

FORESTRY COMMISSION

COMMISSIONERS' TOUR WEST SCOTLAND

25th. – 26th. May, 1966.



COMMISSIONERS' TOUR in WEST SCOTLAND
MAY 25th-26th 1966

The Conservancy task for F.Y. 66 may be stated as follows with estimates for F.Y. 68/69 in brackets.

Production	3 $\frac{1}{2}$ M H.ft.	(4M H.ft.)
Planting	9,000 acres	(11,000)

These primary tasks require:-

Roading	42 miles	(50 miles)
(including both productive and preplanting roads)		

Plants needed	14M	(16M)
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Subsidiary tasks are:-

Foresters' housing	11	(7)
Provision for increasing use of forests for recreation		
Budget	£Nil	(£?)

It is hoped as far as is possible in two days to show something of all these aspects of current work in the central and eastern part of the Conservancy.

Staff

The senior staff of the Conservancy are:-

Conservator	J. W. L. Zehetmayr
Assistant Conservator Harvesting & Working Plans	T. A. Robbie
" " Afforestation	E. J. M. Davies
Land Agent	W. A. J. Johnson
Civil Engineer	J. V. Dishington
Mechanical Engineer	F. C. Atkins
Administration and Finance Officer	J. Wharam

The Conservancy is organised in 10 Forest Districts, 3 Estate Districts and 2 Engineering areas. There are 52 Forests and overall statistics of land use at 30th September 1965 are:-

Total land area	382,000 acres	
Forest land	206,000	"
of which		160,000 was planted 45,000 in reserve
Other land	176,000	"
of which		128,000 classed as agricultural 41,000 unusable 2,000 holdings 5,000 'Other' - houses, etc. 200 Nurseries

While the rate of acquisition is impossible to predict it seems likely that for F.Y.65-67 an average of 10,000 acres of forest land per year will be achieved.

PROGRAMME for WEDNESDAY/THURSDAY 25th-26th MAY

Wednesday 25th May

0915	Depart Dunblane Hydro
1115	Dalmally Hotel - coffee.
1145-1245	<u>Glen Orchy Forest</u> P.64, etc., Afforestation.
1300	Lunch near Tyndrum
1400-1430	<u>Crianlarich Depot</u> of Scottish Pulp & Paper Mills Trans-shipment road to rail.
1530-1700	<u>Strathyre Forest.</u> Pulpwood planning and production.
1800	Argaty at invitation of Major Bowser
1930	Dinner at Dunblane

Thursday 26th May

0915	Depart Dunblane
1000-1245	<u>Queen Elizabeth Forest Park (Achray and Loch Ard Forests)</u> Recreation and roading
1245	Lunch at David Marshall Lodge
1415-1600	<u>Devilla Nurseries</u> Planning plant supply and new techniques
1700	Turnhouse Airport via Forth Bridge
1730	Edinburgh Stations/Hotels

AFFORESTATION PROGRAMME

The Conservancy programme is 9,000 acres rising to 11,000 in F.Y. 69 which will then constitute almost a quarter of the Commission's programme.

Fortunately the reserve of 45,000 acres is well spread, mainly in the highland area of Argyll, and 31 forests are able to contribute over 100 acres to P.66 with two, Glenrickard in Arran, and South Kintyre, doing 800 each. By 1970, however, half of these forests will have exhausted foreseeable reserves. To maintain the programme it is necessary at Conservancy level to inspect and recommend around 1,000 acres/month and this is currently being achieved with the continued run-down of hill sheep farming in the more remote areas.

In order to obtain economic use of labour an attempt is being made to bring in and phase out forests more steadily and to avoid overlarge programmes at any one place of which past experience has shown the dangers. The particular region in which great care in planning is required at present is in the glens between Loch Awe and Loch Tay. This 30 mile stretch is covered by two forests, Glen Orchy and Glen Dochart, with considerable reserves, more land coming in and a very small labour force. Dalmally is being developed for Glen Orchy at the west end and it is hoped to follow up on similar lines at Killin in the east to serve Glen Dochart.

GLEN ORCHY FOREST (incorporating DALMALLY FOREST)

District Officer: Mr. S. Forrester
Head Forester: Mr. C. R. Johnston (Eredine Forest)
Forester: Mr. D. Sinclair

These two forests have been combined this year and the first Head Forester will be appointed shortly. Until now the area has been managed from and largely planted by Eredine.

Total area 12,800 acres
Forest land 9,360 (+ 750 under negotiation)
Planted to Sept. 1965 3,030
Reserve at Sept. 1965 6,330 of which 300 is being planted now
The forecast for '67-'70 is 400, 550, 650, 750 acres.

At present the Forester and 8 men are housed - mainly in County Council houses - at Dalmally, where Argyll County Council are about to start 12 more houses for the Commission. It is hoped the Head Forester's Dorran will go up in the autumn. When these houses are filled a review of plans will determine whether another increase in planting can be undertaken.

The Forest lies in the glens surrounding the triangle of roads between Tyndrum, Bridge of Orchy and Dalmally and the majority of the 20 blocks will be viewed in travelling between these places. The main species are Sitka spruce and Lodgepole pine.

The budget for F.Y. 67 is £19,500 of which 60% represents the cost of afforesting 400 acres. The average costs are:-

	£
Fencing @ $\frac{3}{4}$ chain/acre	6
Prep. ground - including a good deal of hand work	8
Planting including plants, phosphate and haulage	16
Drains, mechanical and hand, at 6 chains/acre	5
	35

The return is estimated at 6%

PRODUCTION PROGRAMME

The Conservancy programme for F.Y. 66 was just under 4 million Hoppus feet but the inevitable delays to the Fort William Mill will probably mean that not more than $3\frac{1}{2}$ M will be felled, the main difficulty being in standing sales. This, however, compares with only $2\frac{1}{4}$ M in F.Y. 65. The actual breakdown of work in the current year is of less interest than the expected breakdown in a full year's working for Fort William for which estimates are:-

Out of the total of 4.1 million Hoppus feet:-

	<u>F.C. Working</u>	<u>Sold Standing</u>
Total	1.75M H.ft.	2.35M H.ft.
including:-		
(Fellings estimate)	(.5M H.ft.)	(.35M H.ft.)
Supply to Fort William	42,000 tons	48,000 tons
equivalent to	1.3M H.ft.	1.5M H.ft.
% of total cut	74%	64%

The small round wood supplies from all but 5 of the 24 producing units are committed to Scottish Pulp and Paper Mills in F.Y. 67.

Timber is sold standing from all but 2 units of the 24 while F.C. working on some scale occurs in 12, at 9 of which, including Strathyre, there are production teams based on the Inachsen winch supplemented in certain cases by horses.

For the first 7 months of F.Y. 66 (October-April) results were:-

<u>Tons</u>	<u>Trade</u>	<u>Total F.C.</u>	<u>Strathyre</u>
Quota	12,300	18,900	1,800
Prepared/Delivered	12,199	18,500	1,834

The current quota for F.C. working is 715 tons weekly of which Strathyre's share is 60 tons. Statistics of output, costs and surplus will be given and compared with the longer-established team at Glenfinart.

STRATHYRE FOREST

District Officer: Mr. J. H. Huntly
Head Forester: Mr. A. Cameron
Production Forester: Mr. S. G. Maule

Total area	8,300 acres
Forest land	5,200 "
Planted to September 1965	4,800 "
Reserve to be planted '67-68	300 "

Strathyre is a distinct unit around Loch Lubnaig and Strathyre village and further additions are unlikely. A working plan survey has just been completed covering also Balquhiddar and Torrie forests to North and South.

The forest was mainly planted 1935-47 and is the classic example of fitting four major species, S.P., J.L., N.S., S.S., to the ground vegetation giving a most pleasing prospect at all seasons. Much is now in the early thinning stage but J.L. is being felled for pulpwood.

The staff consists of Head Forester, 2 Foresters, 1 Foreman and 23 workers, housed in 29 F.C. houses.

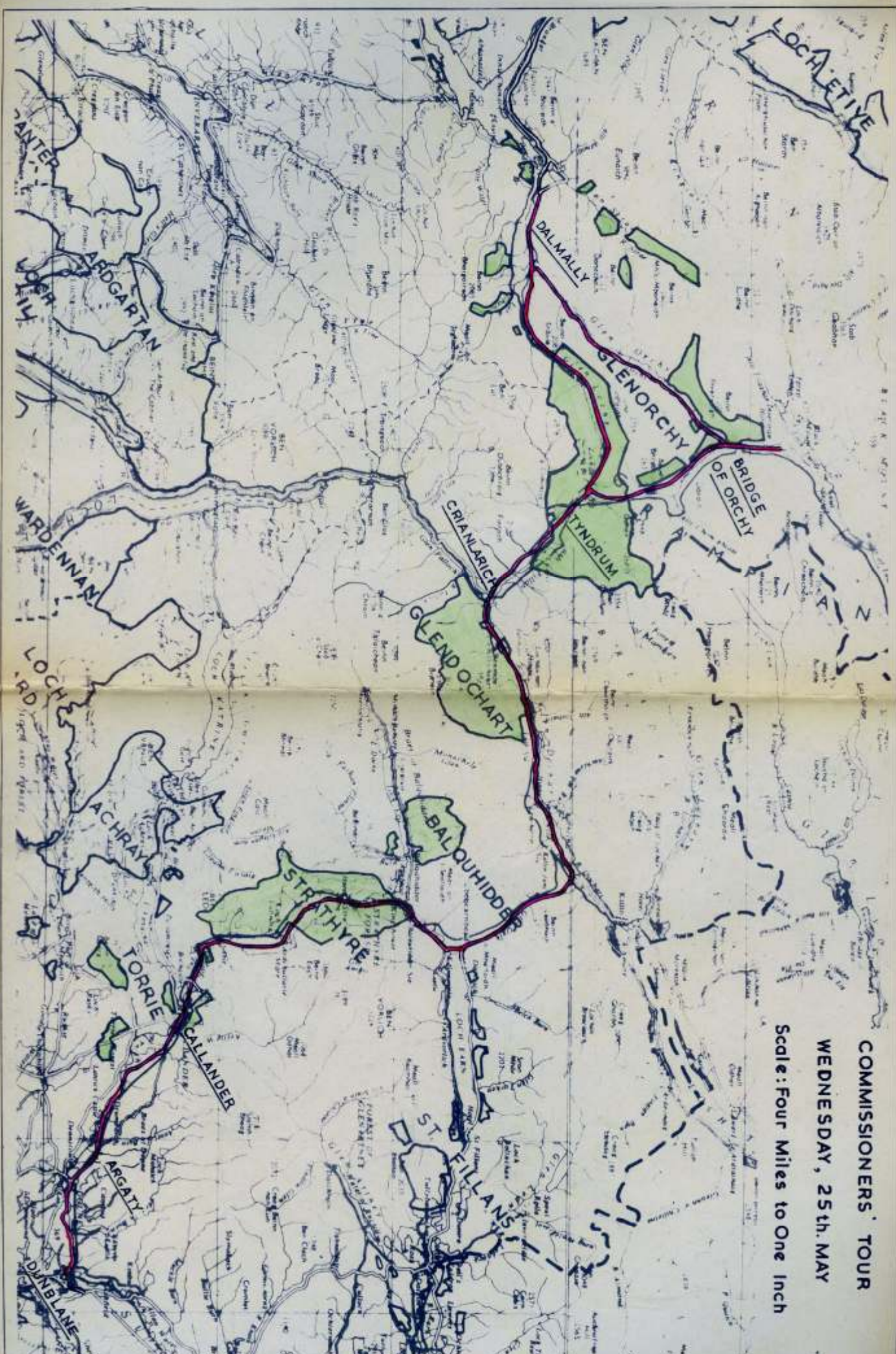
The annual production over the next few years is 225,000 Hoppus feet split approximately at present

Messrs. Timbuyers	75,000 H.ft.
Matyjasek	25,000 "
F.C. Working	125,000 "

The nursery together with the Head Forester's garden have long been a tourist attraction particularly for bus parties and perhaps 50,000 people annually have their attention drawn to the Commission's activities. For this reason the nursery is kept going on a demonstration scale producing some $\frac{1}{4}$ million transplants incurring a deficit of about £400/annum.

STRATHYEE FOREST (continued)

<u>The Forest Budget is</u>		£
Silvicultural Operations		10,700
Harvesting		11,700
Local Supervision		6,000
		28,400
Income		20,000



COMMISSIONERS' TOUR

WEDNESDAY, 25th. MAY

Scale: Four Miles to One Inch

QUEEN ELIZABETH FOREST PARK

District Forest Officer: Mr. A. S. Macnair

District Estate Officer: Mr. R. P. Illingworth

This is one of the two Forest Parks in West Scotland. It is composed of three Forests, Loch Ard, Achray and Rowardennan, and lies between Lochs Lomond, Katrine and Vennacher, including Ben Lomond, Ben Venue and part of the Trossachs, a famed beauty spot and tourist centre.

The total area is 45,000 acres of which 26,000 is forest land, all but 1,000 acres planted. There are three sheep farms but much of the remaining 18,000 acres is mountain and loch. As the visit is concerned with Forest Park and road-building activities no further details of the forests are given here.

There is a long tradition of walking and camping in the area and facilities are being further developed. The main features under Commission control are:-

Caravan Parks and Camping Sites

Cashel, Loch Lomond side	26,000 person/nights in 1965
Cobleland, near Aberfoyle	5,000 in first season 1965
Brig o' Michael, proposed	

The David Marshall Lodge, built by the Carnegie Trust, provides shelter, picnic facilities, lavatories and information, on a view-point overlooking Aberfoyle. 86,000 visitors in 1965.

Picnic sites, where fires can be lit, have been designated for some years but their development and in some cases provision of lavatories is urgent.

Forest Walks. Routes with 10 destinations indicated by coloured markers have existed for some years. Now three short guides have been prepared for routes of varying length and to cover a variety of forest and country sights and activities. 3,000 people in 1965.

Other activities not under F.C. management are 3 Youth Hostels, a residential school camp, 2 Pony-trekking Centres, Fishing, Orienteering.

ROAD-BUILDING

The nature of the terrain and the mainly igneous rock make the Highlands the most expensive area for road-building in Britain. So much is this the case that at current road spacings the economic future for forestry is dubious. While efforts are being made to reduce road density and costs, present extraction methods - mainly the Isachsen winch - dictate a spacing of around 350 yards - 5 miles/square mile.

The current programme of 40 miles/annum includes 12 miles of preplanting road and in addition some 52 miles are being reconstructed to accommodate 20-24 ton gross loads - 30 ton vehicles are in fact running in certain forests.

Budget. The F.Y. 66 budget including labour oncost is £418,000 and the cost of new roads averages £7000/mile. Work in 23 forests was included.

Organisation. There are basically 14 road-building teams each under a foreman grouped round an excavator with supporting compressors, drills, loaders and tippers. Each team works on perhaps two or three forests during a year, the aim is to tackle only about 10/12 fresh forests per annum with resulting economies in moving equipment, etc.

In practice small essential jobs, e.g. accesses, and the need to work certain jobs in summer complicate planning.

The Conservancy is now divided into two engineering areas and the officers east of Loch Fyne are:-

Area Civil Engineer	Mr. MacEwan
Assistant Engineer	Mr. Stark

Beinn Bhan Road is one of seven jobs now in hand in the area. It is a preplanting road to give access to an area of 600 acres recently reclassified as plantable, lying from 1-2½ miles from the nearest road.

The estimated cost is £12,400 for 1.8 miles to give a cost just above the Conservancy average.

High Style Road. The party will return over newly completed roads in the productive area of Renagour Beat.

PLANT SUPPLY in WEST (SCOTLAND)

The requirement for F.Y. 66 was 1,600 plants per acre for 9,200 acres = $14\frac{1}{4}$ million plants.

With a proportion at wider spacing and with lower beating up the estimate for 1968 is 10,500 acres at 1,500/acre = $15\frac{3}{4}$ million.

2M plants are raised for West (Scotland) by East (Scotland) annually. The capacity of nurseries in West (Scotland) is approximately:-

<u>Seedlings</u>		<u>Transplants</u>	
Glenfinart	4M	Glenfinart	3M
Devilla	12M	Devilla	7M
Tulliallan	2M	Tulliallan	3M
		Carradale	1M
	18M		
			14M

These figures emphasise the outstanding role of the complex of nurseries on Devilla Forest including 30 acres in more than a dozen blocks of heathland nursery and 30 acres also of the old arable of Tulliallan Nursery.

With the closure of Benmore, Inverinan and Minard and the intention to close Carradale, further sections of Devilla have been broken in and its importance enhanced accordingly.

The species raised over the years show a steady increase in Sitka spruce to its present 67% and of lodgepole to 18% leaving only 15% of which Japanese/hybrid larch at 8% are the most important.

DEVILLA and TULLIALLAN NURSERIES

District Officer: Mr. W. P. Thomson
Chief Forester Mr. W. Fairbairn
Head Foresters: Mr. D. Lawson & Mr. M.K. Macdonald

The nurseries provide the greater part of the work load of Devilla forest which consists of scattered blocks totalling 3,250 acres planted from 1930, so much so that the squad works in other forests at slack periods in the nurseries.

The central eastern situation, low rainfall of 25", and in the case of the Devilla heathland nurseries the light soil, provide the basic necessities for a main nursery. Tulliallan, the old arable nursery, has a heavier soil and was from 1921-50 much bigger averaging 60 acres under conifers but has now been reduced to a subsidiary role following the expansion of Devilla from an experimental beginning in 1945.

At one time over 100 were employed in the peak season of summer weeding but with the nursery revolution following the introduction of selective weedkillers the main load now falls in the spring when lifting of seedlings, lining out and lifting of transplants, plants for despatch, followed by sowing, must all be fitted into a season traditionally limited by the season, weather conditions and plant physiology.

The permanent squad of 70 in 1959 has now fallen to 52 and the main effort in recent years has been to spread the spring load, and the methods adopted will be the subject of the tour. The principal techniques are:-

- (1) Lifting up to $1\frac{1}{2}$ or 2M seedlings in October/November which are stored in polythene bags for early lining out in the spring.
- (2) Putting up to 3M seedlings to the Tulliallan cold store for May/June lining out after it is too late to lift seedlings.
- (3) Lifting transplants in spring in advance of forest demands and putting them to cold store at Tulliallan ($\frac{1}{4}$ M) or elsewhere. These are then used as the last reserves for planting in forests with the biggest programmes.

(4) Later sowing of seedlings destined for 2+0.

(5) Lifting and lining out of $1\frac{1}{2}$ year seedlings in July to make $1\frac{1}{2} \times 1\frac{1}{2}$ plants.

Not all these techniques can be used every year because of unsuitable weather and there is a need at present for a method of drying plants for cold storage so that the operation can be relied on every year.

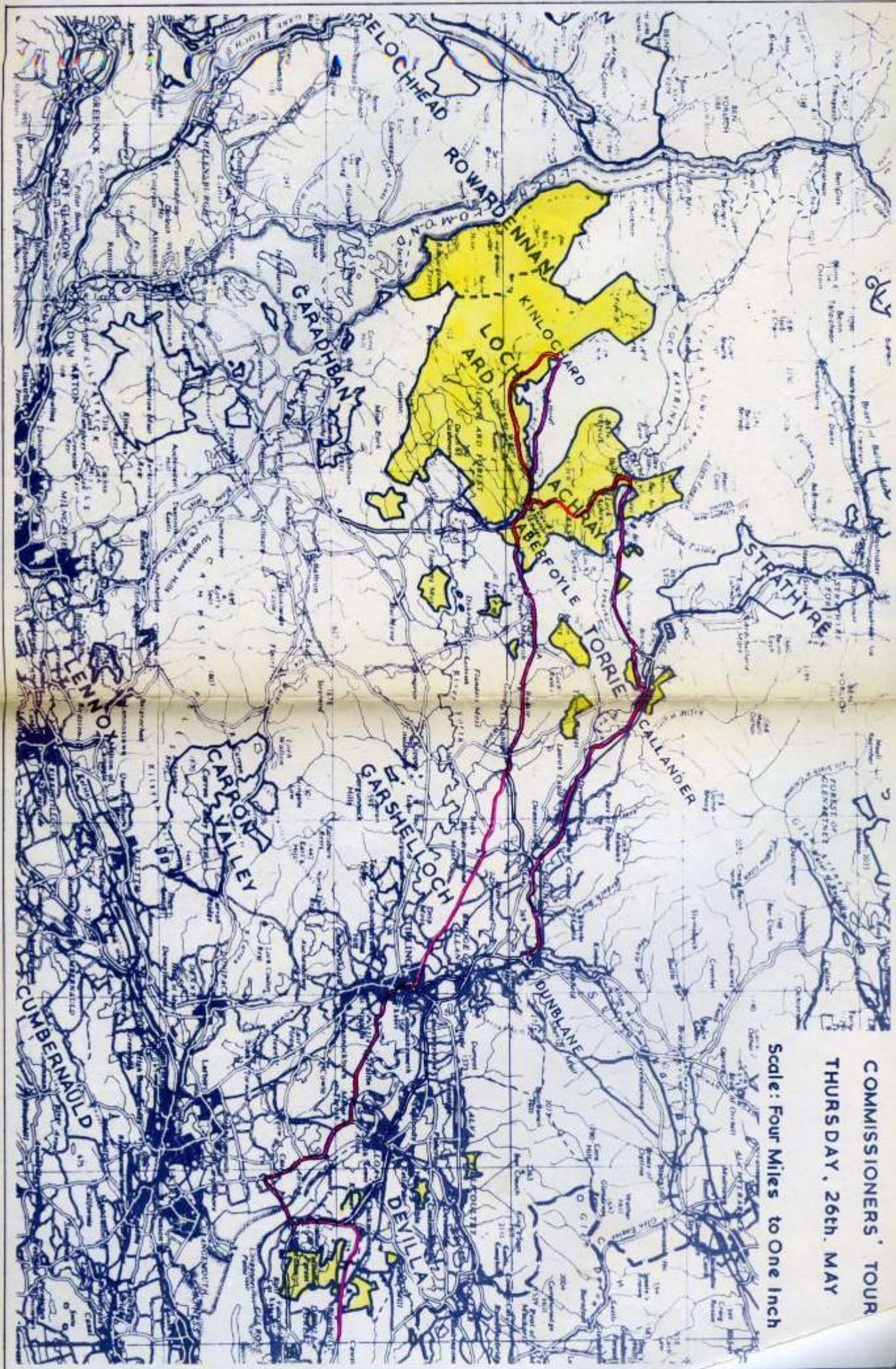
While most of these operations are based on detailed research their success in large-scale practice depends to a very high degree on the skill of the supervisory staff in combining forward planning with flexibility in the light of prevailing weather conditions.

The F.Y. 67 Budget for labour plus oncost only is:-

Silvicultural operations	£7,500
Loan of labour	£3,400
Devilla Nursery	£7,100
Tulliallan Nursery	£9,300

In the F.Y. accounts (unbalanced) the surplus from the nurseries was:-

Devilla	+£9,700
Tulliallan	- £570



COMMISSIONERS' TOUR
THURSDAY, 26th. MAY

Scale: Four Miles to One Inch

Brianlarick

18500 tons despatched = 580 000 pieces
of this 22 tons rejected = 700 pieces
represents 1 piece per 800.

Strathguy

Picture 5 years ago. 1 resident merchant.
West of Loch Lomond and 3 in Perthshire/Stirling
markets becoming very tight
F.C. working - logs at roadside
- pole length material to merchants
(mainly importers) who manufactured
the material into pitprops at local
depots or at central depots
in the mining areas.

Cairn
With confirmation of the establishment of pulp mill
Pulp plans for each forest were prepared.
apart from indicating thinning programmes
indicated uneconomic crops which could be
filled, eg. W.S. crops at high elevation.
Larch crops to be heavily thinned and
underplanted.

- 2 Staff requirements
- 3 Housing and Luban requirements
- 4 Road ~~construction~~ reconstruction and construction programme
- 5 Horses or mechanical equipment ~~needs~~ ^{needs}.

Relationships with the Trade

Planned that ^{the} Early stages mainly by F.C. but trade to be brought in as required by build up. By auctions and ~~sales~~ sales by tender encouraged the trade to come in to the conservancy and by signing 'letters of intent' ensured continuity of working until the pulp mill contracts started. ^{of negotiable notes working - 2 vacant forests} As you will see from the notes by next year the trade will be responsible for supply of slightly more than 50% of requirements.

Training programme. Staff summoned

3 courses.

linked closely to Work Study methods of working.

Workers — Pulp runs 8000 or more
training power saw operators
Trachean Operators

Junior Supervisors Long logging course. 3 weeks
Layout of racks, Power saw, Trachean & Horse extraction

Senior Supervisors Appreciation course of 1 week. Methods of measurement, organisation of work, fixing piece work rates etc.

Durham props for training purposes

Control. As ^{will be} appreciated in the early stages of such a large scale undertaking there are many ~~up and~~ ^{such} fluctuations ~~down~~ in demands, ~~these~~ variations in demand ~~are~~ controlled mainly by postponing ~~new~~ supplies from new units and also by varying the top diameter at which mill-logs may be cut.

8 merchants

+ 2 vacant