimated Volume of Blown Timber Private Woodlands	Estimated Volume of Blown Timber State Forests	Total cu. ft.	Extracted from State Forests and Private Woodlands	% Extracted	Unsold Timber
East	38,636,000	3,080,690	41,716,690	19,902,893	48%	714,000
North	5,826,415	455,249	6,281,664	3,757,482	60%	188,870
Total	44,462,415	3,535,939	47,998,354	23,660,375	49%	902,870

FORESTRY COMMISSIONERS' TOUR - NORTH EAST SCOTLAND

DRUMTOCHTY OR FETTERESSO FORESTS - EAST CONSERVANCY

Friday, 25th June 1954

DRUMTOCHTY FOREST

See Map 4

Mr. G. A. Dey - District Officer Grade II

Mr. W. McDonald - Head Forester

<u>acres</u>			
Planted to date		Planting Programme F.Y.55	350 acres
including F.Y.54	2775	Thinning Programme F.Y.54	350 acres
Acquired plantations	279		(90,000 cu.ft.)
Remaining to plant	4786	Number of workers at date	30
Agricultural & F.W.H.	610	Number of houses	8
Unplantable	1533	Number of F.W.H.	6
Other	15		
	<u>9998</u>		

General Description

Drumtochty Forest lies in Kincardineshire, some 11 miles South West of Stonehaven, on the southern slopes of the Grampian range. It faces seaward across the rich agricultural basin known as the Howe o' the Mearns.

The forest forms one compact block comprised of two distinct sections. There are firstly the original Drumtochty acquisitions of 3340 acres, purchased in 1926 and 1928 and planted between 1927-37; secondly Glenfarquhar section of 6658 acres, which was acquired in 1953 and is currently being planted. By the purchase of Glenfarquhar, Drumtochty and Fetteresso Forests have been made contiguous.

This forest is set among hills. Elevation ranges from 400' to 1500'. All aspects occur but are generally South East to South West. Slopes are moderate to steep, flattening off at the higher elevations.

The Highland Boundary Fault passes through the forest in a North East/South West direction. To the north of the fault are schistose rocks, the Altered Grits, which have given rise to dry soils of moderate fertility. To the south of the fault are conglomerate and sandstone of the Lower Old Red Sandstone series. Here soils are extremely variable and change rapidly from almost impermeable conglomerate to heavy clays and to light sand. Much of the area has been mantled by glacial drift which has become compacted and podsolised on the flatter hill tops.

The annual rainfall is 35". The winters, although less severe than further inland, are fairly rigorous and snowfalls are frequent and sometimes heavy. Prevailing winds are South West and exposure in this direction is severe at the higher levels.

Risks

Fire risk is not high and vermin constitute the greatest danger. Rabbits are extremely numerous on the farms adjoining and the forest margins need constant trapping to keep the numbers down. Roe deer are also far too plentiful and one trapper is employed almost full time against these. White hares and blackgame on occasion cause considerable damage.

History of the Plantations

The former owners of Drumtochty were the Gammell family and the last member to live there was Sir Sidney Gammell who carried out much experimental planting on the estate. It is believed that by 1916, most of the lower

slopes on both sides of the Glen below the 800' contour were well wooded. At the time of acquisition in 1926, only 235 acres of woods remained standing and that area has now been reduced to under 200 acres. Most common conifers and a few hardwoods such as beech and sycamore were tried here and grew well with the exception of Scots pine which tradition claims will not thrive at Drumtochty. It is true that the Commission's own planting of Scots pine have not fared much better but these and past failures are more likely to be due to unsuitable races of pine rather than to any inherent unsuitability of the ground.

Since the Commission began planting in 1927, the planting limit has been pushed higher up the hill to 1000'-1100' whilst experimental pilot plots have been established as high as 1250'. Planting was virtually completed on the main block by 1937 before the era of ploughing and the development of the plantations on the upper exposed heather clad slopes and ridges was very patchy being confined to the flushes.

In the old woodland areas below the 800' contour where site conditions were good, the choice of species was very much easier. Larches predominated - European larch, Japanese larch and Hybrid larch were all extensively used - but Norway spruce and Sitka spruce were widely planted on the moister sites and a limited amount of Douglas fir, *Abies grandis* and *Abies procera* on rich but drier ground. Very little hardwood planting was done and it is now felt that much more of the richer lower slopes should have been planted with oak and beech.

Apart from pure plantings, various mixtures were tried. That most extensively applied was the single line mixture of Japanese larch and Sitka spruce. It was originated by Mr. D. H. Bird, the District Officer at the time. The purpose of this mixture was to produce an early return from the sale of Japanese larch leaving the Sitka spruce plenty of room to grow on to the final crop. Unfortunately in almost every case, the Japanese larch has suppressed the Sitka spruce and the result has been rather open and rough stands of Japanese larch. The results would have been very different had the mixture been planted in alternate rows of three instead of in single lines about.

Underplanting has also been carried out on a large scale. Over 160 acres of acquired European larch which showed signs of die-back were heavily crown thinned and underplanted with a variety of shade bearers including Douglas fir, *Tsuga heterophylla*, *Thuja plicata*, *Abies* species and *Cryptomeria japonica*. This work was carried out between 1930 and 1935 and in 1946 and 1949 further thinnings were made to the overwood.

Thinning and Produce

The present thinning plan was drawn up in 1952 based on a 3 year thinning cycle for all species. The severe gale damage of January 1953 has occasioned some interference to the plan but the average programme over the 10 years period of the plan will be 350 acres (90,000 cu.ft.) per annum. By 1960 it is estimated that the annual programme will be 400 acres (100,000 cu.ft.).

There is a single bench sawmill which is working entirely on blown timber. Fence materials and sawn mining timber are the chief conversions. Pit props have also been prepared but to make the most of the available labour much of the thinnings will be sold in the length as tannage pitwood. It is also intended to sell thinnings standing once the ban on these has been lifted.

Roads

The forest is now well roaded with 25 miles of all weather and fair weather roads. Road making and maintenance on this forest are not expensive.

Mr. G. A. Dey - District Officer Grade II
Mr. D. Anderson - Forester Grade I

<u>Acres</u>			
Planted to date		Planting Programme F.Y.55	350 acres
including F.Y.54	3702	Thinning Programme F.Y.54	negligible
Acquired plantations	223	Number of workers at date	30
Remaining to plant	2182	Number of houses	6
Agricultural & F.W.H.	194	Number of F.W.H.	2
Nursery	8		
Unplantable	2123		
Other	<u>340</u>		
	<u>8772</u>		

General Description

The forest is situated in the parishes of Glenbervie and Fetteresso in the county of Kincardineshire. At its nearest the main block of 8,000 acres is 4 miles west of Stonehaven but there are several small outliers nearer the town.

The main block covers both sides of the Cowie Water valley in its upper reaches and crosses a line of low but exposed hills towards the valley of the Carron Water in the south. The outlying sections, which were previously part of Dunnottar Estate, are set in matrices of agricultural land on the south side of the Carron Water valley.

The elevation varies from 400' along the valley of the Cowie Water to 1200' on the western boundary. There is comparatively little shelter from the prevailing south west wind.

The annual rainfall is from 30" in east to 35" on the western boundary. The whole area is subject to severe frosts and heavy snowstorms usually from the east or north-east. In spring and early summer, drying winds are troublesome.

The rocks to the north and west are granites but over most of the area mica schists predominate. The Dunnottar section is Old Red Sandstone, a deep deposit of glacial drift, extremely variable in constituents and texture, overlies the Sandstone, the mica schist and the lava slopes of the granite.

Soils are also variable. There are limited areas in the valleys of fertile brown earth. Over much of the area there is little deep peat and the glacial drift occurs within a few inches of the surface. Leaching is common and there is frequently pan. Elsewhere, blanket bog with peat to a depth of 5' is found.

Risks

The risk from fire is at present moderate but will increase as the plantations are extended. The chief danger is from fires arising on neighbouring land. Rabbits, white hares, roe deer and blackgame are all numerous in the locality and constant vigilance is required to keep these in check.

History of the Plantations

The acquired plantations in the main block were chiefly Norway spruce and Sitka spruce planted on the richer lower slopes. As might be expected, these have grown well. The Dunnottar section has carried in the past some excellent hardwoods chiefly beech, and scattered prime conifers. Part of these woods are still standing but only the solum was acquired. These woods have come to be regarded as part of the amenities of the town of Stonehaven and as they are cleared are being replanted principally with hardwoods according to an approved plan.

None of the acquired woods has given any pointers as to how the difficult sites which comprise the bulk of the area should be afforested. The chief factors which militate against successful establishment are:-

- (i) The close even blanket of pure calluna which is typical of much of the area.
- (ii) The sealed nature of the surface resulting from long years of grazing and burning.
- (iii) The compaction of the soil and the presence of thick pan over much of the forest.
- (iv) The depth of amorphous peat which is of common occurrence.
- (v) The exposure, not only from the south west, but also in many places from the North Sea which limits the usefulness of Scots pine.

It was realised from the outset that afforestation at Fetteresso would not be easy and the first plantings, which commenced in 1946, were on a small scale. By the use of pilot plots, observations made in existing plantations under similar conditions at Drumtochty and experience gained in site preparation on many areas, it became obvious that ploughing, coupled with a careful choice of species, would be the key to success. A certain amount of manuring with phosphate was also likely to prove necessary.

Once the type of ploughing had been decided upon, the rate of planting was greatly increased to annual programmes of 500 acres. Two main types of plough have been used according to the site. The Guthbertson plough is used in the deep peats to promote drainage and tine ploughs on the hard compacted soils to shatter the pan and stir up and aerate the subsoil. Wherever possible, ploughing is on the contour and at 5' spacing.

As at Drumtochty, considerable use has been made of mixtures. Much of the calluna peat land has been planted with Sitka spruce/Scots pine, the Scots pine being replaced by *Pinus contorta* at the higher levels and on the more difficult peats. Some Norway spruce has been planted pure on the richer grass and rush flushes and in admixture with Scots pine where there is some heather. Sitka spruce has also been planted pure in fertile flushes at the higher levels.

On the steeper slopes which it is not possible to plough, Scots pine has been planted on the less exposed sandy drift, Japanese larch or Hybrid larch where the soil is harder with much schistose material. On similar sites near the planting limit, *Pinus contorta* and Mountain pine have been used.

On the rich grass and bracken slopes, where the soil is of the brown earth type and which are well sheltered, Douglas fir and similarly exacting conifers and hardwoods such as oak, beech and sycamore have been introduced.

The planting limit varies with aspect, being as low as 600' on west facing slopes and as high as 900' where there is local shelter. Once the plantations at these levels have become established and closed canopy, it is likely that the upper limit may be safely pushed higher up the slope.

Thinning and Produce

Thinning has taken place in much of the acquired woods (largely Norway spruce) and some of the Sitka spruce has been thinned twice. In many cases establishment has been patchy but by F.Y.56 the whole of the acquired plantations will have been worked through. Over the next 10 years production will not exceed 5,500 cu.ft. per annum, chiefly pitwood and pulpwood.

Roads

There are 15 miles of preplanting and fire protection roads. These are mainly fairweather only, being bulldozed and graded with no surfacing material applied.

Nursery

There is a lining out nursery of 8 acres which has raised excellent stock in the past, particularly of Sitka spruce. It is intended to close this down once the large central nurseries are in a position to carry the increased nursery programmes now in force.

FETTERESSO & DRUMTOCHTY FOREST

JUNE 1954

FETTERESSO

STONEHAVEN

VENNYV
CATERLINE

Legend

— Forest Boundary
///// Plantations

