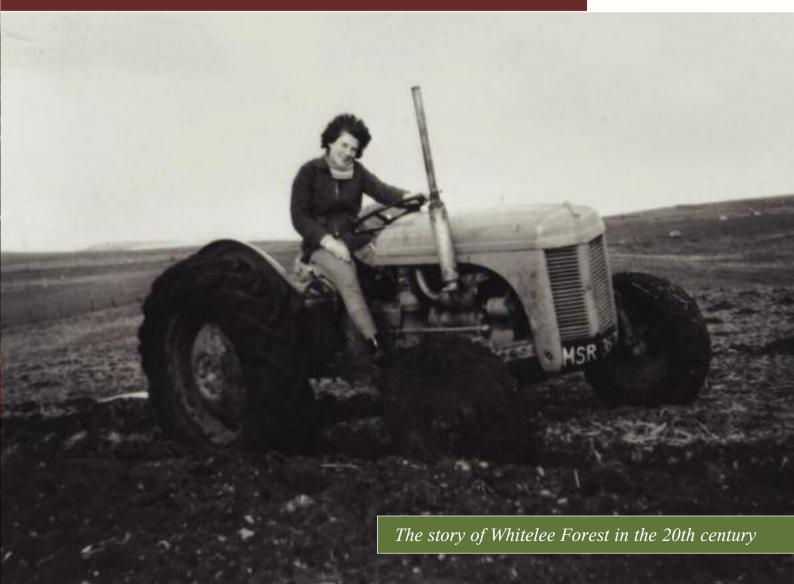
# 'The forgotten forest'







#### Wilderness

Wild and lonely moor swept by scouring winds
Where waving sedge and rushes sound the emptiness
Here fluffs of white cotton grass silently wear the centuries down
Above their saintly heads whaups wail and burble mournful as sinners
Tufts of wiry heath grass like bleached beards
Stream along the wind shaking their hair resignedly
And mist grey as lichen swirls in its cold wraith
Wakes ghosts of lost and tarnished centuries
Ghosts of dim years of strife
Through this opaque dampness muffled owls maraud
Silent as wind-hung gossamer, deadly as the winging arrow
And the peat's raw sweetness tinges the mist with time
Smells of dark brown ages, martyrs' graves, lost causes
And wild and lonely moors

by Bryan Simpson

Contributor to the Whitelee Project; written about the Whitelee Plateau in 1960, before the forest



#### Introduction

Before the Forest (1920s-1961)

- The Whitelee Plateau

Developing the Forest (1961–1980s)

- From Farming to Forestry

- Preparing for a New Forest: Trappers and Tractor Drivers

- Planting 10 Million Trees: Squad and Contractors

- The Work of Trappers, Rangers and / Shooting Tenants

- Foresters and their Work
- \_ Changing Ecology
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#### The Forest Matures (1990s-present)

- The End of the 20th Century
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This Extraordinary Time

Looking Back

## foreword

Of all the many changes that took place in the Scottish countryside during the 20th century, none was more transformational than the spread of plantation forestry. Hillside after hillside, moor after moor, went under trees – most of them conifers. Any significant alteration in how the countryside looks – as is apparent from the furore surrounding the recent proliferation of wind farms – is controversial. Much afforestation, it follows, was deplored. And in the later part of the 20th century, as the often negative impact of conifer plantations on fragile but important moorland and peatland ecologies became better understood, it started to be apparent that forestry's wider costs could indeed outweigh its financial and other benefits.

The practice of forestry changed as a result. But forestry changed in other ways as well. The Forestry Commission, which had presided over the expansion of forestry in Scotland since its formation in 1919, had not exactly locked the Scottish public out of what were ostensibly their forests. But neither had the Commission – prior to the 1970s and 1980s – done a great deal, other than in one or two particular locations, to encourage people to explore its woodlands.

Today's Forestry Commission, in contrast, sets a great deal of store by encouraging public access to its forests – which, in consequence, have become highly valued by very many people. Greater public access has been accompanied by huge effort on the part of the Forestry Commission to explain and interpret what is to be seen by visitors to Commission forests. But in understandable reaction to environmentalist critiques of plantation forestry and its impacts, this interpretative effort tends to concentrate on a forest's natural history – on the birds, the animals, the plants to be seen there. More and more often, admittedly, you will also find some guidance to what a forest might contain in the way of archaeology – whether a neolithic cairn from thousands of years ago or the remnants of a crofting township cleared in the course of 19th-century evictions. What you will not find is any very substantial account of how the forest you are visiting was brought into existence.

Perhaps because I grew up in a mid-20th-century community which was heavily dependent on employment in forestry, and one where both my grandfather and my father were Forestry Commission trappers (what would today be called rangers), I find this a little bit sad. Putting in place the forests we now take for granted was, after all, a major endeavour. It involved much labour and much effort over many years by many thousands of men and women. Lots of those people are still with us. They have stories to tell; stories that deserve to be heard; stories that are of interest and importance. The Touchwood series of publications, of which this is the latest, was initiated with a view to making some at least of those stories as accessible as the forests the stories deal with. In the pages that follow, then, you will find some account of how one Scottish forest, Whitelee, came to be the way it is. Much of this account is in the words of Whitelee people. That is how it should be. And that is why everyone involved in this invaluable exercise deserves both thanks and congratulations.

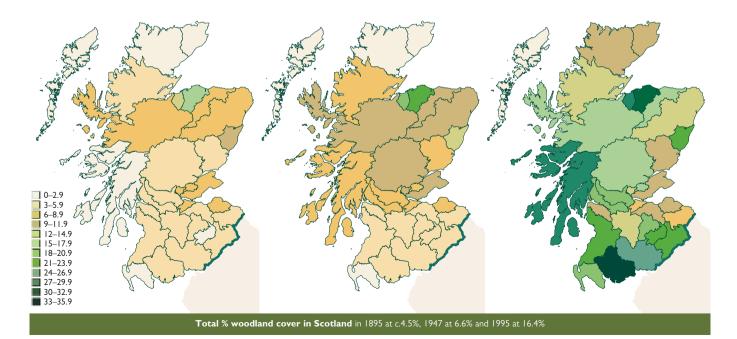
James Hunter, University of the Highlands and Islands Centre for History, Dornoch

#### Introduction

'By 2000, the proportion of Scotland under wood had grown from 6% (in the 1920s) to 17%, most of that being Sitka spruce, and almost all of it taking place in the uplands. It was an extraordinary transformation of the face of the countryside, not all of it directly due to the efforts of the Forestry Commission as an increasing proportion of the trees came to be planted by private estates and forestry companies encouraged by tax breaks.' – Christopher Smout, historian of Scottish woodlands

An ancient track wends its way over the high, spongy peat of the Whitelee Plateau in Cunninghame, part of the ancient kingdom of Strathclyde. This 'Weavers Way' was the route used in past centuries by weavers taking finished webs from their home-looms in the deep Irvine Valley to market in Glasgow, and returning with new yarn for the next job.

The Plateau rises from valleys and moorland between the towns of Eaglesham, Kilmarnock and Strathaven, in Renfrewshire, Ayrshire and Lanarkshire. The Glen Water burn, emanating from a high, marshy hollow, cuts into the Plateau from north to south through a series of ravines. On the heathery slope above its source are the remains of a deserted farm steading and its fields, one of many signs of past residents and farmers in this bleak area.



'ye can actually disappear in it, it's so deep. Ah mean they've actually lost caterpillar tractors up there in the hags.'

– David Findlay

The Weavers Way was a drovers' road too, with a resting place for flocks, herds and men at High Myres, a stunning viewpoint; you could see the whole of the Firth of Clyde from Glasgow to Ailsa Craig. But the Whitelee Plateau was dangerous. Within living memory, one weaver and hundreds of sheep, some cattle, and several horses and foals inadvertently sank into deep, wet, peat bogs. But peat also provided a last resting place for a few people who loved the moorland so much they chose to be buried there.

'Looking at it before the Forest, as ah can remember, it were just like a massive carpet o heather. When you startit walkin throu it, you could actually see the heather in patches, an in between







oto: Kuth litten

the patches there wis like bright green moss, an that's where the water is, an you've really got to be very, very careful where you're standin, because ye can actually disappear in it, it's so deep. Ah mean they've actually lost caterpillar tractors up there in the hags.' – David Findlay, countryman, remembering the Whitelee Plateau before the Forest

The cover of peat over the Whitelee Plateau has been developing for thousands of years, helped by a poorly draining clayey rock below and high rainfall from above. Old maps show that it has been a mossy, boggy landscape for at least 400 years, but was nevertheless farmed until the middle of the 20th century.



Then there was change. Between 1960 and 1990 many Plateau farmers sold all or part of their land to a government body, the Forestry Commission. By the end of the 20th century about 10 million trees had been planted on this former moorland, to form a new 15 000 acre forest. It was one small part of a vigorous government push to provide the country with a resource of wood and timber which it desperately needed. Two World Wars had reduced British woodlands to small fragments which could barely sustain the urgent need for pit-props to support the coal mines — let alone a flourishing timber industry.

Tree-planting on bare land is called afforestation. As all good land was required for food production, only the very worst land was allowed to be afforested. The wet, peaty moorland of Whitelee Plateau fitted this category and was transformed into one of hundreds of new 20th-century British forests. The Whitelee peat still remained – under the new forest – but was churned up by ploughing so that young trees could be planted onto upturned ridges, with water draining away along the parallel furrows.

It was not only landscapes which metamorphosed. Rural communities disappeared or appeared, buildings became ruins under trees or were rebuilt for forest workers, ecologies altered. Yet, during the whole century, the people who sold or lost their land to afforestation were never asked how they felt about it, or what happened to them. The working lives of staff who bought land for the Forestry Commission, surveyed the lands, designed the forests or hired the men and women to carry out

tree-planting assumed little importance. Tough workers who ploughed the peat, planted and weeded millions of young trees were not asked how they did it, what tools they used or how working out in all weathers affected them.

The Whitelee Forest Oral History Project was set up to discover something about these unknown people and their lives. The farming communities of the Whitelee Plateau, residents of nearby towns, the many people involved in afforestation, naturalists and country-sports men – have willingly contributed to the study of this significant historical, social and ecological event.

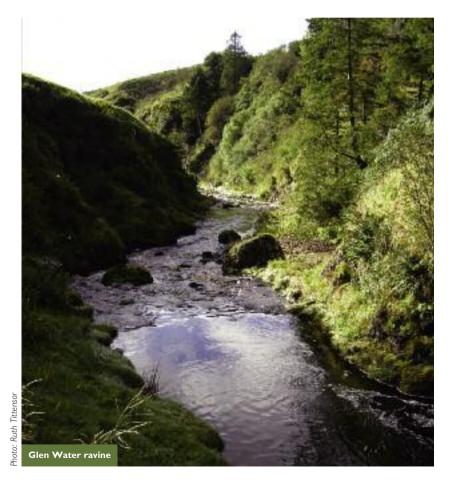




Photo: Ruth Tittens



Photo: Ruth Tittenso

This booklet presents the freely given story of Whitelee Forest. If contributors spoke Scots rather than English their quotes are in Scots too – it is normal practice to give quotes in the original. You will have little trouble in understanding the descriptive Scots language.





#### The Whitelee Plateau

'One of the overriding things was the sort of emptiness and bleakness of the place...trees were restricted to gullies, rocky gullies...there was just this huge area of bleakness which was predominantly on the heights, heather moorland. Which varied from very wet peat bog to what they call dry heather moors, just depending on the topography of the land. And, all around the outskirts of this would be what the Scots call sheepwalk country' — Bryan Simpson, field naturalist, remembering the plateau before the forest

Volcanic lavas 300 million years old, which cooled hard and deep, form the ancient bedrock of the Whitelee Plateau. A layer of stony clay, called glacial till, was dropped by moving ice directly on top of the lavas less than one million years ago. No rocks from the intervening millions of years are left between the lavas and till. Centuries of cold, open, tundra landscapes after the Ice Ages were followed by warmer times in which forests grew and eventually dominated the landscape. Then, 9000 to 7000 years ago, peat started to form on top of the glacial till. Prehistoric residents burned and cleared the forest trees and bushes to make open glades in which animals could graze. When the climate became wetter, peat started to form on the ground surface in these glades. During decades and centuries,



'One of the overriding things was the sort of emptiness and bleakness of the place...' – Bryan Simpson

the peat layer grew upwards and thicker, as well as expanding outwards as people cleared away more forests. Today, the peat can be up to 21 feet deep over the glacial till on parts of the Whitelee Plateau.

Scottish peat is formed mainly from plants such as dead bog-mosses, grasses and sedges in uplands where there is high rainfall and poor drainage. In such waterlogged conditions, these plants do not decompose after dying, but lie on the ground as they are. Vegetation, however, continues to grow on top. As time goes by, the dead plants become compressed into brown or black 'rock' because each year's growth is added on top of the existing deposit.

A carpet of living heather grew on and over the deepening peat. During millennia and right into modern times, the peat grew deeper and dead heather became incorporated into the peat too.

People burned the heather to kill old bushes and encourage new growth, flowering and seed-set. Younger heather and its seeds provided good food for sheep, and birds like grouse and finches. In wetter patches, moorland grasses, rushes and cotton-grass formed green, brown or white patches.

But very bright-green or red vegetation signalled death-traps. They were pools of water with a living surface of brightly coloured bog-mosses into which many a farm animal disappeared. These are called 'sinks' or 'peat hags' by local people.





Meadow pipit

The living forests eventually declined after centuries of human onslaught. The trees fell into the peat, and their undecomposed remains, called 'moss stock', are often ploughed up from the peat as half-fossilised trunks. A treeless moorland landscape was maintained by constant grazing of farm animals, assisted by rabbits and brown hares – introductions from Europe.

In recent centuries there have been few living trees on the open moorland. Laggard beech hedges and thin shelterbelts of Sitka spruce, now barely provide shelter for farm stock. Wild damson and crab apple trees survive on the moorland edge. Remnants of natural woodlands cling onto the sheer sides of some ravines. Bluebells, primroses and sweet violets still flower under misshapen ash, birch and rowan.

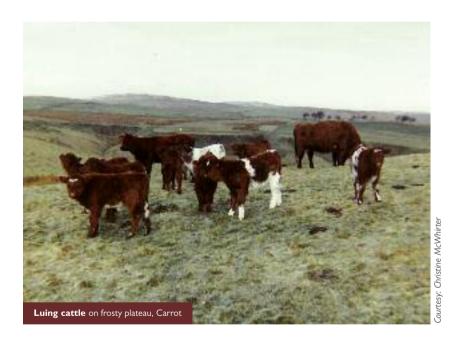
Many wild animals managed to populate the exposed moors. People remember flocks of fieldfares, dunlin and golden plovers in winter. Wild ducks, geese and swans frequented the small lochs. In summer, lapwings and oystercatchers nested, while skylarks and curlews called from farmland on the edge of the Plateau. Kestrels were common, but bigger raptors, like buzzards and hen harriers, were persecuted. Adders were common enough to be regarded as pests and on one farm the goats killed adders by treading on them.

Brown and mountain hares were very common and provided human food in abundance, but foxes were snared or shot because farmers believed they killed newborn lambs. Some people enjoyed watching badgers coming out of their setts and crossing the Glen Water of an evening. Brown trout, minnows and stickleback frequented the burns, providing fun and food for local lads.

Whitelee Plateau undulates between 900 and 1095 feet with its highest point, Corse Hill, at 1230 feet. The Plateau stands isolated above its low-lying surrounds; it is open to weather from all directions. Distinkhorn, eight miles away, is the nearest hill of similar height. Annual average rainfall in the past 30 years has been 68 inches. Deep snow came every winter and could lie until May. Sheep were frequently buried under deep snow, but they could be rescued by farm collie dogs.

Prolonged cold winters meant curling ponds were popular on the Plateau edge. Occasionally people skated on the River Irvine, which rises on the south-east margin of the Plateau. Whitelee is renowned as a very windy place. There was no shelter for people or stock from sun, rain, snow or wind, so gales battered people and dwellings. Farmhouses could be damp and mouldy. The air and soil temperatures were sufficiently high for crops to grow only from June to September, so it was difficult to ripen even oats. Any warm summer days were obviously very welcome.

It was sometimes difficult to know where you were on the featureless Whitelee Plateau. Even shepherds sometimes got lost in a sudden mist. Occasional stone wall dykes, or post and wire fences, formed farm boundaries. However, these march fences were often just invisible lines known only to sheep and farmers! There are more than 90 burns leaving the Whitelee Plateau, all eventually reaching the River Clyde or Firth of Clyde. The peat acted as a huge sponge, slowly releasing the downpours into these waterways.



'...on a clear night you could count the three lighthouses on Arran...There was a beautiful view from the closet if you sat with the door open...' – Elizabeth Watson





The views from the Plateau were fantastic, to 70 miles distant on a clear day or night.

'A most wonderful view from the farmhouse. And on a clear night you could count the three lighthouses on Arran, as well as other lighthouses up and down the Clyde...The toilet at Whiteleehill was a dry closet away out at the end of the byre. It had spaces for two adults and one young person. There was a beautiful view from the closet if you sat with the door open...' — Elizabeth Watson, family visitor to Whiteleehill farm in the 1930s



Photo: Ru

'But if ye go up tae Whitelee Hill the views round about wis fantastic, absolutely fantastic. Ye could see right away tae the Firth o Clyde, Arran, Ailsa Craig, Ben Lomond. Whitelee Hill, that's a right watershed, ye can look in every direction fae there.' — Margaret and John Struthers, farmers, talking about the high point of Whitelee Hill

There were about 80 farms on, or partly on, Whitelee Plateau. Those with all their land on the peat moors had large acreages so that they could support sufficient stock to make a living from the very poor ground. Hardy sheep, like blackface, and cattle, like blue-greys, could live on the high moors all the year, maybe with a little extra feeding. Small areas of enclosed land around the steading were called inbye and grew crops like potatoes and hay.

Plateau-edge farms were much smaller but more productive. They had less moorland but larger inbye on better, mineral soils. Crops like turnips, and more hay, could often support a dairy herd of Ayrshires. Clydesdale horses provided traction on most farms until the early 1960s.

Attractive 18th and 19th century U-shaped farm steadings dotted the landscape sparsely. Farm families had large vegetable plots, flower gardens and fruit trees by their steadings, with a few sycamore or spruce trees to provide shelter. Hares, rabbits, grouse, pheasants and partridges ended up in the kitchen. Country sports were an important social activity, either formal shoots with a team of beaters on big estates, or farmer and friends having some fun while controlling pests and providing food.

Contributors to the Project remember the wild, open, working landscape between the 1920s and 1950s. They remember, too, when in 1961 changes came to landscape and lives.





Courtesy: Jim (



tesy: Jim Currie



## Courtesy: Norman Davidson

#### From Farming to Forestry

'The Forestry Commission was formed in the aftermath of the First World War when timber became a scarce commodity and the Government decided it had to increase forestry in Scotland to 10% of the land surface. This was to prepare for future wars by creating a reserve of growing timber, should we ever again become isolated as an Island. In my days afforestation was the primary goal, and to produce pit-props for mining and other timber as quickly as possible. Absolutely nothing else mattered. So we embarked on huge scale planting of fast-growing conifers.' – Bill Sutherland, retired Forestry Commission district officer who started work in 1942

Making a living from farming on the Whitelee Plateau stretched resourcefulness and resources, and was a hard life. Mechanisation came slowly and late after the Second World War; Clydesdale horses and manual labour were used until the early 1960s.

Plateau farmers attempted to improve and reseed their inbye parks on the better, mineral soils. But they could not extend cultivation onto the peat because it was too wet. With a small inbye compared to peat moorland, they could not produce sufficient extra winter food to feed more animals indoors in winter, or have more animals on the summer moorland.

Farmers could only take advantage of government 'headage' payments by increasing sheep density on the moorland to above its carrying-capacity. This caused an ecological change – tough grasses replaced heather patches, so pasture quality deteriorated. It became less worthwhile financially to drain moorland



'Jist remember wan thing, and tae me this is the maist important thing – the Forestry Commission is a government body, it's your taxes that pays fur it. So it's yours [the forest], enjoy it; and look efter it.'

- Jim Newall, Forestry Commission wildlife ranger

regularly, where previously miles of deep parallel drains had been dug by hand. Rushes spread. Neither could Whitelee Plateau farmers take advantage of increased know-how, fertilisers, pesticides and genetically élite crops which were helping lowland farmers produce staggering increases in crop productivity after the War – again because of the small area of their cultivable land.

They couldn't change the weather either! There was still cold, wet, misty and windy weather and a short growing season; parts of the heathery moorland were still too wet for tractors, people, cattle or even sheep to use much of the time. Nothing could be done with peat hags. There was a limit to how much the poor land could be improved.



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Farmers found it increasingly difficult to afford paid labour on their farms. The 1940s had provided Prisoners of War and labour from the Women's Land Army, but this was temporary help. Farmers themselves took over shepherding from paid shepherds, while offspring were expected to work unpaid on the farm along with their parents.

Concurrently, a government body, the Forestry Commission, was being pushed by Westminster to rapidly expand its afforestation of bare land in Scotland. The reason was to add to the nation's much-needed timber reserves and assist rural employment. The Forestry Commission had already afforested huge areas of upland Wales and northern England with conifers. Scotland had received a much smaller share of new forest.

The Forestry Commission was looking avidly for land unsuitable for agriculture. It found some on the marginalised Whitelee Plateau in 1961.

Farmer John Gair sold his 1500 acre Whiteleehill farm and steading, along with the outlying High Hapton, to the Forestry Commission in June 1961. He was paid slightly over the going rate at £7–10 per acre. Whiteleehill was a very isolated place in which to rear a family. With the sale proceeds he moved his family to a farm in the Scottish Borders where the better land could carry one sheep to one acre, rather than one sheep to three to four acres as on the Whitelee Plateau.



"...the Commission was desperate to acquire land to meet the large planting programme." – Peter Innes

'At that time the Commission was desperate to acquire land to meet the large planting programme and it was not a question of what will we take, but what can we lay our hands on. Whitelee, at high elevation on deep peat, was in many ways a stab in the dark and a lot of people in the FC doubted if it would be successful. However, J.A.B. MacDonald, Conservator, South Scotland, at the time was a forward looking man and decided to take it up.' – Peter Innes, retired Forestry Commission chief acquisitions officer 1961 who negotiated the purchase

This sizeable chunk of moorland was just what the Forestry Commission needed! The new holding was eventually named Whitelee Forest. The first employee, a tractor driver, Dan Blair, was hired. He began work in the winter of 1961 and nearly stuck to the tractor seat with the cold as he started ploughing the peat of High Hapton.

There was no thought at the time that Whitelee Forest would expand beyond its original size. Isolated blocks of state forest were not uncommon. However, Bill Sutherland, an eagle-eyed Forestry Commission district officer, changed that. The new Whitelee Forest was placed in his forest district of South Cowal. He became familiar with the locality during the next several years, visiting it and watching progress. But in 1966 he was moved to Edinburgh to join the team of Forestry Commission acquisitions officers. The wide-open moorland of the Whitelee Plateau stayed in his memory and he decided it might be possible to expand Whitelee Forest.

Meanwhile, farmers adjoining High Hapton, where little green trees were sprouting from the ground, had been watching the goings-on with interest. And over the next two decades, Bill Sutherland and his colleagues bought over 20 more units of land for Whitelee Forest from willing farmers. Both sides benefited from land sales. Farmers could sell everything and retire, buy a

better farm elsewhere, or sell just their worst land and buy better ground nearby to add to their existing holding. The Forestry Commission could reach its planting targets for the nation's future forests and benefit local employment. Whitelee Forest increased from that first small planting to a final 15 000 acres.

Despite the exceptionally poor ground and exposure, the Forestry Commission felt that Whitelee Plateau was suitable for a big 'tree-farm' because there seemed few constraints like a beautiful landscape used by tourists, or known archaeological or ecological features. The conifers would be visible only at the Plateau margin. Sitka spruce could be grown on a huge scale without many other tree species needed for pockets of better ground.

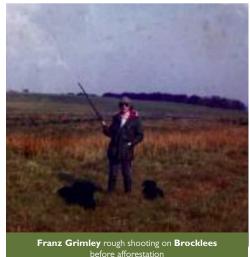
"...the best forests are actually on slopes, in mineral soils. By choice, we would not have wished to go into the peaty areas. The mineral soils give you far more flexibility in practising the type of forestry that professional foresters want to practice, thinning the plantations, diversity of species, wildlife, and so on, and the forests that I enjoyed managing best were those...I also had vast areas of bog, and that was what I called earlier basically farming. Tree farming. We had to do it, because...the primary objective for most of my career was industrial development, providing a base for industrial development." – Gordon Cowie, retired Forestry Commission senior executive

At the peak of planting, Whitelee Forest provided twelve outdoor jobs for men, as well as a secretary in the forest office at Waterside. Apart from two tractor drivers, whose work took them to whichever forest in Scotland needed ploughing, the outdoor workers formed a forest squad. The squad planted trees, tended them afterwards and did many other jobs such as making fire beaters, fire watch, digging and clearing drains by hand. Some workers loved the outdoor work, developed a keen emotional relationship with the forest, and took pride in planting a new forest for the future.

Contractors were sometimes employed to help with tree-planting and fencing. A resident forester and trainee forester worked from the forest office, but they usually stayed only a few years because the Forestry Commission moved managerial staff from forest to forest to gain experience.

The first actions of afforestation were to fence the moorland, remove treeeating pests like hares, and deep plough the peat. Ploughing produced a corrugated landscape which could be walked over only with great difficulty, while forest fences also reduced access by locals.

Competitive tender to the Forestry Commission Glasgow office, rather than friendly discussion with farmers over a cup of tea in the kitchen, now decided who could shoot game like grouse, or control pests like foxes and rabbits on this government land. Local people were thus gradually excluded from both their usual haunts and their usual activities on the open moorland.



### Preparing for a New Forest: Trappers and Tractor Drivers

'I've got to say...the ploughing furrows were enormous, stretching for miles, or it seemed like it at that stage anyway, so...it was quite awe-inspiring in the amount of ploughing that was going on and what they were doing...[From a] technical point of view, it was very good. The techniques they were adopting and the people that were doing it were first class.' – Richard Toleman, retired Forestry Commission forester, remembering the ploughed Whitelee landscape

The Forestry Commission leased Whiteleehill steading to a tenant to look after the cattle and sheep. They were removed gradually over five years as each block became ready for tree-planting. On Carrot Farm, John Telfer, his son Kenny, the shepherd and dogs took the Luing cattle and blackface sheep off the moorland some at a time, persuaded them into a lorry and drove them to their new farm a few miles away. This took several days. When whole farms were sold, the collies also had to go and they usually found homes with relatives or friends on other farms.

You cannot mix sheep and cattle with trees, because these animals eat the trees. So, if the fencing between forest and adjoining moorland was poor or non-existent, a new forest fence was erected.

'There wis yin fence Ah pit up at Ellrig that run rig back tae the Carrot an away oot the tap o these ridges are buchts, an Ah've sat in they buchts eatin ma piece oan a snawy January day, fencin. Frichtenin, thon...Well ye can hardly see onything in yer haun for snaw an it's a long walk back tae whaur yer vehicle wis, by that time ye ken yer maybe two or three kilometres oot. A long walk' — lain Hamilton, fencing contractor remembering winter work fencing the moors for forestry

On the spongy and quaking bog of Moss Mulloch, squad worker Brian Speirs put up a forest fence. However, wind and snow frequently pushed it into the bog, so he felt he was forever renewing it.



"...the ploughing furrows were enormous, stretching for miles..." – Richard Toleman

After the farm animals had been removed and fences put round the newly acquired land, it was the turn of the trapper to come and remove tree pests like rabbits and hares – which also nibble young trees. A newly planted forest of tiny trees provides rabbits and hares with ready meals – nibbled, misshapen trees are useless as a commercial crop. The timber industry wants straight trunks with few branches.

Stan Share, a first-class trapper, was sent to the new Whitelee Forest from 1961 to 1963. He remembers it as a bleak, cold, rain-sodden area, with snow in May 1962. There were



numerous rabbits and hares on the first block, High Hapton, and Stan was given a young helper, Donald Crawford. They worked at dawn and dusk to trap these animals. But he remembered them as happy days.

### '...we wore wellies and leggings ourself for protection from adverse weather and snakes' – Stan Share

'A huge area fenced off first and I had to concentrate on all vermin pests left inside before planting operations etc. We could not use working dogs because of the blasted adders especially on sunny days and we wore wellies and leggings ourself for protection from adverse weather and snakes (about six species). We were allowed to keep what we caught and shot as an incentative so we ran some of the kill to Mac Fisheries shops in Gourock, Paisley, in my old van and got one shilling for hares (not gutted) for soup makers and 2/6d per pair rabbits. This was big money to us being on basic pay about £21 in those days. Happy poor days' – Stan Share, retired Forestry Commission trapper, remembering the early Whitelee Forest

Before any trees could be planted, the moorland had to be prepared by draining and ploughing. The seedlings would 'check' if they were planted directly into existing vegetation rather than a ploughed ridge.

'…If you plant them on a ploughed furrow, then the tree gets, it's free-rooting, it's got no competition…And it would grow six inches in the first year, a foot in the second year, and then go on at eighteen inches a year. And then it very quickly becomes established' — Bill Sutherland, retired Forestry Commission district officer

Tractors and ploughs which could cope with the difficult ground conditions were needed. New ploughs developed by Scottish firms like Clarks of Parkgate were brought in. And it was very important that tractor wheels did not break the surface mat of vegetation, else the vehicle would grind down into the soggy peat and drag the plough with it. To avoid this, tractors and diggers with caterpillar tracks, wide wheels or wheels encased in metal-mesh cages were used.

Ploughing forester Roy Harvey, decided on equipment (diggers, tractors and ploughs) and the techniques of ploughing and draining. He described one of the machines:

'Ploughs turning a furrow on one or both sides (single-furrow or double-furrow) were used according to conditions. Ploughing produced parallel ribbons of 'ridge-and-furrow' for tree-planting or wide and deep canals for draining. Ridge and furrow went more or less up and down a hill, but was related to the topography. Drains were dug at right angles from them, leading into natural waterways. A balloon-tyred Ford 'Backacter' was another machine used to cut drains, often working half-submerged in water. Whether drains were produced by ploughing or digging, they became half-full of sediment within a few days! So men with hand tools had to constantly clear them.' — Roy Harvey, retired Forestry Commission ploughing forester



'Whether drains were produced by ploughing or digging, they became half-full of sediment within a few days!' – Roy Harvey

To start with, tractor drivers worked singly, but because of the dangerous nature of the ground needed a 'banksman' walking along behind, to help in case of accident. However, Roy Harvey felt that on difficult ground two tractors should work in tandem, the plough attached to the second tractor.

Robbie Allan was often the driver of the front tractor, Iain Kennedy of the second, with the plough. The two tractors were connected by a rope winch. With Iain's tractor at a standstill, Robbie drove his tractor as far forward as the rope would allow, then stopped. He then winched it in, so that the weight of two tractors pulled the plough through the difficult ground.

'Whit they call the 'humpy plough'. Now, it wis a drainin plough, an honest t' god, you could walk underneath it wis so big, an it took two tractors to work it, ye know...' – Robbie Allan, describing the plough

But a plough, maybe the tractor too, would sometimes get stuck in the peat, occasionally sinking completely. Tractor drivers always managed to jump out in time! It was a long and dirty job to rescue the machinery, involving mechanical engineers, rescue tractors, pumps to clear out water, piping and cleaning equipment. But sinkings got less frequent when foresters decided that the very soft places probably would not grow trees, and need not be ploughed.

The tractor drivers like Robbie Allan and Iain Kennedy were a race of men apart, out for lonely hours on dangerous ground, turning the moorland into miles of dark, peaty ribbons. They stayed on local farms or in their own caravans, going home at weekends. Their work took them to many Scottish forests. They worked hard, enjoyed it and were very proud of their skills and the quality of their work.

Local people watched the goings-on with interest. Farmers Thomas and Janet Grant at Brocklees were interested to see how the Forestry Commission would cope with the peat (which they were used to of course!). Young Tom Semple and his sister Susan at Meikle Hareshaw noticed when tractors appeared on Calder Moss, their horizon. They fetched the binoculars (which every farm had on the kitchen window-sill!) to watch. By and by a tractor driver came to ask their parents if he could keep his caravan in the farm yard.

By the early 1960s, Whitelee Forest was well under way.





'honest t' god, you could walk underneath it wis so big' – Robbie Allan

## Planting 10 Million Trees: Squad and Contractors



'It was reasonably hard work; we started at half past seven in the morning, til half past four in the afternoon. But wi all the rest o the industries includin factories they went roughly the same hours so it wasnae too bad. Except in the winter. A lot o the time [a small laugh, remembering]' — Brian Speirs, retired Forestry Commission squad worker, remembering the working conditions

By early March 1962, Dan Blair had ploughed and drained 300 acres of what had been the moorland of High Hapton. Local lads Rex Boland and Brian Speirs were the first members of the forest squad. They started work in that cold of winter 1962, no outdoor clothing provided. They spent their days clearing muck which constantly accumulated in the furrows and drains, using huge tools called rutter, bottoming shovel and howk.

It was time to start tree-planting! There was no ceremony. George Caird, the first resident forester, planted the first little tree, a Sitka spruce, below the steading of Whiteleehill. Brian Speirs planted the second tree, pleased to be included at the start of the Forest. Then he and Rex Boland got going on the 10 million to be planted in the next three decades.

#### "...we started at half past seven in the morning, til half past four in the afternoon."

#### – Brian Speirs

As Whitelee Forest grew, the numbers in the squad increased. Members of the same family often worked in the squad – for instance Lawrence Kennedy father and son, and Ian Peter, with brothers Grant, Robert and father Alf. When nearly 17, Alexander Fenton joined the squad, not wanting to work in the local textile factories. He and his mother were very pleased with his weekly wage of about £48 – the exact amount depended on how hard he worked, as the squad was on 'piece-rates'.

In the early years everyone had to provide their own outdoor gear. Alec Fenton borrowed his mother's kitchen gloves to stop the peat getting right up under his finger-nails; others used gardening gloves. Their oilskin coats and hats were of little use for work needing constant bending up and down, or using a spade. So the squad often got wet and even had to sit on the wet peat for their lunchtime 'piece' in the days before a shelter was provided.

Brian, Alec and George Young (one of the contractors' men) described how there might be a long walk from the nearest road to the day's planting site. They each carried two heavy bags of tree seedlings (called 'sprigs'), negotiating bogs and burns on the way. Where possible, they walked along inside the ploughed furrows. In later years bags of tree seedlings were taken to the planting site on a local farmer's tractor or a small tracked vehicle called a 'Muskeg'.

Having arrived at the planting site, the squad would drop their bags onto the ground. Then they drew out enough seedlings to get to the end of a planting ridge – and back along another to their bags. After all, if you got half-way, and ran out of seedlings, you had to walk all the way back to the start of the line, to get more!

Some men used a planting spade to make a notch in the ground for a sprig. You put it into the ground in front of you and then put your foot down hard on it to make a deep 'V' slit in the ground. You eased the spade forward, put the sprig





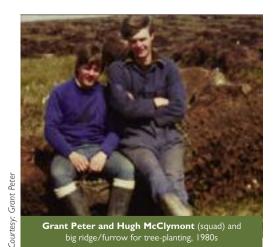


into the slit behind it with its roots down: then you took out the spade and trampled the turf down hard to hold the seedling securely in the ground and keep the turf in place. Planting tree seedlings was actually not as difficult as carrying the two heavy bags to the planting site.

'You planted thousands of tree seedlings a day.

All day.' - George Young, retired tree-planting contractor and postman

Tree seedlings were planted on the top or sides of ridges. Ploughing had overturned the original turf and the peat, originally underneath, was now upturned in a ridge, and ready for little trees to be planted.





You walked down the line of the planting ridge with your spade and sprigs, planting one every six feet. When you got to the end of the line, you climbed down and across the furrow, then on to the top of the next parallel ridge. You went back down that planting ridge, parallel to the previous one you'd just planted. Hopefully you arrived near your planting bag, to pull out another bundle of sprigs. That went on all day for eight hours, except when it was time for your lunchtime piece.

A worker could plant an average of 1500 trees a day, depending on the weather and the peat. Thus, each day in the planting season (winter and early spring) a squad worker dug a notch or plug in the peat 1500 times, pulled out a seedling from the planting bag 1500 times, bent down to plant it and stretched up again 1500 times, walking nearly two miles between first and last sprig.

National targets advised 1000 little trees per acre of new forest ground; however, on this difficult land, the maximum possible was only 700.

Men chose their own tree-planting tool. Brian Speirs used a border spade, Alec Fenton a planting spade sharpened with a rasp, Jim Young a huge semi-circular spade which dug a plug rather than a notch in the ground.

Lorry-loads of sprigs a time were brought from Forestry Commission nurseries to Whitelee Forest. Sitka spruce was the main tree species. This North American conifer is suited to the site conditions of Whitelee. It would produce a commercial crop, the object of the Forest. The wood of Sitka spruce is good enough for structural timber and has very long fibres which make good quality paper too. Small amounts of lodgepole pine were planted on very poor areas, with Japanese larch for some variety and amenity. In later years, the Forestry Commission decided to plant broadleaves like ash, birch, oak, rowan and southern beech along watercourses and at the forest edge.

The young trees were fertilised with rock phosphate to encourage their growth in the poor soil. To start with, the squad used big pails and hand-scoops, walking along the rows putting a circle of the granular material around the base of each tree. Nitrogen fertiliser was needed in some areas. In later years, a helicopter and pilot were hired to do the job of applying fertiliser from the air.

As the little trees grew, so did the grass around them. The squad had the task of 'weeding' the grass to keep the competition down. Men cut the grass using





a short-handled tool with a curved blade called a 'grass heuk' which they kept very sharp. Heather, which had become rampant for lack of grazing by sheep and cattle, was sprayed to prevent it outgrowing young trees. The squad could do this only on the few available windless days, else the spray would blow onto non-target areas. At intervals the squad went through the young plantations 'beating-up', that is, replanting any gaps where a tree had died.

Fences would often need repair, to stop farm animals getting into the Forest, and drains frequently needed clearing out! Spring weekends needed constant fire watch, sitting with binoculars in a vehicle at high points, and keeping in touch with the forester or district officer by radio. Fire was a potential disaster for a growing forest.

Squad work could thus be a seven-day-a-week job. Weather did not stop work unless there was constant rain or snow.

'The worst wes the mist comin down...a really wet day wes worst. Because ye would go out in the mornin an work, an in that time we hud shelters out on the hill where ye could go in [on] yer lunch break. But ye would only go in there an have yer lunch break. The worst thing ever wes tae put the wet waterproofs back on tae head back out, that wes the worst feelin ever, definitely. But as I said, apairt from a really wet day, that wes it. I mean a mild still day ye used tae get a lot o midges. There were a lot o midges...an they were bad, they really were bad. Eventually The Forestry supplied ye wi midge cream which made a big difference. But prior to that, that wes it, even the snow or the frost. It...wes juist one o thae things ye'd tae gae oot an work in an that wes it' — Brian Speirs, describing outdoor work in Whitelee Forest

The ex-inbye of five farms sold to the Forestry Commission were converted into 'Forest Workers' Holdings'. This land was sufficiently good for agriculture, so was not allowed to be planted with trees. Five of the squad took up tenancies of these smallholdings. Men worked their smallholdings before and after work, at weekends and in holidays. Wives and families were vital in running them, so had a vicarious but important part in the success of Whitelee Forest.

The squad was a group of skilled, practical men, working day-in and day-out – continuous sheer hard work that today we can scarcely imagine. These men worked in difficult conditions and for low pay. Without them there would be no Whitelee Forest.



'The worst wes the mist comin down...a really wet day wes worst.' – Brian Speirs

#### The Work of Trappers, Rangers and Shooting Tenants

'Oh ay, ah loved it, ah loved it, it wis ma dream job. As for the rifle. Well, ye went to a range wi the rifle ti start wi, but there's a big difference in shootin a range an shootin a deer because ye never do the same shot twice, so every day wis a school day, every day ye learned sumthin different.' lim Newall, remembering his training as a wildlife ranger

Farmers on the Whitelee Plateau held the shooting rights for their land, but sometimes they leased out these rights if they wanted additional income. Several landowners with big estates employed gamekeepers to raise pheasants, control pests and run regular shoots for the landowner and his friends in the open season.

Most farmers had no keeper and just invited a few friends for an occasional informal shoot.

Farm sons or other lads might raise some pheasants in their spare time. Red and black grouse, and abundant mountain hares, were the main quarry on the heather moorlands. Pheasants, partridges, brown hares and rabbits were the more usual quarry on the enclosed farmland. But many a grouse was shot as it flew from the moors onto a ripening or harvested oat field. Shooting provided both sport and food. Foxes, stoats and feral mink were controlled because they ate grouse and pheasant eggs, and weak lambs.

The Forestry Commission owned the shooting rights on the land it bought after 1961. Before trees were planted, its trained trappers controlled tree pests like



"...every day wis a school day, every day ye learned sumthin different.' – Jim Newall



hares and rabbits. Trappers (later known as wildlife rangers) worked at times of day or night when few people are about. They needed to know Britain's strict and humane laws on pest control, as well as be skilled in the different methods which could be used.

As the new plantations grew, foxes increased in numbers. Nearby farmers became anxious, because they felt the forest was harbouring a farm pest which killed lambs each spring. Rangers Robin Heaney and Bob Logan were sent from south Ayrshire and the Isle of Arran to control foxes, as a gesture of neighbourliness to farmers. But the Forestry Commission did not really like killing foxes, which are not forest pests, and eventually stopped the practice. Control was carried out on tree pests only early on, and then, only just before planting. However, before long, another tree-eating animal came along.

Deer of any kind were rarely seen on the open Whitelee moorlands and in the young Forest. But, by the 1980s, roe deer had migrated into the expanding woodland and increased to several hundreds. (Red deer were seen on only one occasion, at the east end of the Plateau.)



Jim Newall, Forestry Commission ranger with roe sack

and dog in Whitelee

The young Jim Newall had worked in Kyle Forest squad when, at the age of 20, he had the opportunity to become a trainee ranger. Head ranger Robin Heaney took him to Whitelee Forest in 1985 for his first day of training. Jim eventually specialised in deer control and, along with Robin Heaney and Bob Logan, included Whitelee Forest in his beat. Jim also enjoyed escorting recreational stalkers who paid the Forestry Commission to shoot a roe buck with a good set of antlers.

Roe deer may live all their lives in the suitable habitat of modern forests, and are viewed as both pest and resource. They reduce the quality and value of commercial timber by browsing and damaging young trees, although they use older plantations for resting. So deer control was carried out in Whitelee Forest to keep deer to an acceptable number, within the Forest's 'carryingcapacity'. The venison then provided a profitable resource.

As Whitelee Forest extended over more and more moorland, deer continued to increase. Alexander Fenton was given the job of full-time wildlife ranger from 1997 to 1999. Like Jim Newall, he had progressed from the squad to training in what was now called 'wildlife management' (it was all-round management of wildlife populations not just 'control' or 'conservation').

'I was out the door at half-past three this morning, getting into an area of ground for a shot, when the deer aren't moving, when I know they're going to be moving. And, at this time of year, in the summer, you'd go back out again at night, and you'd be out till midnight, then back again. And you just do that, it was just perpetual. "...most of the shooting was, walked-up stalking, actually going in and locating deer, and, shooting them. This time of year it would be roebucks and does. The roe does, would have kids at foot, so, I wouldn't shoot them because they've got dependent young. So it would just be the males... 'Right. Well, OK, I mean you bleed the animal, you gralloch it, gralloch's removing the intestines and the stomach. And, from there, you keep that beast intact, but it in your roe sack, and carry...a roe sack's like a rucksack, specifically made for carrying roe deer. And you would move off the hill, or move out the forest to your vehicle, and then that beast was taken straight to the game dealer...Because Whitelee, although it's a 6000-hectare block of forest, it didn't have a larder, a deer larder. In the



present place I'm in now, we have a quality assured deer larder, it cost us about  $\pounds 150~000$  to put in...

'…a lot of the times that I was in the Forest, I would be out before people came in. More up the East Kilbride end. Up near the Eaglesham end, there tended to be more people out early in the morning walking their dogs and stuff like that. So I would maybe meet, meet some of them. But I got kind of friendly with these people, and they knew what I was about, and they were kind of country people anyway, so they weren't in the least bit worried about what I was doing'—Alexander Fenton, Forestry Commission wildlife ranger, describing deer management

In early years, the Forestry Commission let the game shooting and vermin control in Whitelee Forest to one syndicate for an annual fee. The lease included young plantations and as-yet unplanted areas. John Golder and Alan Colquhoun formed the first syndicate; local countryman Hugh Hendry acted as their part-time gamekeeper. In 1981, when the forest had increased dramatically in size, shooting was divided into several lets. However, the lessees were now only allowed deer stalking and vermin control. There were few game like hares, grouse, woodcock and snipe remaining, as their open habitats had disappeared under spruce plantations.

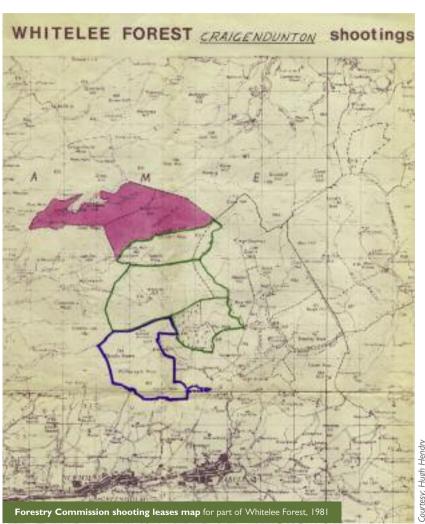
The Forestry Commission became aware of the increasing feeling in Britain against killing wildlife, and eventually lessees were allowed to shoot only deer.

Alec Fenton moved on. Iim Newall became the trainer and mentor of Whitelee Forest's deer-control tenants, who were now known as Deer Control Lease Members. Insurance and training to a basic level became obligatory, and they were subject to spot checks on use of rifle, humane dispatching of an injured beast and knowledge of the law. A jawbone of every shot deer

was collected, and with the advent of GPS the exact location of its death was noted. Tenants were obliged to attempt to meet the Forestry Commission's target cull for both sexes each year.

Andrew Templeton and Robin Chambers were two local men who became long-term Deer Control Lease Members. In the new millennium, Jim Newall joined a group of wildlife rangers who were concentrating on wildlife surveys in Whitelee Forest, putting up bird and bat boxes and conserving what was left of the increasingly rare black grouse. The current private syndicates who control deer in Whitelee Forest are still rigorously monitored by a senior ranger, while occasional in-house deer culling is carried out by rangers like Andy McMahon from South Ayrshire.

By letting game shooting, by taking out recreational stalkers and by letting deer stalking to trained lessees, the Forestry Commission made some financial gain in the years before any trees were ready to harvest. This was important, considering that taxpayers paid for the very long-term investment called Whitelee Forest.



#### Foresters and their Work

'It is a very difficult area for a forest. The particular difficulties are the peat "soil", the high water-table, the high rainfall and the high winds. Plants are damaged easily, the soil is unstable, and windblow occurs' — Pat Armstrong, retired Forestry Commission resident head forester 1975—1987

George Caird, the first resident forester at Whitelee Forest, was responsible to head forester Bert Mitchell at Leapmoor Forest in north Ayrshire. At the start, Whitelee Forest had no forestry house or office, so George lodged at Laigh Hapton, an adjoining farm. George had neither trainee forester nor secretary and did all the paperwork in his digs.



oto: Ruth Tittensor

As time progressed, many head foresters and foresters followed in his footsteps as each was moved on to gain experience. The other head foresters and foresters we know of were Tony Polwarth, Duncan McCallum, Alex Smellie, John Clark, Fred Cowie, David Gregory, Pat Armstrong, Bill Meadows, Ken Whitaker, Kerr Robertson and Andy Walker. Head foresters were responsible to district officers (who had responsibility for many forests in one district). They, in turn, were responsible to a Conservator based in Glasgow initially. Scotland had four Conservancies at that time.

District officers responsible for Whitelee Forest included Bill Sutherland, Ian McIver, Brian Roebuck, Alister Jones, Jim Hamilton, Tony Burns, Christina Tracey and Michael Wall.

As afforestation progressed and the employee count increased, a forester's house was built in the hamlet of Waterside to the west of Whitelee Forest. Secretaries Doreen Flett and Edith Gillies were two of the few women who played a part in Whitelee Forest, working in the wooden shed which was the forest office in the forester's garden.

In 1971, Fred Cowie was sent to Whitelee as resident head forester because he was experienced in afforesting soft, deep peat elsewhere in Scotland. The resident forester was responsible for all that happened on and in the Forest. He produced annual work-plans, hired workers, obtained tools, ordered seedlings from the nursery, decided where fire-breaks would go and saw to

the budget. He became familiar with his forest, keeping an eye open for 'windblow' (when trees in wet or shallow soils blow over), tree disease, poachers and quality of work. Fred got to know his squad, adjoining farmers and local engineering firms where he could get machinery mended. He understood and respected the skills of squad and tractor drivers and enjoyed the freedom to use his initiative which came with the job of resident head forester.

Pat Armstrong took over from Fred Cowie in 1975 after a career in six Scottish forests. He, too, was very aware of the difficult environmental conditions in which the Whitelee Plateau was being afforested. He tried to improve the squad's working conditions by updating their tarpaulin shelter to a 5 ft x 15 ft steel-framed, moveable tent with a plastic floor. In it they ate their lunchtime piece and sheltered during heavy rain. By now, the squad was supplied with wellies, trousers, jackets and gloves. Bill Meadows was the trainee forester who assisted Pat Armstrong from 1977 to 1984.



Courtesy: Norman Davidson

'Well most of my time at Whitelee was very much based on the practical outdoor side of the forest

environment, planning the actual work on the ground as far as areas that were to be established, planning the cultivation, the ploughing, the draining, and subsequently the planting of the areas.

'Supervising the squads on the ground, both direct employees and others who came in from time to time with the contract labour or others like prisoners from Dungavel Prison...measuring for payment terms, because it was all done on a piecework payment as far as the teams were concerned. So it would be measuring out areas as far as the ploughing operation went...The drainage was a length, so, maybe measuring, walking, and pacing the distance of drains, and marking those on a map, again recording them for future management needs, the actual areas that were planted, areas that were left unplanted, the areas where we had rides going through, access routes effectively for the tractors and other needs. Making sure they were accurately marked on the actual map. So it's all been recorded' — Bill Meadows, Forestry Commission one-time forester in Whitelee Forest

Roy Harvey and Ian Reid were specialist ploughing foresters who visited Whitelee to decide on the machinery and techniques for ploughing and draining. Bill Mason was a forestry instructor who came occasionally to train the squad in techniques such as spraying herbicides and using the semi-circular spade. Richard Toleman, a forest surveyor, tramped the Whitelee Plateau in 1972 to map the underlying soils as a guide for future planting.

Running Whitelee Forest involved many operations in which choice and planting of trees was only a part. The Forestry Commission tried to ensure a constant supply of work for the squad all year, every year, in the long-term. In very busy times (the mid-1970s to 1980s), when there was still bare ground waiting, 600 acres of land were planted annually.

Head forester Pat Armstrong retired in 1987 when much of Whitelee Forest had been planted. Kerr Robertson, head forester on the Isle of Arran, took responsibility for overseeing the small remaining squad and its general maintenance work.

The new forest was now nearly 15 000 acres, of which about 400 acres of rocky knowes, bogs and glades were left unplanted. After planting, weeding, beating-up and fertilising, the plantations were left to grow.

Normally, poorer specimens in a plantation are felled during growth, to allow the remaining trees to grow better, and to give the Forestry Commission a small income before final harvesting. However, there was to be no intermediate thinning in Whitelee Forest. The Forestry Commission had predicted that in the exposed, wet conditions of Whitelee Forest, thinning would cause many





remaining trees to be 'windblown' due to wind funnelling through the gaps and destabilising trees. This would severely reduce the quality and quantity of the final crop of 40-year-old timber trees.

Local people like David Findlay watched the forest growing and found the rows of tiny trees quite attractive, curving up valleys, with different sizes in one view. But as they became 30-foot trees, he saw it as a bland wall of same-green forest. The flora and fauna were not worried about the look of the forest however. Functioning woodland ecosystems had started developing in Whitelee Forest.

#### Changing Ecology

'The whole character o the country changed. At one time when it wis aw heather ye could lie an ye got, like a summers day wi the breezes, an ye hud curlews. Ye could sit an...Ye could see for miles aw roun aboot ye. They planted aw the forest an ye could see thirty feet. Once the trees got up, a mean, they were like, it wis a desert. The only place ye seen any life at aw wis in the big rifts between the forests. The roads...' – Jim Currie, countryman, describing the conversion of moorland to forest

Plant and animal populations respond to natural ecological factors such as weather and soil development. However, human influences such as farming and forestry also have ecological effects. Outside influences cause farming and forestry practices to continually adjust. In the 20th century, farming on the Whitelee Plateau adjusted to influences such as two wars and the run-down of landlords' finances. In these ways, political events influence plant and animal populations.

For instance, Jim Currie noticed how, in the 1950s, farmers on the Plateau increased their sheep and cattle numbers, which produced an obvious change to the moorland. The heavier grazing pressure caused heather to deteriorate, recede and be replaced by grasses. Jim and others observed that grouse and blackcock decreased simultaneously. Hugh Hendry remembered when farmers at the



'They planted aw the forest an ye could see thirty feet.' – Jim Currie

plateau-edge reseeded their inbye parks, grew less variety of crops and started using machinery for cutting hay or silage. The more uniform habitats no longer suited lapwings, curlews, skylarks and hares, their decline was affirmed by many people.

After 1961, afforestation produced even bigger, quicker changes. There were physical changes to the land surface, hydrology, and peat or mineral soil caused by deep ploughing and draining. Ecological changes were also rapid after pest control and ploughing. The result of ploughing, fencing and tree-planting was immediately visible as landscape change to the Whitelee Plateau.

Black-headed gulls, which had nested in their thousands on the open moorland, disappeared soon after their nesting places were ploughed up.

"...after the forest came, — to begin with — the gulls spread out [from their original few nesting hags] over the Whitelee Forest area to form lots of little colonies, such as at Flow Moss, where it is marshy...then the gulls disappeared with the Forestry from these hills.' - Hugh Hendry, countryman, remembering a sudden ecological change

On the other hand, mallard numbers increased on each ploughed area because the furrows and drains frequently filled with water. Black grouse increased when

young heather started growing luxuriantly out of the side of the ploughed ridges, providing a good food source. However, as the years went by and growing plantations eradicated moorland, black and red grouse almost disappeared and mallard lived only on small lochs in still-open areas.



One foot in Ayrshire (left) and one foot in Lanarkshire (right) — also march fence between High Overmuir (left) and High Allerstocks (right) with hummocks

Brian Speirs knew the Whitelee Plateau before the forest and as a squad member for 33 years afterwards. He observed that although some ecological changes happened immediately after ploughing and tree-planting, it took about ten years for all the moorland birds, like lapwing and grouse, to vanish. lim Leitch, who farmed High Hapton in the 1950s, noted that although his favourite skylark and lapwing disappeared, other birds like wood pigeon, chaffinch, siskin and blue, coal and great tits were newcomers to the area.

Today, Whitelee Forest has had half a century with neither sheep nor cattle to eat the vegetation. Plants, especially on the unplanted boggy peat bogs and along grassy corridors ('rifts', 'rides' or 'brakes'), have grown unchecked. Brakes are crammed with soft, giant moss hummocks, and leggy heather clumps on drier outcrops. In watery hollows and along burns, luxuriant tufted-hair-grass and rushes have grown into massive, shoulder-high thickets.

People saw a change in character of the burns flowing off Whitelee Plateau. Water levels rose and fell much quicker after rain; overhanging vegetation reduced both their width and the light reaching the water. When the conifer plantations matured, the drains below were cleared less frequently - and

Ruth Tittensor

Photo: |

eventually not at all. Bog-mosses and rushes gradually filled the drains and small burns, which became marshy lines, snaking through the Forest. Fish were said to be much less common, apart from eels, and lads found it difficult to reach or use their fishing banks amongst the tightly packed spruce trees.

'...you could spend a couple of weeks just looking at one dyke and still come up with new species...' – John Douglass





Despite the difficulties, naturalist Bryan Simpson and lichenologist John Douglass made forays into Whitelee Forest. They studied mosses, liverworts and lichens within both plantations and open areas. They found that pre-existing habitats like the 1000 boulder 'Boulder Fields', the stone dykes and sheep fanks, the burns and gulleys were the richest habitats for lichens.

'...to just study a stone dyke like that one near the quarry there, up at the, the Calder Water, you know, you could spend a couple of weeks just looking at one dyke and still come up with new species...' – John Douglass, lichenologist, describing habitats on a stone dyke

New lichen species had become established in the more sheltered conditions of the forest and grew more luxuriantly in the absence of farm stock. The verge of the internal forest road, the quarry from which roadstone had been excavated, planted rowan trees, and Sitka spruce themselves, provided new habitats on which lichens could grow.

Bryan and John delighted in the colours and textures of the now-rampant vegetation of mosses, liverworts, lichens and ferns along the rides. They have a positive view of the ecology of this modern forest.

"...the forest's not just a mass of trees, like people tend to think. It's much more than that. And also the bird stock is very interesting. ... And you get the whole swatch of the usual birds...but you also get the occasional visitors, interesting visitors like crossbills, we've seen, I've seen them once only. Crossbills, and redpolls, and small flocks of bullfinches. So, all in all, the ecology is really quite interesting. And, although we have demeaned modern forests in the past, I think there's less inclination nowadays, now there's more known about it.' - Bryan Simpson, field naturalist

The two specialists were adamant that the peat bogs which are too soggy ever to be ploughed and tree-planted, are of the utmost importance as fragments of very ancient habitats, with many common and rare lichens.



"...but, I think in general, you know, the forestry, putting forests in large areas of prime blanket bog is not really a good idea, because of the habitat, it obviously takes thousands of years to get going and these trees will eventually dry the habitat out and degrade it...' – John Douglass, lichenologist

Wildlife ranger Alexander Fenton spent from 1997 to 1999 on deer control in Whitelee Forest. By then, many species of wildlife had migrated into the Forest. When out at dawn and dusk, he observed, for instance, rabbits, brown hares, badgers, otters, foxes, merlin, sparrowhawk, tawny owls, hen harriers, an osprey flying over, buzzards. And shooting tenant Robin Chambers saw weasels, stoat, feral mink, peregrine falcons, cuckoos, woodcock, lots of frogs and toads, and many butterflies and bees in the open areas.

Not all of the species seen by people were new to the Whitelee area, but people's observations show that afforestation neither destroyed all previous fauna and flora, nor was it a wildlife desert for incoming species.

Wild species living on the Whitelee Plateau before the forest were important in themselves and to people's lives. It is not surprising that the observed declines of animals such as grouse, blackcock, lapwings, snow buntings and skylarks were a source of dissatisfaction to people of the area. The newly arriving species like roe deer and siskins, the increase in raptors and the voluptuous moss hummocks do not seem to give the same satisfaction or meaning.

### Local People and the New Whitelee Forest

'Well away at the tap end at Low Overmuir there ye could pit a haund in Renfrewshire a fit in Lanarkshire and anither fit in Ayrshire. There's no many place ye can dae that, three counties in wan. There's some stunnin views away fae the top end, ye cannae dae these things noo, I mean it's a physical impossibility. Ah think the last time Ah wis up Low Overmuir road end would be twa vear back an when Ah came back doon Ah had a tear in ma ee because Ah used tae walk they hills regularly but ye cannae dae that noo. Ah could take ye tae certain bits but Ah think even Ah wid get loast' - lain Hamilton, fencing contractor, remembering where the three counties meet



Farmers who sold land for Whitelee Forest welcomed the finances. They could then improve their current business, perhaps move to a better farm elsewhere, or retire from the hard life of farming on the Whitelee Plateau. For those remaining next to the new forest afforestation did cause some problems. For instance, deep forestry ploughing caused flooding on several farms. This was put right by adjusting offending forest drains. But as the trees grew they provided welcome shelter for farm stock and farmers. Jim Kennedy of East Hookhead, whose farm previously had no shelter within four miles, appreciated the growing tree-cover when out working.

Farmer Tom Semple could no longer enjoy the distant peaks of the Isle of Arran, nor could he see his neighbours out working the sheep, nor have a chat with them over the march fence. But the views were of little concern to John and Edith Telfer of Carrot Farm. They had found working with 4000 acres of soggy peatland, only 25 acres of inbye and the mist-covered landscape, very difficult. They were delighted to see such poor agricultural land covered with trees and to move to a better farm.



For Norman Adam, worker on East Heads in the 1960s, a thickening green line on the horizon was all he saw of Whitelee Forest. The milking herd of Ayrshires was kept on the lower, enclosed land close to the steading. With an outdoor working life he had little reason to wander up onto the moors and investigate: going shopping in Newmilns on his day off was more important to his life.

Two tractor drivers from Dumfries lodged weekly at Whatriggs. This was good for farm finances and not dependent on the weather! Other forest workers, including Robbie Allan, stayed in their own caravans in farmyards, depending where they happened to be ploughing. As a result, friendships which lasted a lifetime developed.

Residents of nearby towns and villages found the increasingly difficult access a big disappointment. The Forestry Commission had been right that Whitelee Forest was hardly visible towards the Plateau, except for the people of Eaglesham. In this sense the 'blanket' of 15 000 acres of dark-green conifers was of little concern to wider landscape appreciation. However, the fantastic views from the Plateau could no longer be enjoyed. Apart from wet bogs and rocky knowes like Corse Hill and Laird's Seat, the high Plateau was tree-covered. The views now consisted of narrow corridors lined by high green walls with sky at either end of the tunnel! In fact, you were actually very lucky if you could get as far as walking down a green corridor. There was no road, surfaced or unsurfaced, through Whitelee Forest until the late 1980s. Even fit and determined people could not get into or through the thick, prickly plantations.

Countrymen David Findlay, Jim Currie and Hugh Hendry had known and used the Whitelee Plateau since they were lads in the 1940s and 1950s. They noted the decline of moorland game and wildfowl following ploughing and tree-planting. They found access into the new plantations and through deep ploughed furrows and prickly little spruce almost impossible. Later, access along tall green corridors became increasingly burdensome as the mosses grew into huge hummocks. After about 1980, they looked elsewhere for their outdoor recreation - the moorland they had used and appreciated all their young lives had gone.



#### "...the coming of the Forestry Commission was a lifeline to many farmers..." -Robin Chambers

Other local residents, like owners of greyhound dogs, people who collected gulls' eggs for baking, wild plums for jam or who liked to hear song birds, stopped visiting the Plateau. Scouts and Boys' Brigade lads could no longer camp (too prickly!), and organisers of sheep-dog trials found new sites.

Although most of the forest squad were local men, several families, including the Kennedy and Peter families, came from southern Scotland to work in Whitelee Forest, tempted by the tenancy of a Forest Workers' Holding. Robert Struthers and Jim Young were the only members of local farm families who joined the forestry work force. So the new forest contributed relatively little to local employment.



A young man on an adjoining farm, Thomas Grant, got himself some paid forestry work in the 1960s. With his tractor, he took bags of tree seedlings or fertiliser across the moors to work sites. His son, Young Tom, earned some extra cash at the water pumps during a forest fire in 2002.

The Forestry Commission provided nothing comparable to Saturday work or holiday jobs for local youngsters, in the way that farmers had done previously. Indeed, Whitelee Forest was indirectly a cause of unemployment amongst local shepherds, none of whom were interested in becoming forest workers when their sheep-flocks were taken from the sold moorland. The sale of Carrot estate to the Forestry Commission affected Iain Stewart, who had been long-term gamekeeper for Lord Weir and the Telfer family:

"...the coming of the Forestry Commission was a lifeline to many farmers, as they got far more for selling their land than it was worth. It did, however, mean the end of work and jobs for moorland keepers in the area, and Mr Stewart, retired' - Robin Chambers, countryman and farmer



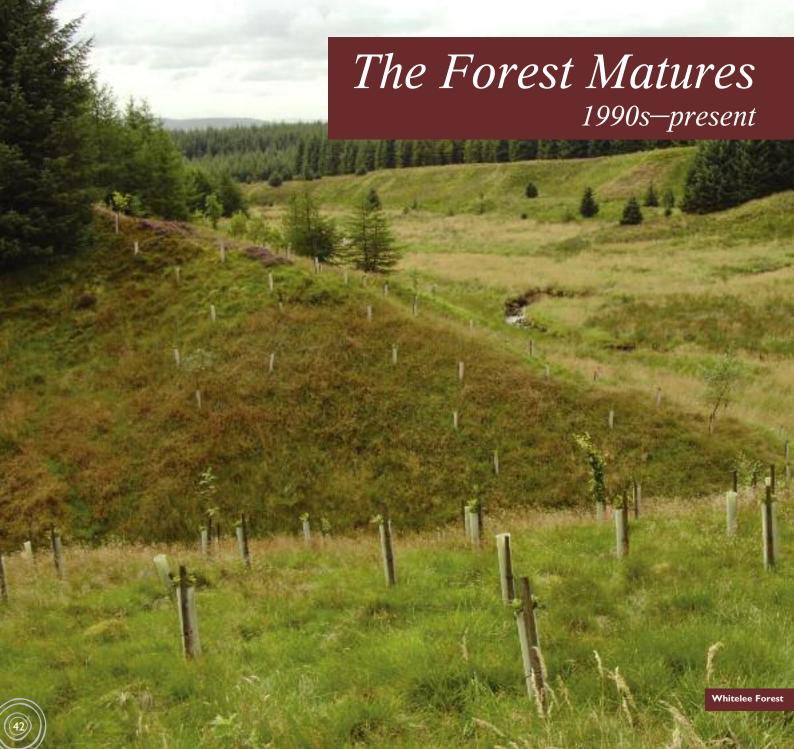


Sitka spruce planted very close to Little Calder Water

Permanent employment was not actually in great demand around Whitelee Forest. Nearby towns still had busy textile factories and the industries of East Kilbride were in a phase of expansion. Locating a new forest on the Whitelee Plateau contributed little to fulfilling government policy for the Forestry Commission to assist employment in rural Scotland.

The coming of the forest did not provide new infrastructure around the Plateau. And it was not until nearly 30 years after its inception that new and easy access into and through the forest was possible for the general public (on foot, bicycle or horseback) along an internal forest road.





# The End of the 20th Century

'Whitelee was not very far from existing markets for the type of timber that was being grown in Whitelee, and Whitelee together with similar forests from a wider catchment would be ideally placed for the possibility that another major pulp mill, and certainly sawmill, could be built in Central Scotland or along the M74. And so, with its timber production being forecast for, say, the first ten years and twenty years of the twenty-first century, Whitelee could in theory be ideally situated.' — Alister Jones, retired Forestry Commission district officer, discussing the markets for Whitelee timber

From the 1960s to 1980s Whitelee Forest expanded over land which farmers, one by one, sold to the Forestry Commission. Sitka spruce was still the predominant tree, with less lodgepole pine because it suffered from windblow. There were patches of Norway spruce for Christmas trees and Japanese larch for amenity.

Whitelee Forest was not a cultural and tourist hot spot in the same way as the famous nearby forests of the Trossachs and Argyll Forest Park. The intended role of Whitelee Forest had been, from the beginning, as a producer of cellulose, that is, plant fibres. In the 1980s, the Finnish firm Kymmene built the big Caledonian Paper Mill not far away at Irvine. It was to take cellulose from Whitelee and other Scottish west coast forests.

The Forestry Commission reacted to general public disquiet about the uniformity of new conifer forests by planning plantings of broadleaved 'amenity' trees. Head foresters Fred Cowie and Pat Armstrong were not happy trying to grow them in such difficult conditions as





'Whitelee could in theory be ideally situated.' – Alister Jones

Whitelee Forest. But Brian Speirs was delighted to have ash, rowan, oak and even horse chestnut in his planting bag for a change; he envisaged their beauty in half a century's time.

Managerial foresters like Alister Jones, Christina Tracey and Kerr Robertson had three main issues to work with in the 1980s and 1990s. First, harvesting the first trees in the not too distant future had to be considered. How were lorry-loads of felled trees to be transported through the boggy forest to a public road and thence to a timber mill? Indeed, how were harvesting machinery and timber lorries ever to reach the harvesting sites across the boggy landscape without sinking?



rtesy: Grant Peter



Apart from a very minor road linking Drumclog and East Kilbride across its eastern tip, the Weavers Way historically was the only north—south through-route across the Plateau. Tracks between farms and to peat-digging sites were used by residents and local people for daily tasks; farmers walked their sheep across the open moor as a matter of course.

Land for Whitelee Forest had been bought piecemeal over three decades, not in one large chunk. Forest vehicles and squad workers trudging on foot used farm tracks or the moorland itself to reach work sites. In the early days, the emphasis had been on afforestation at all cost, and not on harvesting at some future date.

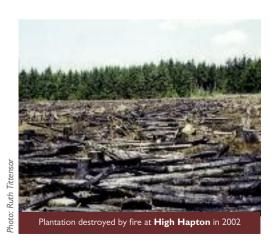
However, during Alister Jones' time as district officer in the late 1980s, there was a forest fire. Luckily, it was kept under control. But Alister realised that if it had been nearer the middle of the Forest, fire engines and personnel would not have reached it for lack of access which could bear large vehicles. He persuaded his superiors that at least one internal road across and down the forest was needed:

"...about 1987/88, we had a fire in Whitelee...somewhere towards the eastern end. I think it was near Logoch. And, well, ironically, that wasn't very very far from a public road...What I pointed out at the time was, "Well, you were lucky that the whole forest didn't go up, and had there been a strong easterly wind that night, there would have been absolutely nothing we could have done about it". That fire could easily have burnt approximately a third or a half of the forest.



'...you were lucky that the whole forest didn't go up...' – Alister Jones

'In terms of control from say Straiton, there was twenty-five miles via Kilmarnock, which is the best part therefore of an hour from office to the edge of the forest, and possibly another hour to walk into the scene of the crime as it were, this really was a very unmanageable area.' — Alister Jones, retired Forestry Commission district officer, discussing the difficulties of fighting a forest fire



Alister's bosses agreed with his assessment and road engineers were brought in to build a forest road. It stretched about nine miles from west to east and five miles from south to north.

The second issue was the shortage of further land for afforestation on the Whitelee Plateau. The forest had spread as far to the east and west as possible. No land was available for further afforestation on the vast Eaglesham Moor to the north, nor on the better agricultural land of the Irvine Valley to the south.

The first harvests were envisaged for 40 years after the first planting, that is, early in the new century. Yet the last trees had been planted by the early

1990s and there was no further land available. This meant a time-gap of a decade between final planting and first harvesting.

A new forest should ideally be a minimum size in relation to the size of its work force, the areas planted each year and the time before the first trees planted are ready to fell and sell. Ideally, just after the final trees are planted, the trees planted first should be mature and ready for harvesting. The intention is to give work to employees without break, and to produce an uninterrupted income after the first fellings. This is a difficult task, however, in an industry dependent on environmental conditions, weather and fluctuating markets.

The third issue was therefore employment. Enough work for the reduced squad of four had to be found every week in a forest where work was scarce. There was the inevitable manual drain clearance and the squad also marked and enhanced the Weavers Way.

'We did build seats and stiles at both ends, we put down marker posts, and the path that a lot o people had walked we widened by cutting the grass. Any drains crossing it that had been overgrown wi grass and weeds, we cleaned tae let the public know the drain wes there, that kind o thing. I really did enjoy that.' — Brian Speirs, retired Forestry Commission squad worker, remembering his last jobs in Whitelee Forest

The squad went to Avondale, Kyle and Arran Forests to help with tree-planting. However, despite hopes that redundancy could be avoided, the remaining four squad members (Hugh McClymont, Ian Peter, Robert Peter and Brian Speirs) were made redundant in 1994. They were heartbroken, found other jobs, but only one in forestry. Apart from rare visits by a squad from Kyle Forest, the wildlife rangers Alec Fenton, Bob Logan and Jim Newall were the few staff sometimes working in Whitelee Forest.

Local residents saw little happening in the forest – no squad in the Transit on its way to work, or stopping for cigarettes at the Waterside shop, no tractor



Courtesy: Brian

drivers' caravans in farmyards, no helicopters spraying fertiliser, no foresters in the pub. Farmers adjoining the forest saw broken fencing and fallen trees, and felt the effects of more foxes and deer coming out of the trees. But there were no forestry staff with whom to discuss these things. People who had lived or enjoyed themselves on the moorland, or worked in the Forest, took on new work, went elsewhere for their recreation or retired. Whitelee Forest no longer provided jobs, recreation or a subject for discussion. Local people and forest rangers called it 'the forgotten forest'.

However, considering the doubts of its suitability as a new forest over 30 years previously, Whitelee Forest had been an enormous achievement for everybody connected with it. A forest of 10 million trees had been planted on some of the worst possible ground – and was growing!

#### The New Millennium



At the end of the 20th century, the Forestry Commission set up the new Scottish Lowlands Forest District to revitalise several forests in Scotland's Central Belt and to make contact with their nearby communities. Whitelee Forest was taken into this new district. Wildlife rangers such as Emma Stewart started work in Whitelee Forest, surveying habitats and wildlife.

The new forest road seemed to reach out to the public like an unspoken invitation, especially at its eastern exit to a minor public road. People from urban East Kilbride discovered safe walking with their dogs and for kids cycle routes without vehicular traffic. Community ranger Jim Smalls was sent to

clear the inevitable litter. As an ex-policeman, he naturally spoke to people whom he met, and engaged them in discussion about what they wanted from their nearby forest. Whitelee Forest was gaining a new lease of life!

Government changed the remit of the Forestry Commission yet again. Fulfilling social needs now equalled growing cellulose and gaining financial return in state forests' national role.

The Forestry Commission career structure had also changed since the 1960s. Instead of every forest having a resident forester, local squad and occasional local contractors, many forests in one district were managed by a group of specialist foresters in the district office. Today, the foresters overseeing Whitelee are based in the Scottish Lowlands Forest District office at Carluke. Practical forest work is now almost all done by contractors who bid for jobs or standing timber.

District forester Rena Tarwinska worked on the social aspects of forestry, that is amenity, recreation and nature conservation. There were plans to encourage more public recreation in Whitelee Forest.

'The Forestry Commission in Scotland has developed significantly in the last five, six years in trying to involve local people more...in the workings of a forest, and, essentially, trying to explain why we do things the way we do, and also...to integrate people's opinions and ideas and thoughts into any planning and management that we do. With that in mind, whenever we develop a Design Plan, we put it out to consultation, and always hold our meeting, advertised to local people, in a local village hall, or school or whatever, and invite people to come and have a look at the plan, and, well, as far as we have developed it, we try and involve people right at the start; obviously we don't want to spend a lot of time working on something and then say, "Well, this is it, like or lump it." What we try and

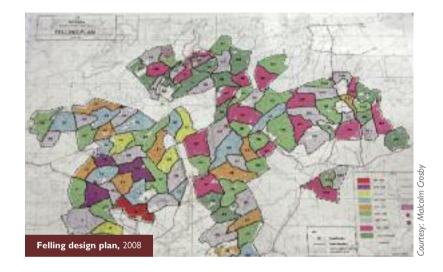
do is say, "Well look, these are our thoughts so far; this is what we know about the place. Come, you know, let us know how you use it." – Rena Tarwinska, Forestry Commission district forester for community and conservation

Also working in the new district office were production forester Frank Jackson and planning forester Malcolm Crosby. Frank specialised in preparations for harvesting the first Whitelee plantations, ready for the marketplace in 2001. Malcolm prepared a Design Plan containing detailed maps and proposals for the future silvicultural management of Whitelee Forest.

Rangers |im Newall, |im Smalls and Emma Stewart were the lucky ones, as their work needed them to be out and about in the Forest, to both research ecology and meet the public in an educational capacity. A big local squad was no longer needed. Rutters and howks became tools of the past, found in museums or rusting in people's sheds along with peat spades. Planting bags and spades remained the only hand tools in regular use by contractors. However, a small, modern squad of lain Hughes, lames McKie and William Orr visited Whitelee and other forests in the Scottish Lowlands Forest District to maintain fences and collect litter. Senior ranger Andy McMahon occasionally went to Whitelee from his main work area in Kyle Forest, to cull deer when the market in venison was buoyant.

Meanwhile, the first harvesting of timber took place in 2001 at High Hapton, site of the earliest plantings.

'The harvesting is sold on a standing sale basis...The timber area, if it's a coupe, or it's a volume, let's say it's



'What we try and do is say, "Well look, these are our thoughts so far; this is what we know about the place. Come, you know, let us know how you use it" - Rena Tarwinska

10 000 tonnes, we put it to the market...we have market sales four times per year. And, timber merchants put in for it. So, the one with the highest bid gets it. Now he employs, or they employ, their own contractors to do the work. They employ their own haulage contractors to take it away. And they either take the log material, which is the best part of the tree...the big part, away to their sawmills, if they've got a sawmill, if they're that type of group, where they cut it into boards for housing et cetera et cetera. The rest of the tree, the smaller end of the tree, goes to either the pulp markets, like, Irvine being one, or export pulp. And there is quite a

marketplace for that. Or, if it's degraded timber, drier timber et cetera, and it's maybe not Sitka spruce, that goes down to Auchinleck. So, they're the people that work the forest.' - Frank Jackson, Forestry Commission production forester

As in all modern forests, one man in a huge computer-controlled machine called a 'harvester' felled the trees. It cut cleanly through each treebase, sliced off the bark and side-branches, cut the trunk into useful lengths and put them into a pile. The harvester can fell and deal with 50 trees an hour.

A purpose-built tractor and trailer called a 'Forwarder' then extracted up to 15 tonnes from the pile of harvested timber, taking it to a stack on the side of the forest road. To do the equivalent with heavy horses (as in old times) four teams of heavy horses would have to do an eight-hour shift without respite!





Timber stacked by the forest road was then lifted onto a timber lorry which had its own 'grab'. Each lorry, with trailer, could carry nearly 40 tonnes of harvested trees through the forest, out to the public road and then to the mill.

Operations foresters checked that all contractors' work was carried out according to health and safety regulations and that a site was worked in an environmentally sensitive way by the various contractors.

Mechanical forest harvesting did not straightforwardly oust manual workers. Mechanisation enhanced productivity; however, at the same time, men no longer wanted to work in the conditions endured by the Whitelee squad. Young people were no longer interested in constant, hard, physical, outdoor work, in Scotland's weather, with adders, clegs and midges! The Forestry Commission realised that manual forestry workers are prone to ill-health in old age, as a result of their demanding outdoor work. So, mechanical harvesting was seen as acceptable from both the human and the financial point of view.

Between 2001 and 2007, 12 000 to 15 000 tonnes of timber were harvested yearly from Whitelee Forest – not a large amount, but considered by the Forestry Commission to be satisfactory if kept up for 30 to 40 years.

The exceptionally hard work carried out with such vigour and motivation by Whitelee Forest's early workers during over three decades of planting have now come to fruition. A local man who planted thousands of trees in Whitelee Forest in the early 1960s said:



Photo:

'It is good to know that I was at the instigation of that'

– George Young, retired tree-planting contractor and postman

#### The Second Rotation Whitelee Forest

Timber lorries loaded with harvested timber make their way through Whitelee Forest on the forest road to the public road overlooking East Kilbride; then they travel to a pulp mill or sawmill in south-west Scotland or northern England. But what has happened to the cleared acres from which those trees were felled?

The forest is not left to regenerate itself; a 'second rotation' of trees is planted. Modern methods of ground preparation are different from those of the 1960s. There are no tractor drivers ploughing ridges and furrows or deep drains. Instead, a machine called a 'Backacter' is used to make small mounds. The Backacter has a bucket which digs into the old ridges and furrows. It scoops up either soil from the ridges or sediment from the furrows which has accumulated during the last 40 years. The bucket throws out a dollop of this mixture, which lands on the old ridge as a mound of earth. Long rows of mounds on top of the old ridges can be produced quickly like this.

People (not machines!) then plant tree-seedlings into the mounds of soil. They use the old-fashioned way, by hand, with a planting bag full of sprigs and a planting spade. The little trees are planted closer together than in the past, 1000 per acre compared with 700 per acre in the early Whitelee Forest. With tighter spacing, trees grow with fewer branches and less whorls on the branches. So there are fewer knots. The marketplace wants timber without knots, which can take more stress.





The young trees are again mainly Sitka spruce, it being the species most suited to conditions on the Plateau – it has a market into the foreseeable future. However, some lodgepole pine, Norway spruce and Japanese larch are included. A variety of broadleaved trees will be planted on suitable ground, according to the proposals in the Design Plan.

The second rotation Whitelee Forest will need sophisticated silvicultural management in the 21st century. This is because yet another large-scale change in landscape, ecology and technology is under way.





resy: Egger

### Europe's Biggest Wind Farm

'At one point we could sit outside and see the whole of the Firth of Clyde, and also see the coast of Ireland with binoculars. We have a beautiful outlook, beautiful sunsets, we can see wonderful sunsets over Campbeltown and Arran. Not for much longer I'm afraid. Because the wind turbines will mar everything within sight' – Norman Gibson, local resident and engineer

Someone at the National Engineering Laboratory (NEL) in East Kilbride looked at a wind map of the British Isles in the early 1980s. It was noted that Whitelee is in one of the highest wind speed categories, and, being a plateau, is also exposed to wind from all directions. The NEL leased from the Forestry Commission a pocket of not-yet-planted land at the summit of Myres Hill. And, in 1986, three different experimental wind turbines and other research items were erected there.

The eventual results of turbine research were presumably encouraging. At the end of the 20th century, an energy company discussed with the Forestry Commission and nearby landowners the building of a 'wind farm' in and adjoining Whitelee Forest. The locality had several advantages, including its judged minimal effects on people, views and ecology.



Grants were available from government towards the costs of constructing wind farms. Plans were prepared by the firm 'ScottishPower' for a wind farm of 140 turbines to be built between 2006 and 2009 in Whitelee Forest and northwards on Craigenfaulds Moss and Topfaulds Hill. This is being extended to over 200 turbines.

At the time of construction, it is the largest onshore wind farm in Europe. Landowners, including the Forestry Commission, benefit from working with ScottishPower because they receive an annual rent for every turbine on their land. The future of Whitelee Forest is assured by the Forestry Commission. The Design Plan proposes a type of 'short-rotation forestry' for those plantations close to turbines. Trees will be harvested before their height interferes with wind-flow around turbines. Frank lackson explained that Whitelee will still be a forest but with gaps containing wind turbines:

"...the wind farm at Whitelee will comprise about eighty wind turbines within the forest area...This doesn't mean that the whole of Whitelee, or the section where the wind turbines in Whitelee are going to be situated, is going to clear-felled. The only areas that's going to be clear-felled are the areas round about the wind turbine, the base of the wind turbine, and the roads that connect the wind turbines to each other.

'Our plan is to re-establish a crop, Sitka spruce, again in the areas where we can plant, with the wind turbine cuts. This has been agreed with ScottishPower, and it was part and parcel of the deal that we had to establish a wind farm there. Now...in that sense, the ground will be replanted, but...instead of the crop growing on for about thirty, thirty-five years of age, we will fell it at, top height twelve, thirteen, which will probably be about year twenty of age,' — Frank Jackson, Forestry Commission production forester

By 2009 the first phase of 140 turbines, each embedded in a large concrete base in the peat, was completed. Forestry Commission foresters checked that work carried out by contractors on the site accorded with what had been agreed. Nature conservation organisations liaised with the Forestry Commission to keep a regular check on the environmental effects.



Forestry Commission staff viewed the wind farm as a challenge to carry on forestry simultaneously with the wind farm and an opportunity to provide good public access along surfaced roads between turbines within the forest.

Rena Tarwinska planned the future of recreational facilities and of nature conservation in Whitelee Forest. She was adamant that a modern state forest is not just a mass of closely packed conifers.

"...it will always be a forest...but...it can be a bit misleading...to imagine that a forest is nothing but trees...I sometimes explain that my colleagues manage the trees themselves, and I manage the spaces between the trees, and there's a surprising amount of space between trees in the forest. The open space for deer, from glades that we design in, and roadsides, and general open space for keeping viewpoints open, and that's all really important, and most species and habitats develop as a result of the open space and the interface between the forest and the open space. So, although we refer to the whole, whole area as 'a forest', it's actually a huge complex matrix of different habitats and, habitat types and species opportunities' - Rena Tarwinska, Forestry Commission district forester

Ranger Jim Smalls suggested that, whatever one's opinion on wind farms, opening-up Whitelee Forest for public recreation can only be good 'Everything we can do to get people out into the fresh air is a good thing'.

Photo: Keith Hobley

Norman Gibson is one of the few people who have experienced life close to wind turbines. He and his family have lived within 300 yards of the three experimental turbines on Myres Hill since 1986. They experienced problems like more lightning strikes, and interference and breakdown of the family's television, telephone and computer. The noise underneath the turbines is acceptable, but from the distance at which they live it is frequently extremely loud and frightening, especially when the turbines stop turning and 'feather'.

For Karen Bruce and her family, a quiet life in a rural steading gave way to a life with more than a dozen turbines up to 153 yards high on one near horizon, and others even taller on another horizon. But she is philosophical and thinks the need for electricity is paramount.

Bryan Simpson and John Douglass, who knew the considerable nature conservation and historical value of Whitelee moorland and forest, still reserve judgement. They await research on the effects of the wind farm on the ecosystems, ecological processes and carbon-holding capacity of the modern Whitelee Plateau. On a global scale, peat bogs (only 3% of the world's land-area) are major carbon sinks which hold twice as much carbon as all forests. Peatlands degraded by ploughing, burning or excavating produce around 10% of global carbon dioxide emissions (Kaat and Joosten, 2008).

Pristine peat bogs are a 'living cultural heritage' older than Britain's cathedrals. After millennia covered with developing peat bogs, Whitelee Plateau has been transformed by afforestation and a wind farm in only half a century. However, fragments of its ancient peat bogs remain along the forest brakes, on a few sites too boggy to plant trees or wind turbines, and on a few of the adjoining farms.



# This Extraordinary Time



Older residents of the Whitelee Plateau locality have seen three social, ecological and landscape phases within their lifetimes.

Ancient and extensive peat bog moorland landscapes and ecosystems based on farming sheep and cattle provided meat, wool and dairy products annually during the first half of the 20th century. Ecosystems also provided extra resources supplying many other (wild) plant and animal foods, fuel (peat), and varied recreation for nearby communities.

From the 1960s to 1990s a young conifer-woodland landscape and its ecosystems replaced the moorland, sheep and cattle after major disturbance by deep ploughing. The main product was to be cellulose, with venison and moss as minor products. The extra resources and recreational possibilities previously used by local people, now vanished, replaced by recreation for a few people (shooting syndicates), with a few or one target food species.

The early 21st century saw change to a modified woodland landscape and new disturbed ecosystems, still producing cellulose, but from more varied silviculture. A second major product is electricity. Within these two main outputs, social functions including recreation, conservation and education will be artificially engineered and deliberately integrated. Food resources will be venison for a few people.

Older residents have also lived through and seen five phases of technology:

- 1. Agriculture based on horse- and 'man'-power was the technology of the first half of the 20th century. It gave way after the Second World War to.
- 2. Mechanised agriculture based on the internal combustion engine. Horses and hand tools disappeared, while workers were fewer. Mechanised agriculture gave way in the 1960s to,
- 3. Manual forestry, which took over some of the agricultural tools, with minimum mechanisation. By the end of the 20th century,
- 4. Mechanised forestry using computer-controlled machines had almost entirely replaced men and hand tools. At the start of the 21st century,
- 5. Electricity generation from wind using new methods of computerised wind turbine technology was added to existing mechanised forestry.





### Looking Back



"...it is easy to imagine families continuing in the same place for generations — but this would be wrong...On thirteen Whitelee farms on the Loudoun Estate, insurance documents and rentals enable us to trace the tenants' names in 1828, 1891 and 1921. Only three were unchanged between 1828 and 1921 (Mitchell at Whatriggs, Smith at High Carlincraig and Loudoun at Low Overmuir). Six were the same in 1828 and 1891, and five in 1891 and 1928. Five farms had different tenant families at each of the dates. So only a small minority lasted the century, and most gave up within fifty years or less. In 1921 the Loudoun farms were sold to the sitting tenants, when the Earls of Loudoun fell on hard times, but it is not clear that the change from tenant to owner occupier led to families staying put for any longer...By the time the Forestry Commission came to purchase land, most of it was in the hands of owner occupiers' - Christopher Smout, historian of Scottish woodlands

'On East Browncastle Farm there were 2000 acres of moorland, about 500 acres being heather moor. Here there were grouse, blackcock and brown hares.

Cartloads of hares used to be shot as pests' —

Gavin Ross, one-time farmer on the Whitelee

Plateau, now deceased

'The skylark hovered high in the sky singing their song. The grouse, the curlew and the peeweep called incessantly. Sitting on a peat hag supping stewed rhubarb...Gathering gulls eggs with my pals, building a fire and frying the eggs...' – Jim Leitch, one-time farmer on the Whitelee Plateau

'Sheep...sunk down into the very soft bog and were lost forever...this is why the soft, green, boggy ground was called The Black Death' - John Telfer, one-time farmer on the Whitelee Plateau

'There were lots of Moss Cheepers up on the moors in those days' - lain Hamilton, farmer and fencing contractor

"...sheep farmin wis in depression, the Forestry Commission come in an probably done good...for the sheep wisnae payin, if they hadnae've bought it probably naebody would. So they probably did they farmer a good turn. If ye goat rid o that grund an ye could go an buy better grund...' - Thomas Grant, farmer on the Whitelee Plateau

Whitelee at high elevation on deep peat was in many ways a stab in the dark and a lot of people in the Forestry Commission doubted if it would be successful' - Peter Innes, retired Forestry Commission chief acquisitions officer

'My job was to inspect properties...I would meet the owner and survey the property assessing its value for tree-planting and prepare a report on my findings' - Bill Sutherland, retired Forestry Commission district officer and acquisitions officer

'I was sent over to Whitelee to clear rabbits and hares before it was ever fenced or planted – this was 1961/1962/63. The moorland heather parts and peat hags were pretty well populated with rabbits. Brown and white hares. No deer' - Stan Share, retired Forestry Commission trapper

'In the very, very wet and soft conditions a very light tractor, the TD500, which had slatted tracks and which moved across the bogs by squeezing the surface between the slats without breaking it, was employed. The plough used was double furrowed' - Roy Harvey, retired Forestry Commission ploughing forester

'I like t' think that, ye know, ye made a beautiful job becuis when you looked back an it wis nice an tidy, ye know, t' me I got great satisfaction o that...l felt I wis very fussy wi ma ploughin, it hid t' look nice, it hid been nice...An, if I hid my life ti live owre again, I wid go back ti plough it. That's e, thing I loved. I wid. Ay. And, eh, becuis of, I got a lot a satisfaction out o that.' - Robbie Allan, retired Forestry Commission tractor driver



Courtesy: Robert Graham

Rutter tractor with Robbie Allan, 1970s, and harvester, 2001

"...the ploughing furrows seemed to stretch like ribbons for one black mile after one black mile' - Frank Jackson, Forestry Commission production forester

'Three tractors were stuck in one place in Darvel Moss on the first of December 1970. Now, two tractors pulled one plough. Tom called it 'shadowing' where there was one tractor hooked on to the second tractor with the plough behind. Now, another tractor was brought in to rescue the three tractors – and before it reached the three tractors that tractor got stuck' - Janet Grant, farmer on the Whitelee Plateau

'I brought in my first wage, I gave it to my Mother, and she thought, That's an awful lot of money, that...good grief, there must be more to this forestry work. There's money in them there hills. It was, piecework, aye, so...supposedly the harder you worked, the more you get, so, that was an incentive. Well the main job at Whitelee was planting trees to establish a...commercial crop...and again it was a piecework rate, so you would try and go as hard as you could...' -Alexander Fenton, Forestry Commission squad and wildlife ranger

'The main effect of Whitelee Forest on the locality has been to vastly increase the numbers of foxes and deer' - Jim Loudoun, retired tenter in nearby lace factory

'The area as a whole has produced over 190 species [of lichens], nine nationally scarce, one nationally rare and six indicators of long ecological continuity. We have spent many happy days checking out the intricate habitats of Whitelee. When we come across a real beauty we do what is known as a Craig Brown and punch the air...lust as he used to do when on those rare occasions Scotland scored' - John Douglass, lichenologist

'So, they're really quite nice actually to walk through, these rides, and some of them go on for hundreds of yards. And to be in there on your own, especially if the evening's just coming in, it's quite magical. You've got the scent of the forest and you've got this immense silence...Broken only by the sound of, sometimes small birds, finches you know, redpolls, whatever, twittering away in the treetops. And it's really...I think, to me it's, it's quite magical. I've enjoyed many many hours just walking through these rides in the forest on my own' - Bryan Simpson, field naturalist







Wind pump 'Dickie', Laigh Hapton, and wind turbine, Whitelee Forest

Photo: Ruth Tittensor

'Where the trees are growing well now, it's most difficult juist for me, even maself, to find aw these parts, because the trees are growin well on the better...land. The trees are growin so dense. An there's no maintenance, they don't prune the trees or anythin lik that. It's so thick an the trees are now intermingelt, they overlap the branches. A mean it's impossible to walk through them. An they're growin right tight tae the ground. Which a'm concern't about the vermin si'uation' — lim Kennedy, farmer on the Whitelee Plateau

'...at Whitelee the harvesting operation is done by one machine...And a man with a chainsaw, you'd need a group of men with chainsaws, oh you'd need a gang of thirty men to do the same work' — Frank Jackson, Forestry Commission production forester

'Litter [such as old windows] dumped is a problem at Whitelee Forest. It has to be removed. Many mountain bikers and walkers use Whitelee Forest: they enter the forest from the Ardochrig end' – Jim Smalls, Forestry Commission community ranger

'The day of open moorland and the sheep farms, that's passed and now it's used for forestry, it's an established forest. And so you cut the trees and you replant them...We just accept it now as an established forest'—lames Mair, historian and teacher, now deceased





Courtesy: Rober

'You will hear them, and that's one thing for sure...They are very noisy. It's quieter when you're underneath it than it is half a mile down the road. Sometimes you're sitting and you'll hear something like an express train coming. This is when it shuts down. Feathers the tips itself against the wind to stop, and change direction. It's like an express train coming in. It gives you a fright sometimes when it feathers does go' — Norman Gibson, engineer and resident near wind turbines

'I think we, at my age, and people of a similar age, were very much in the, almost crusading days of forestry. Where we were charged with getting the maximum amount of growing stock and timber and trees on the ground, and we felt that we were at the cutting edge of forestry. We were like forestry pioneers putting in trees where no trees existed before.

'Whereas now, we begin to look at forestry more in terms of its naturalness, and how the plantations of the past can be converted to forests of the future which are more diverse. So I found that my forestry career has always been interesting and active and varied because nothing ever stayed still, times changed and attitudes changed, and forestry has changed as well. And today foresters are doing things the way they think best for the requirements of today, just as we did thirty years ago for the requirements then, and the needs of the people' — Richard Toleman, forester for 35 years, instigator of the Whitelee Forest Oral History Project

# Acknowledgements

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www.forestry.gov.uk Forestry Commission website



# People of the forest

The Touchwood History project began in 2006, when initial contacts were made with folk who had worked in forestry in the locality over the years. The Whitelee Oral History Project, which was a separate project undertaken by Ruth Tittensor, began in 2004 and was completed in 2007. This Touchwood History book is an abridged version of the story that came from the Whitelee Project. Interviews were conducted by Ruth Tittensor and set out to obtain as much detail as possible on lives spent working and living with the forest and the locality beforehand. Those interviewed included nearby residents, farmers, people involved in country sports, and Forestry Commission foresters, rangers, surveyors and squad members.

The following photographs are of a selection of the people who contributed to the Whitelee Project. We are indebted to everyone who was interviewed. They have left a lasting legacy – the story of everyday life – work, rest and play – meaningful, poignant, fulfilling, funny, both ordinary and extraordinary.



Malcolm Crosby
Forestry Commission
planning forester



David Findlay
Country sports



Jim Leitch Farmer



Grant Peter
Forestry Commission
squad



Richard Roberts
Resident nearby



Stan Share
Forestry Commission
trapper



Bryan Simpson Field naturalist

# 'We were like forestry pioneers putting in trees where no trees existed before' Richard Toleman



Thomas Grant Farmer



Hugh Hendry
Country sports



Jim Kennedy Farmer



Archie Mitchell Farmer



Jim Newall
Forestry Commission
squad, senior ranger



John Struthers
Farming family



Margaret Struthers
Farming family



Bill Sutherland
Forestry Commission
acquisitions/
district officer

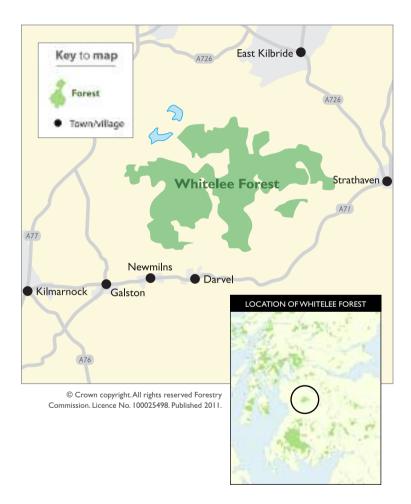


Rena Tarwinska
Forestry Commission
district forester



Richard Toleman Forestry Commission surveyor, Whitelee Project instigator

## Whitelee Forest



East Ayrshire





Consultancy

Front cover image: Craigends inbye in the 1950s. Courtesy: John Struthers

Back cover image: Two tractors in tandem pulling a Parkgate 'Arched Beam' or 'Humpy' plough with a 'Single-throw' mouldboard, Whitelee 1976. *Courtesy Norman Davidson*.

All un-credited images in the publication are courtesy Forestry Commission Picture Library.

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Ruth Tittensor (2011)

'The forgotten forest'.

The story of Whitelee Forest in the 20th century. Forestry Commission Scotland, Edinburgh.

FCMS118/FCS(KA)/JTCP-1.5K/JUN11



This is the fourth book in the series of Touchwood History publications. The other three are: 'Smell of the rosin noise of the saw'; The story of forestry in Mid-Argyll in the 20th century, 'The forest is a beautiful place to be'; The story of forestry in the Great Glen in the 20th century and 'No rivalry but different'; Glenmore and Rothiemurchus in the 20th century.

All available to order on-line at www.forestry.gov.uk/publications

This is the story of forestry in and around Whitelee Forest, based on the memory of those who lived and work in forestry, knitted together from personal recollections.

