

FORESTRY COMMISSION
BRITAIN'S FORESTS



STRATHYRE

ONE SHILLING NET



New houses for forest workers at Keip, near Strathyre village, below the young plantations on the slopes of Beinn an t-Sithein

The picture overleaf shows a planting gang setting out with their bags of young forest trees, to cross Loch Lubnaig by motor launch



Loch Voil and Creag Mhor

STRATHYRE FOREST

THE STATE FOREST OF STRATHYRE lies in the uplands of south-west Perthshire, beside one of the few through routes leading to the central and western Highlands of Scotland. The greater part of its ten thousand acres, about half of which now carry tree crops, lies on either side of picturesque Loch Lubnaig; the remainder, a mile or two away, stands on the Braes of Balquhiddy, above Loch Voil. The usual approach from the south, by road or rail, is from Stirling and through the town of Callander. Just beyond, the route winds through a narrow defile, the Pass of Leny, whose rocky slopes, over-hung with the foliage of oak, birch, and alder, run down to a small but beautiful cataract, the Falls of Leny. Beyond this point the valley broadens out, but nearly the whole of its level extent is filled with the placid waters of Loch Lubnaig, the loch of the bend, so called from the pronounced turn where it rounds the steep cliffs of Ardnandave. On either side, apart from two or three small farms, the hillsides are clothed with a multi-coloured mantle of coniferous trees—larch, spruce, and pine, stretching far up the slopes to a height around 1,200 feet,

(3)

where they give way to hill grazings, succeeded in their turn by the barren rocky summits of Ben Ledi and its neighbours on the west, and the foothills of Ben Vorlich to the east. The railway follows the western shore of the loch, while the road keeps close to its eastern edge. Loch Lubnaig, which is four miles long, ceases a mile below the little village of Strathyre, from which the forest takes its name, but the forest itself continues for a further three miles along the sides of the strath. At Kingshouse, where the main road and railway swing north-eastwards towards Lochearnhead and Glen Ogle, the strath bends sharply west towards Loch Voil, and from this point the traveller can see a little of the Tulloch plantations, the first to be planted by the Forestry Commission at Strathyre, which lie high in the Kirkton Glen, above the village of Balquhidder.

THE COUNTRYSIDE AND ITS WILD LIFE

The whole of Strathyre Forest lies to the north of the Highland Line, and this important geological boundary, which runs right across Scotland, is obvious to the eye as the traveller from the south leaves the Lowlands at Callander and enters at once into a region of steep crags, high peaks, broad lochs and rushing torrents. The main underlying rocks, of which the higher peaks are built up, consist of metamorphic schists and grits, with a few bands of intrusive igneous rocks and one of Dalradian limestone. But during the Ice Age great glaciers scoured out the valleys, and much of the soil that is now being afforested rests on glacial debris—a mixture of boulder clay and coarse gravel. Some of this, in its turn, has been overlaid with peat, shallow in some parts, but in others forming beds several feet deep, some of which were formerly worked for fuel.

The main topographical feature is the broad, winding strath formed by Loch Lubnaig, the river Balvaig, Loch Voil, and Loch Doine—a valley overdeepened by glaciation and having only a very gradual fall. Loch Voil is only seventeen feet above Loch Lubnaig, four miles away, and nearly every winter severe floods occur, when the River Balvaig overflows its banks and the whole strath, from the head of Loch Doine to the foot of Loch Lubnaig, is filled with one great sheet of water. At the head of Loch Lubnaig is a curious long narrow delta, the Roin Mor, which almost isolates the little pool known as Lochan Buidhe.

To the west of Loch Lubnaig the forest climbs up a fine range of craggy hills, which reach their highest point on Ben Ledi (2,873 feet), from which very extensive views may be obtained over both Highlands and Lowlands. From Ben Ledi the forest boundary runs



Loch Lubnaig, looking north towards the crags of Ardnandave Hill, with Meall Mor on the right

north over Stuc Dhubh and Ben Vane to Beinn an t-Sithein (the hill of the fairies) which is the prominent peak to the west of Strathyre village. Another landmark on this western shore is the crag-strewn Ardnandave Hill (2,332 feet), around the base of which the railway winds its tortuous course. To the east of the loch the hills are less impressive, and the forest does not rise so high, but its boundary, on a 2,000 foot ridge, lies within a few miles of the rugged summit of Ben Vorlich (3,224 feet) and the wild Forest of Glenartney. The Tulloch section of Strathyre Forest, which lies to the north of the strath above Balquhidder village, occupies more gently rounded hills, which, however, reach 2,010 feet on Meall Reamhar; and here the plantations themselves run up to 1,700 feet above sea level. A public footpath up the Kirkton Glen crosses the long ridge that separates Balquhidder from Glen Dochart, the highest point of which is Ben More (3,843 feet), four miles to the west of the forest. As the visitor will see, the forest as a whole is set in a frame of extensive highlands, reaching far to the north and west and affording magnificent views in nearly every direction.

Such mountainous country has naturally a high rainfall, but

7

owing to the presence of still higher hills towards the south-west, the figure recorded for Strathyre is only around sixty inches a year. The valley is closely sheltered, a fact which is reflected in its Gaelic name, *strath-theo-thir*—the valley of the warm country; and the climate is generally mild, although in winter the surrounding peaks are often snow-capped. Both rainfall and shelter favour the rapid growth of tree crops, which is fortunate since the strath contains little good agricultural land. The flat meadows beside the River Balvaig are liable to floods and tend to become overgrown with rushes, while the steep slopes of the valley carry only a poor vegetation of heather, bilberry, bracken, and mountain grasses. Down to the eighteenth century the foothills were covered with oak and birch scrub, and a sale of timber which brought in £1,400 “chiefly for the sake of the bark” (which was used for tanning) has been recorded. But when afforestation began in 1932 the hill-sides were virtually treeless.

Red and roe deer are so common in the neighbourhood that it has been necessary to surround the new plantations with six-foot fences to protect the young trees. Rabbits, once common, have been exterminated on the areas now planted up, but mountain hares sometimes cross the fences when snow lies deeply on the ground. Of predatory animals, otters, badgers and foxes occasionally frequent the forest, and the wild cat is known to make its lair among some of the higher crags. The great golden eagle is seen from time to time—indeed a pair are believed to have nested quite recently near the fringe of the forest, but the most remarkable feature of the bird life is perhaps the water fowl. Mallard and pochard are common on the lochs, as well as a handsome fishing duck, the goosander, and in winter a flock of wild swans regularly settles on Loch Lubnaig. Both trout and salmon are found in the lochs, and in spring the salmon may be seen leaping up the Falls of Leny on their way to the spawning grounds of the headwaters.

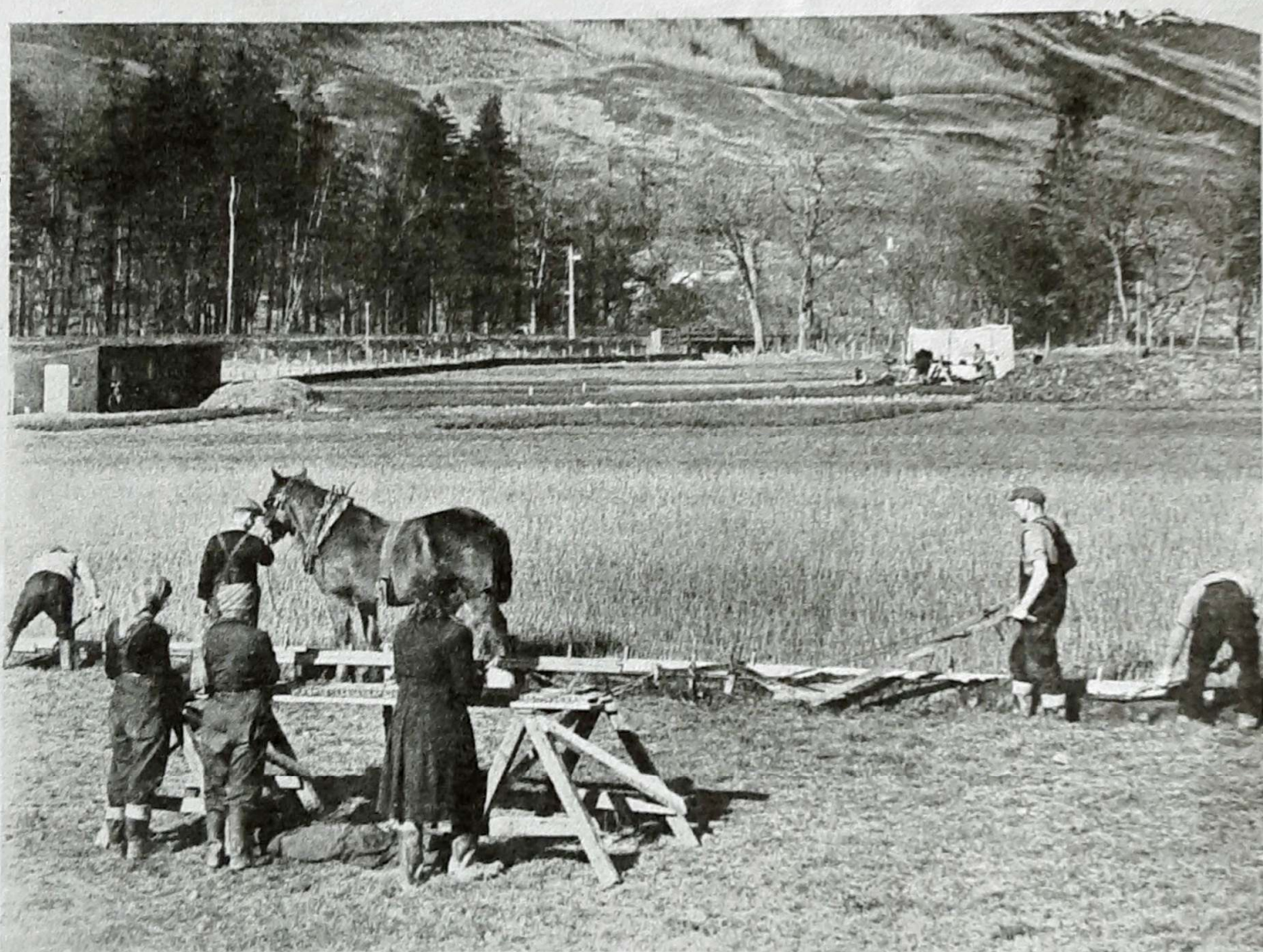
THE FOREST

Strathyre Forest covers an area of ten thousand acres of land, which was acquired by the Forestry Commission in stages between 1930 and 1940. Tree planting began in 1931, and has continued steadily since, so that it is now possible to see plantations of all ages from one to twenty years. Nearly all the land that is considered plantable has now been afforested, and the plantations cover 5,150 acres. Most of the remainder is regarded as unplantable, mainly because it lies at too great an altitude, where exposure, poor soil, or precipitous slopes render forestry impracticable. This higher land covers 4,593 acres, and, where possible, it will continue

to be used for sheep grazing. 178 acres of better land at a lower level has been reserved for agriculture, for housing sites, and for Forest Workers Holdings; four acres are used for a forest nursery.

When the Forestry Commission acquired the land it was used for sporting purposes, and to a smaller extent for sheep grazing. The first planting, where the oldest trees may now be seen, was done in the Kirkton Glen at Tulloch, above Balquhiddy, in 1931. In 1935 planting began in the main block of the forest, at the south end of Loch Lubnaig, so that the woods there are now (1951) about sixteen years old. Planting has been continued in a general northerly direction, so that most of the younger plantations lie between Strathyre and Kingshouse. Five species of coniferous trees have been used for the bulk of these plantations, and from the first it was realised that if the best use was to be made of the land, it would be inadvisable to plant these in compact and regular blocks, all of one species. The forest soils vary markedly from place to place, as does the vegetation that they support, and the forester has followed this natural pattern of variation in order to plant his

Transplanting larch seedlings at Strathyre Forest nursery. The girls in the foreground are filling the transplanting boards, while the men with the plough turn up the soil against the roots of the young trees



(5)

trees to the best advantage. This bold pattern, and the irregular upper edge of the plantations, shows how forestry can enhance a Highland landscape when forethought is given to its future effects.

Many of the steeper slopes have a subsoil of deep free loam derived direct from the main bedrock, and this land, before afforestation, carried bracken, oak and birch scrub, and fine grasses. It has been planted up with the larches,—the European larch with its straw-coloured twigs and light green foliage, and the Japanese larch with its red-brown twigs and blue-green leaves. It is these larches that provide the irregular masses of light green or warm brown—varying with the season—that break up and diversify the larger, darker and evergreen mantle formed by the pines and spruces. Both the larches are known to grow well in this district, and as an example of what the Japanese larch can do, a measured plot on the Ardchullarie estate, adjoining Strathyre Forest, has been found to grow seventy-five feet tall in forty-six years, producing a total volume of 6,737 cubic feet per acre; this is equivalent to 146 cubic feet, or about five tons, of timber grown on each acre *every year*.

Other portions of the ground at Strathyre Forest have a subsoil of compacted clay and gravel left by the glaciers, which bears a natural vegetation of heather. Such ground presents difficult conditions for tree growth, and the only tree that thrives there is the hardy native Scots pine. No other pine has been planted on any extensive scale at Strathyre.

Besides the bracken-clad and heather ground, there is a great deal of peat-covered land which bears moorland grasses or rushes, and on this the trees usually planted are the spruces, which bear their needles singly upon the shoots. The Norway spruce, familiar as the Christmas tree, is preferred for planting on the lower slopes, while the Sitka spruce, which has blue-green, sharply-pointed needles, is generally planted further up the hills. Taken together the spruces occupy nearly two-thirds of the plantations.

Besides these five main trees, other conifers have been planted in smaller quantities, including Douglas fir, grand fir, noble fir, Lawson cypress and western hemlock. Here and there along the roadsides, patches of better soil have been planted up with broad-leaved trees, such as lime, alder, beech and red oak; this has been done partly for fire protection, and partly to add variety to the forest scene, for the forest as a whole is unsuited to the large scale growth of hardwood timber.

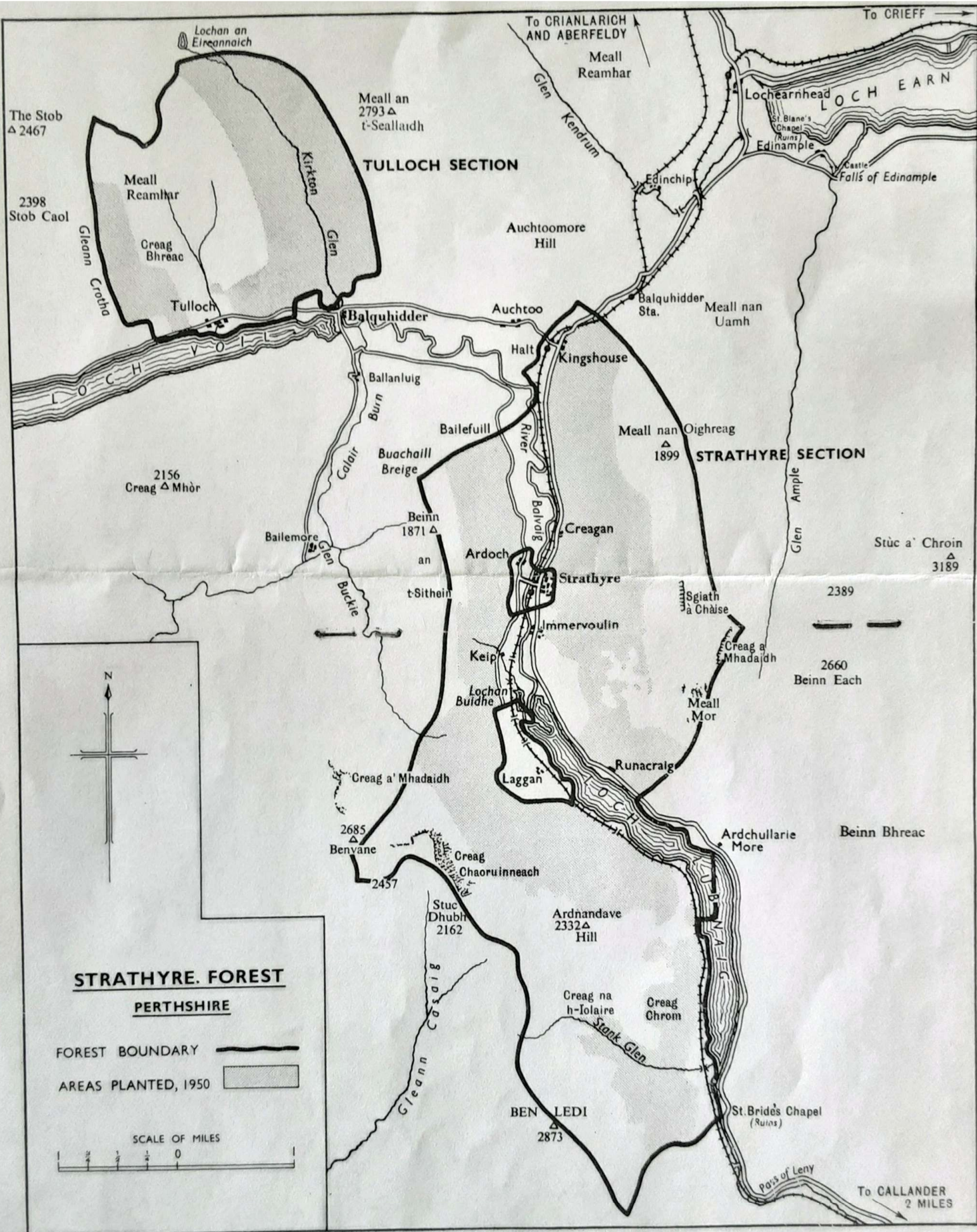
At Strathyre, the work of raising the forest trees can be followed from the earliest stages, for just south of the village the main road runs through the centre of the four acre forest nursery. Here may be seen the seedbeds, in which the seedling trees are carefully

(7)

raised from seed sown each spring; and the transplant lines, in which transplanted trees remain for a year or more, until they have grown large enough for planting out in the forest. The actual planting is done from October until April; the trees used vary between one and two feet in height, and are set about five feet apart; 1,750 young trees are required to plant one acre. Before planting is done, the ground has to be fenced against deer, and rabbits, drained where necessary and, on some areas, cleared of scrub; all this work is done by hand. Owing to the steep slopes and rocky subsoil, it is seldom possible to plough the ground before planting, as is done at certain other forests.

Once planted, the trees need little care apart from the cutting back of bracken and other large weeds during their first few seasons of growth. Their early growth is slow, becoming more rapid later, and averaging from one to two feet in height per year. Thus the older plantations at Strathyre, planted in 1932, are now about thirty feet high. The next stage is the thinning, that is, the removal of a proportion of the smaller and poorer trees to allow the better and taller trees more growing space. The trees removed are used for fence posts, pit props, and similar purposes, and provide the first return from the forest. Thinning has recently commenced at Strathyre, and it is anticipated that there will soon be a steady flow of fencing material to the lowland farms of central Scotland, and of pit props to the mines of the Stirling coalfield, only twenty-four miles away. Thinnings will be repeated at intervals of a few years, giving each time larger and more valuable logs, until, perhaps seventy years or more after planting, the remaining trees are considered mature, and are then gradually removed to provide sawmill timber, so making way for a new crop.

The main risk that threatens the productive growth of the forest is fire—and at Strathyre the danger is exceptionally high because the plantations are bordered either by the busy main road or by the railway. The precautions taken include the division of the main planting areas into sections by means of rides, the planting of firebreaks of broadleaved trees, and the maintenance, in dry weather, of constant watch from look-out points. There are two such look-outs; one, which is readily seen from the railway, consists of a small tower on the steep crag called Runacraig high above the eastern shore of Loch Lubnaig; the other is on the opposite hill-top above Bailefuil farm. Both are linked by telephone with the Forester's house near the village, and at danger periods a motor-driven fire pump, mounted in a jeep, is kept continually ready for immediate despatch to any outbreak of fire that is reported. So far, losses have been light, but if they are to remain so, continual



care must be exercised by all who visit or pass through this beautiful forest.

To get into the woods in case of fire, and also for bringing out timber, new roads are being constructed. One such road already runs down the western shore of Loch Lubnaig, close to the railway; and several others have been planned. At present some parts of the forest can be conveniently reached only by boat, and a motor launch is used on Loch Lubnaig for this purpose, as is shown on the front cover.

In order to establish and develop the new forest, on land which formerly gave work to very few people, it has been necessary to build up a substantial labour force, which will increase as more and more plantations reach the productive stage. At the present time (1951) fifty-seven people are employed, of whom ten are women and four are juveniles. Looking ahead to 1959, it is estimated that one hundred workers will be required, mainly to cope with the growing volume of timber from thinning operations, while by 1969 the figure will be 150. This increase implies the building of many new houses and, in effect, the repopulation of a strath which, prior to the start of afforestation, had been steadily losing its people.

The first stage in building houses was the establishment, during the thirties, of a dozen Forest Workers Holdings. Each holding consists of a neat, grey-walled, slate-roofed bungalow with a plot of land attached, and the occupiers are guaranteed 150 days work in the forest each year, though in practice most of them are now full-time employees. The second stage has been the erection, in 1950, of a group of twelve pre-fabricated timber houses at Keip, an excellent site beside the railway about half a mile south of Strathyre station. These houses, which were imported in sections from Sweden, are well-designed and commodious, and give a good example of the uses of timber for house building; even the roofs are covered with wooden shingles. A view of some of these houses appears on the inside of the front cover.

At the present time, some of the forest workmen are accommodated in hostels, but it is hoped that they will all be provided with houses as soon as possible. As a step in this direction, twelve more houses have been planned for early erection, while it is expected that over a hundred will eventually be required.

This gives some indication of the possibilities of forestry as a means of providing productive employment, not only at Strathyre, but in many other nearly deserted glens of the Highlands. Moreover, the timber that these workers produce will go out in a steady stream, easing the shortages which now restrict us, and lessening



Thinning a young plantation of Japanese larch

the dependence of coal-mining and industry on imported supplies.

The Forester in charge of Strathyre Forest, and his assistants, all live on the spot. The Forest office is situated in the nursery, beside the main road at Strathyre village, and visitors wishing to learn more about the work in progress may make enquiries there. Strathyre forms part of the charge of a District Officer, responsible to the Conservator of Forests for West Scotland, whose office is at Glasgow.

HISTORY AND TRADITION

After this review of the work of afforestation in Strathyre, let us take a brief glance at the local history. This begins in the shadowy past with the arrival of a Roman military force at Callander, where they built a small camp at Bochastle, to guard the plain against Celtic tribesmen emerging from the Highlands through the Pass of Leny. Subsequently, so the tradition runs, early Christian saints of the Celtic church, or their missionaries, were active in the neighbourhood. Kilmahog, just south of the Forest, is named after St. Chug, while beside the main road at the south end of



The view south from the Braes of Balquhidder, with the River Balvaig winding down towards Strathyre village and Loch Lubnaig. Beinn Each stands on the left, and Ardnandave Hill is seen to the right

Loch Lubnaig one may still see the ruins of an ancient chapel and burial ground dedicated to St. Bride (circa 500 A.D.); further north, near Balquhidder, one Angus is said to have preached to his flock. But although there was some settlement in this rugged countryside from these early times, much of it remained forest and waste. Ardochullarie, now a well wooded private estate adjoining Strathyre Forest, was once a hunting lodge of the Scottish kings, who followed the chase in the royal forest of Glenartney not far away, and lands in Balquhidder parish were in crown ownership in the time of James IV, when they formed part of a dowry given to the Welsh princess, Margaret Tudor.

At a later period, the land was occupied by several different clans, of whom the Maclarens or Maclaurins, and the MacGregors, were the most prominent, though both names are somewhat uncommon in the district today. There were also many Fergusons and Stewarts, surnames which, on the other hand, remain common.

A feud of long-standing existed between the Maclarens, who claimed to have received their lands from Kenneth III in 850 A.D.,

and the MacGregors, who were later arrivals. The Maclarens claimed the right to be seated before all others in the kirk of Balquhiddel, and in a dispute concerning this, the vicar, Sir John Maclaurin, was slain in 1532. In 1558 a number of Maclarens were killed in a fight with Macgregors from Glen Dochart, and during the seventeenth century these MacGregors, although officially outlawed in 1563, appear to have been the more powerful clan. Robert MacGregor, famous in history and fiction as Rob Roy, was born in Callander parish in 1671, and after a turbulent career as cattle-dealer, freebooter, and leader of irregular armed forces, died peacefully at the farmstead of Inverlochlarig Beg, above Balquhiddel, in 1734. His grave, and those of his wife Helen and sons Coll and Robert, may still be seen in the kirkyard; one of the gravestones is of contemporary date and bears the arms of the clan—a pine tree torn up by the roots and a crown pierced by a sword, but the other two stones bear carvings of some earlier period.

Sir Walter Scott, who first visited the district as a lawyer to serve a writ of ejectment on a Maclaren of Inverenty in 1790, made this countryside famous with his romantic novel *Rob Roy*, published in 1818; Strathyre is also mentioned in his poem *The Lady of the Lake* (1810). Stevenson made Balquhiddel the scene of the meeting between Alan Breck, David Balfour, and Robin Oig MacGregor, a son of Rob Roy, in *Kidnapped*, and the sequel to this novel, *Catriona*, is largely concerned with the fortunes of another son, James More MacGregor of Balquhiddel. The poet Tannahill sang the praises of this countryside in his *Braes of Balquhiddel*; which opens:

“Let us go, lassie, go,
Tae the braes o Balquhither,
Whar the blaeberries grow
Mang the bonny Heilan heather;
Whar the deer and the rac
Lichtly bounding taegither,
Sport the lang simmer day
On the braes o Balquhither”

and today the fame of the district is spread by the popular modern song entitled *Bonny Strathyre*, sung to the old air *Taymouth*.

William Wordsworth, who visited this countryside in company with his sister Dorothy in 1803, was inspired to write a poem on

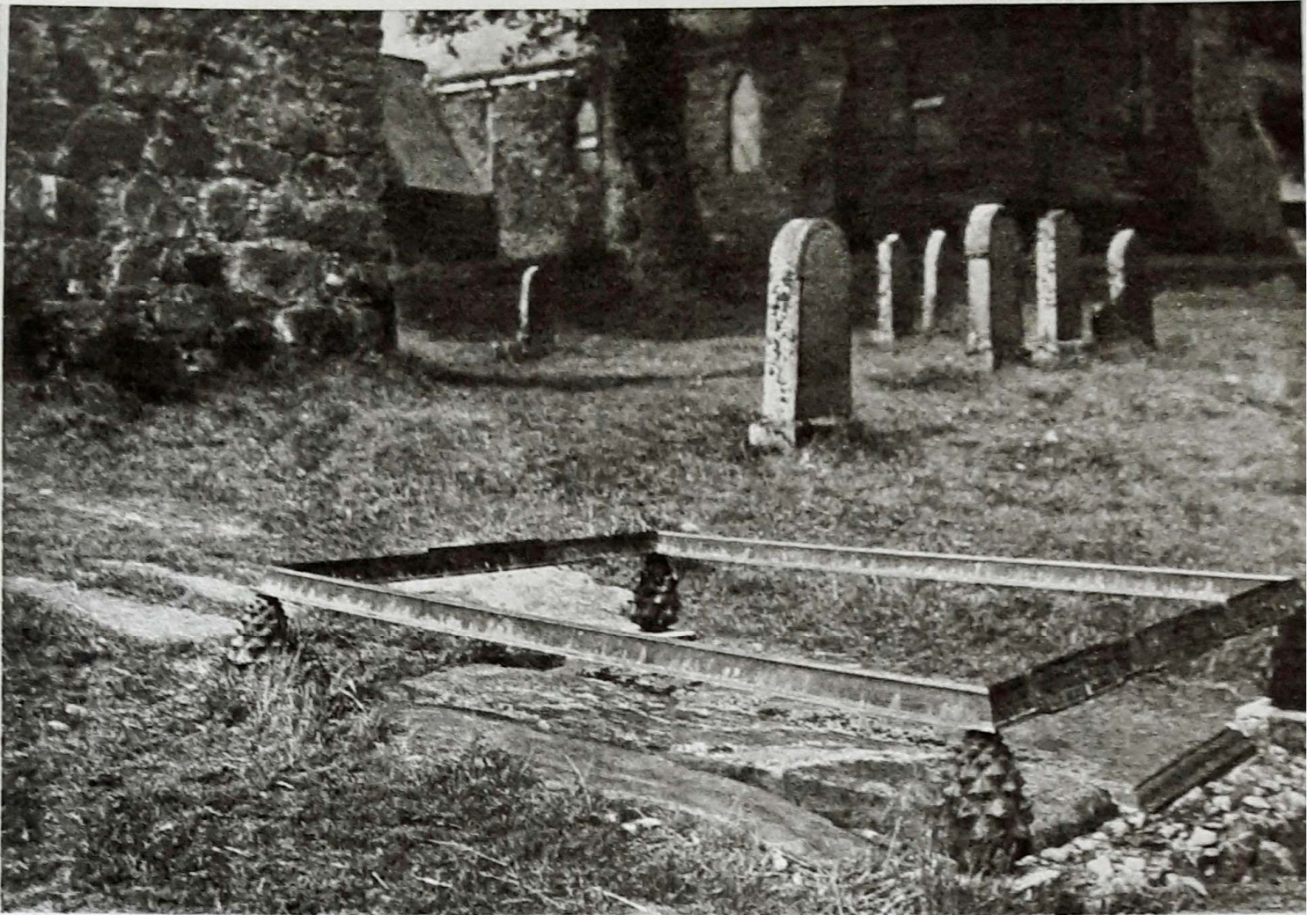
Rob Roy's Grave, and also the exquisite lyric entitled *The Solitary Reaper*, the opening verse of which runs:

“Behold her single in the field,
Yon solitary Highland Lass
Reaping and singing to herself—
Stop here, or gently pass.
Alone she cuts and binds the grain,
and sings a melancholy strain,
Oh! listen, for the Vale profound
Is overflowing with the sound.”

Other literary associations are with Robert Kirk, minister of Balquhiddar from 1669 to 1685, who translated the psalms into Gaelic verse and rendered the Irish Gaelic Bible of 1587 into Scottish Gaelic lettering; and with Dugald Buchanan, greatest of Scottish Gaelic religious poets, who was born at Balquhiddar in 1716. Little Gaelic is now spoken in the neighbourhood, though every natural feature has its Gaelic place name. Balquhiddar is a rendering of *baile cuile thir*, the township of the back-lying country; while Loch Voil is *loch a bheothuil*, the loch of the quick-running flood.

Anyone visiting Balquhiddar today, and seeing only the peaceful kirk and kirkyard overlooking Loch Voil, with but a cluster of cottages beside it and a few sheep farms scattered up the long green glen, may well wonder how this lovely but deserted spot came to be so famous in history and literature. Yet in 1631, when the kirk that preceded the present structure was built, it was centrally placed for the needs of the inhabitants and could seat 600 people; in the Braes district, to the west, there were then “fifty tenants, with a cottar perhaps under every tenant”. Traces of this intensive settlement and cultivation may still be seen, in the form of “lazy beds” where crops were raised on the hillsides, and peat roads climbing the slopes to the mosses at the higher levels. Some of the men no doubt found employment on the great drove road that led from the Highlands through Strathyre to the Lowland cattle fairs. In the eighteenth century military roads were built by Highland regiments, who have left inscriptions on several wayside stones; but later, with the advent of the big sheep farms, the population fell rapidly. By 1837 there were only three tenants and one cottar living to the west of Balquhiddar, and about this period also there was considerable emigration to Nova Scotia.

Subsequently the construction of the railway and the development



**The graves of Rob Roy MacGregor, his wife Helen, and his sons Coll and Robert,
in the kirkyard of Balquhidder**

of a tourist trade provided work for some of those who remained, but no activity except forestry is likely to employ substantial numbers of people on these magnificent but infertile hills. It is significant that, within twenty years of the commencement of this afforestation scheme, it has been found necessary to build new settlements and to plan ahead for a substantial increase in the population.

FACTS AND FIGURES

AREAS

Total area of Strathyre Forest, 1950: 10,461 acres.

Area classified as "plantable" in 1950: 5,551 acres.

Virtually the whole of this plantable area was planted by the spring of 1951.

The main section has a total length of 7½ miles, and an average width of two miles: the Tulloch section is about two miles square.

EMPLOYMENT AND HOUSING

Number employed in 1950				57 workers
Estimated employment by 1970				150 workers
Houses occupied or in course of construction, 1950				24 houses
Estimated requirement by 1970				115 houses

ELEVATIONS ABOVE SEA LEVEL

Lowest				397 feet (Loch Lubnaig)
Highest				2,873 feet (Ben Ledi)
Highest for normal planting				1,700 feet (Kirkton Glen)

ANNUAL RAINFALL

60 to 80 inches, varying in different parts of the forest.

ORDNANCE SURVEY MAP

No. 62 in the Popular Edition for Scotland, entitled "Loch Katrine and Loch Earn".

DISTANCES

Strathyre village, in the heart of the forest, is eight miles from Callander, twenty four from Stirling, fifty three from Glasgow, and sixty from Edinburgh.

PUBLIC TRANSPORT

Strathyre Forest is traversed by the British Railways main line from Stirling to Oban, which has convenient connections with Edinburgh, Glasgow and the South. A branch line from Balquhiddy runs to Perth via Crieff. The best station for approaching the main section of the forest is Strathyre, but certain trains also stop, on due notice, at Kingshouse Platform, which is nearer to Balquhiddy and the Tulloch section.

A motor bus service, operated by Messrs. Alexanders, runs from Callander through Strathyre and Lochearnhead to Crieff; both



Climbers approaching the summit of Ben Ledi

Callander and Crieff can readily be reached by connecting services from other districts.

ACCOMMODATION

There are hotels at Strathyre, Balquhiddy, Kingshouse, Lochearnhead, and Callander, all within walking distance of the forest. There is a Youth Hostel at Monachylemore, beside Loch Voil and close to Balquhiddy and the Tulloch section of the Forest.

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