GILLFIELD THE STUDY OF A WOOD



Submitted for the University of Sheffield Diploma in Environmental Studies 1974-5

D. R. Warburton, Totley (Thornbridge College of Education)

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Editor: The species names given above are those in current use when Bob completed this thesis in 1975. Since then, several changes have been made with some genera and/or species names. To maintain the relevance of this work today new scientific names have been added and placed in square brackets [].

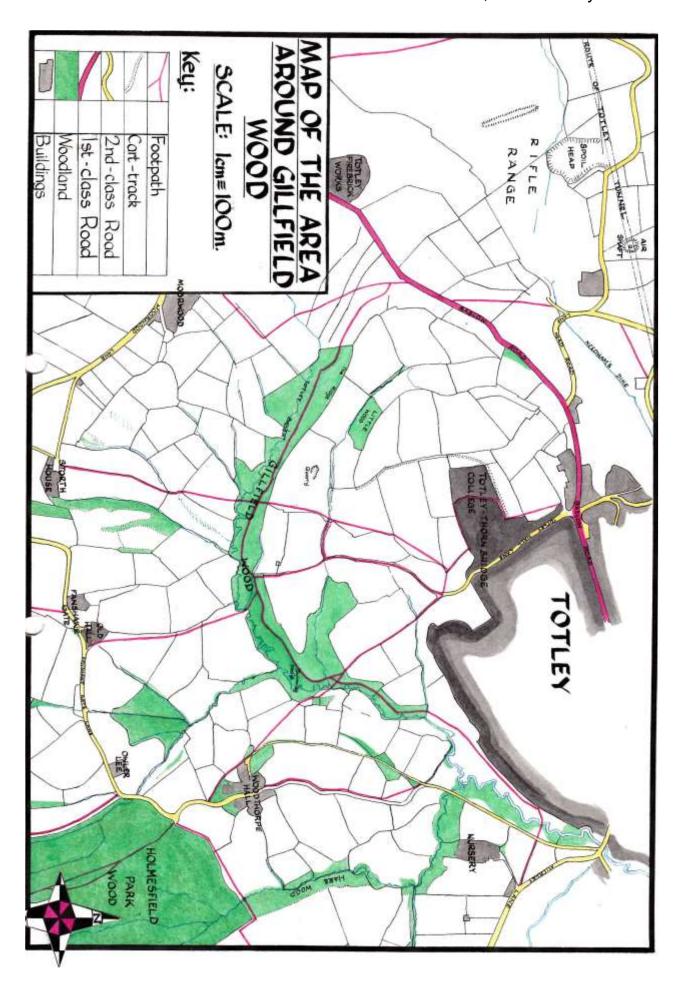
Few other changes and certainly very minor ones have been made throughout Bob's diploma to preserve his work in recognition of how he wrote. The main changes include:

Changes of position of certain photographs or charts to align better with the text. This led to changes in the original page numbering.

Paul Hancock, December 2020

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INTRODUCTION

Gillfield Wood is an area of mixed woodland, mainly deciduous, situated to the south of the parish of Totley. The wood is about a half-mile from the nearest houses, and a quarter of a mile from the nearest road, Baslow Road.

The southern boundary of the wood is formed by the stream known as Totley Brook, a tributary of the River Sheaf. The northern boundary coincides with the top of a fairly steep scarp slope on which the wood is situated, and this is marked by a low dry-stone wall towards the western end. The total area of the wood is about thirty acres, and it is roughly crescentic in shape, facing south, with the eastern and western tips facing southeast and south-west, respectively.

The two main points of entry are gates at the extremities of the wood, and these are connected by a broad track, which runs the full length of the wooded area. The path is used frequently by walkers, picnickers, and vehicles belonging to the landowners. Three other footpaths cross the wood; from Totley to Holmesfield; Fanshawe Gate; and to Storth House (the last two are old houses about a half-mile to the south). Although these footpaths are used regularly, people seem to keep to the paths, and cause little or no interference or damage to the flora and fauna. The only exceptions to this rule occur in September and October, when many visitors move through the wood picking Blackberries, and just before Christmas, when the Holly berries are the target.

The wood is in the process of reaching maturity, and most of the trees are less than fifteen feet high. The numerically dominant trees are: Red Oak (*Quercus borealis* [*Quercus rubra*]), Larch (*Larix spp¹*), Sycamore (*Acer pseudoplatanus*), and Sessile Oak (*Q. petraea*) in that order. There are also large specimens of Beech (*Fagus sylvatica*), Ash (*Fraxinus excelsior*) and Alder (*Alnus glutinosa*), but these are survivors of previous fellings and are restricted in numbers and distribution.

Gillfield Wood is now owned by Sheffield Corporation and is managed by the Agriculture Section of the Estates Department. It was purchased on December 20th, 1945, along with the rest of the estate of W.A. Milner, the last owner of Totley Hall. The land was bought as part of general Corporation policy so that they would be able to direct more easily the form of development which may subsequently take place.

At the time of purchase, the wood was in a partly felled state, some trees having been felled during the Second World War, especially the years 1939-40. It was the intention of the Corporation in 1945 to fell about 80% of the remaining timber, leaving the rest to ease any public outcry. 'The residents of Totley, however, felled the remaining 20%, so that, in effect, the wood was clear-felled by 1946. There is a small remnant of the previous planting (see section on Mature Trees, page 55), and also an area of oak woodland which was at the sapling stage in 1945 and hence not felled at that time. This

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¹ Larix decidua (European Larch), L. kaempferi (Japanese Larch) and L. eurolepis (a hybrid). See also page 36

latter remnant is now about twenty feet in height and is situated towards the western end of the wood, near the ridge.

The bulk of the trees which were felled were sold to private contractors as standing timber and were subsequently used as mining timber. The smaller wood (coppicing) was used mainly for fencing by the Corporation.

The composition of the wood immediately prior to felling in 1945, as far as can be ascertained, was predominantly Oak, with some very large Beech, with a lesser quantity of Ash, Elm, Alder and Hornbeam. A few of these larger trees escaped felling and can be seen along the northern and southern boundaries.

The replanting was carried out on commercial forestry principles, and the following trees were planted:

Oak (species unspecified)

Red Oak (Quercus borealis [Quercus rubra])

Larch (*Larix decidua*)

Sycamore (*Acer pseudoplatanus*)

Beech (Fagus sylvestris)

Pine (unspecified)

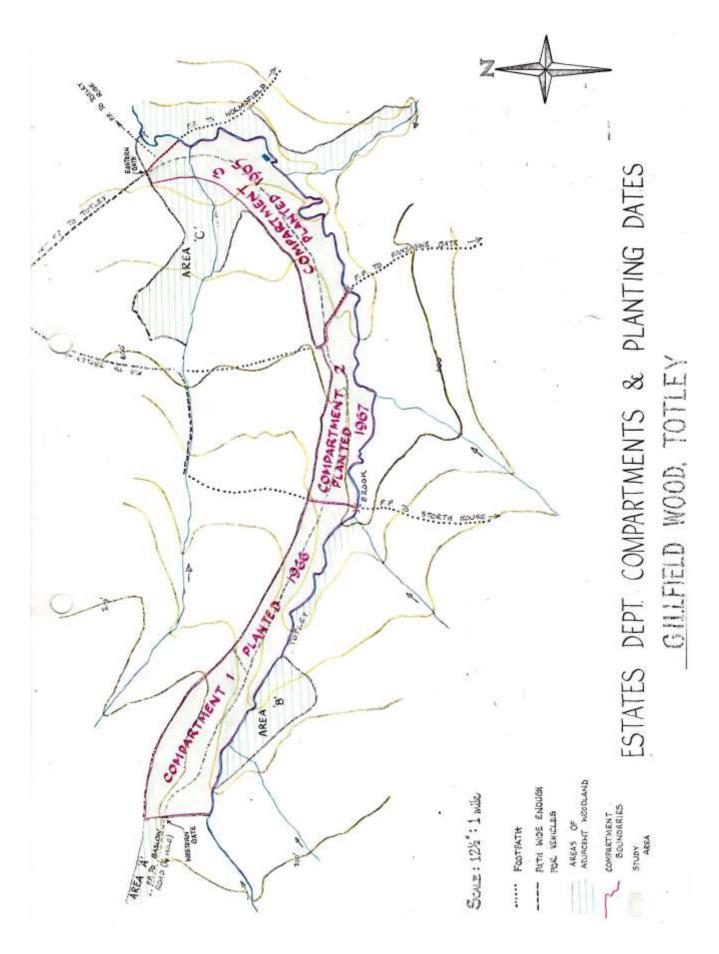
The plantings were done in three main phases, according to the compartment of the wood (see accompanying diagram page 4).

PREFACE

The aim of this account is to report upon a broad, inter-disciplinary investigation of a small area of woodland in Totley. I hope that all aspects of a woodland survey will be covered, but because of the limited time available, this work must be completed some time after it is due for assessment.

My investigation will be into the twenty-one acres of mixed woodland known as Gillfield Wood, situated some three-quarters of a mile south of the centre of the old village of Totley. The historical evidence of the wood's existence will be explored, and the visual evidence of any of man's activities in the wood will be as fully documented as possible. The geological features of the area will be studied, and their fundamental influence and relevance to the landscape, flora and fauna will be examined. The tree population will be investigated, although the great majority of trees owe their existence to recent plantings. The flora and fauna will be examined, with a more detailed investigation being carried out where this seems appropriate.

Finally, the present use being made of the wood, its value as a local amenity, and possible suggestions for its future use or development, will be examined in the light of facts obtained during the study.



Compartment 1 (10 acres) - 1966

Compartment 2 (5 acres) - 1967

Compartment 3 (6 acres) - 1965

In the opinion of the Estates Department, any tree over twenty feet in height is a relic of the pre-1945 woodland. This category includes several Wych Elm (*Ulmus glabra*); Alders (*Alnus glutinosa*); Sessile Oaks (*Quercus petraea*); Silver Birch (*Betula pendula*); and Scots Pine (*Pinus sylvestris*). The wood's future is still measured by the owners in terms of its commercial value as a mature wood, but increasingly, its role as an amenity is receiving more emphasis.

The area of woodland to be studied is not the whole of Gillfield Wood; three adjacent areas have been excluded, partly because their recent history is dissimilar to the greater part of the wood, but also because they are physically separated from the study area.

Area 'A' is an area of new woodland and is made up entirely of coniferous trees. It is fenced off from the fields and is separated from the remainder of Gillfield Wood by a low dry-stone wall - the wood's original boundary. This sector has been planted with Larch, which although still quite small, have grown to form an almost impenetrable tangle with the Blackberry plants which line the path from the wood, across to Baslow Road.

The predominant species in Area 'B' is Sessile Oak (*Quercus petraea*). This is a small area of old, possibly relict woodland, with many trees present which have no commercial value. This sector has been studied as a contrast area, and has proved useful in this respect, since there appear to be species present in Area 'B' which are very rare or even absent in the main study area. There is no evidence that any forestry management has ever been practiced here and dead and rotting trees are to be found in varying states of decay. This section of the wood is separated from the rest by Totley Brook.

Area 'C' is a quite extensive area of mixed woodland with some very large mature trees and many saplings, mainly Sycamore. It was leased out by the Sheffield Corporation with the intention of this part being maintained by a private tenant. This venture appears to have been aborted, since no work has been done here for years. It has always been out-of-bounds to the general public, having been used for pheasant rearing by the previous owner. This interesting area is still fenced off and visitors are discouraged by the use of barbed wire to cordon this portion off from the main wood.

An additional reason for limiting the size of the study is the sheer size, which would have made a detailed account of Gillfield Wood almost impossible in the time available.

THE STUDY AREA

Gillfield Wood is almost three-quarters of a mile in length and averages about one hundred yards in width. It is surrounded by fields which at present are used only as pasture for cattle. It is a quiet secluded wood, visited only by walkers or fruit-gatherers in the autumn months. Although extensive planting took place only some eight years ago, there is little feeling of 'artificiality' since there are enough large deciduous trees to break up the line of the horizon from any part within the wood. The broad track mentioned in the Introduction is, for the most part, simply a flat grassy path, although in some places the ubiquitous limestone chippings have been laid down.

PLATE 1: Main path looking East

Taken November 1974. Note young Larch to the left of the main path and the heavy Bracken layer. Trees in the foreground are Oak and Sycamore. The slope of the land at this point is from left to right and the stream lies some 60 metres in this direction. The width of the path at this point is about 2m.

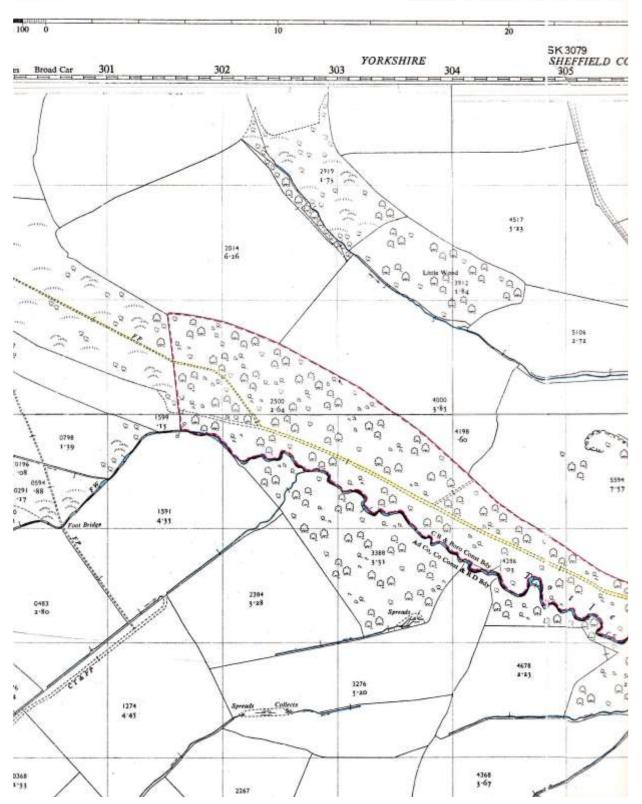


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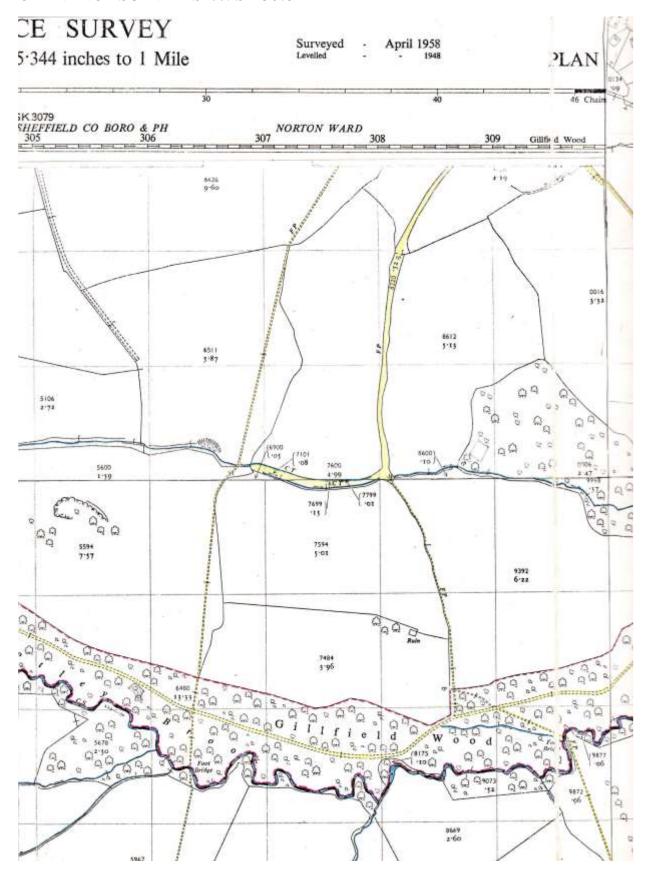
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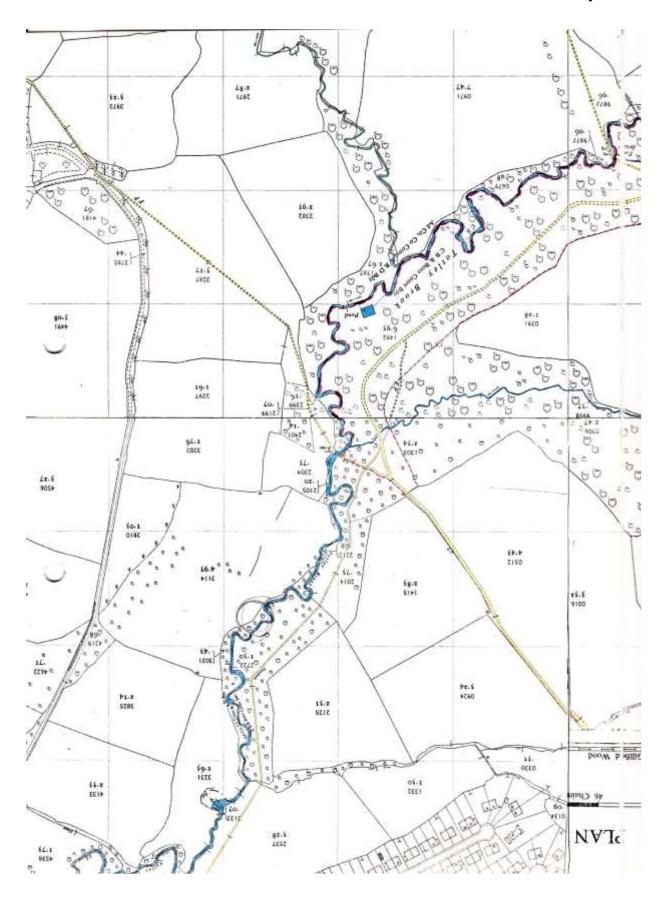


PLATE 2: Panoramic View of Gillfield Wood (October 1974



The central portion of this panorama was taken looking due North, and the crescentic shape of the wood can be clearly seen from the series of photographs. The slope of the land is quite evident and the main drainage and the main drainage streams joining Totley Brook can be seen coming from the left of the photograph (these are marked by lines of trees and bushes – especially noticeable is the stream in the immediate left foreground). The high ground of Totley Moors can be seen in the far left of the frame. The general drainage pattern of the area can be appreciated from this view as it follows the general sweep of the land from the left to the bottom of the steep slope of Bradway Bank towards the right of the picture. The base of this slope marks the course of the River Sheaf, of which Totley Brook is a tributary.

The proximity of the suburban area of Totley can be appreciated from the pale buildings of Totley-Thornbridge College in the centre-middle distance. The housing estates of Totley and then Bradway can be seen as one looks right from the college buildings. These are

amongst the most southerly of Sheffield's districts and, indeed, the county boundary follows the bank of Totley Brook which is marked by the line of trees in the foreground and leading off towards the distance at the left-hand side of the photograph.

The wood appears, from this view, to be a quite mature stretch of woodland. This is, however, quite misleading. This effect is caused by the large mature trees which line both banks of Totley Brook and the large trees on the ridge along the northern border of Sheaf and its tributaries can be seen leading towards the centre of Sheffield near the right-hand side of the frame.

The western end of the main path is shown in PLATE 3 where the gate and stile can be seen quite clearly. This is a fairly recent innovation, since the original gate and stile are to be found some 30 metres to the left of the present ones. These old exits can be seen in Plate 4.

The original stepped stile and gateway were in use until 1943 and lead to Baslow Road via a long straight track. In that year, the Ministry of Agriculture proposed to divert the path because the field was to be ploughed and re-seeded. The Ministry proposed that the path should be diverted to the top of the bank beside the top field wall, and then down again along the wood's western boundary wall. This plan was resisted by the Ramblers and was not implemented. It was then proposed to make the diversion higher up Baslow Road near the Fire Brick Works - this proposal was also resisted and was not carried out. The field was not re-seeded. Gillfield Wood was cut down in the winter of 1943/4 and timber lorries came up and down the long narrow field which as a result, became impassable. The new footpath and gate were then transferred to the higher field and the old gate was left unused.

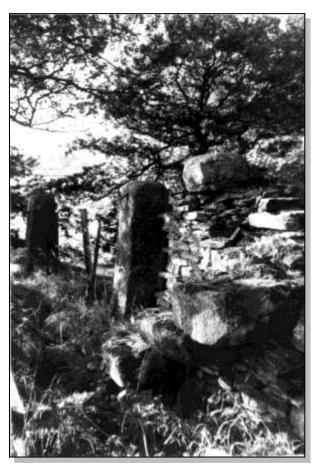


PLATE 3: Western gate and stile, October 1974

The path to Baslow Road leads off to the left of the picture. The original drystone boundary wall can be seen at each side of the new gateway.

Trees present in this photograph are Rowan (*Sorbus aucuparia*) and Hawthorn (*Crataegus monogyna*), to the left and right of the gate respectively. Trees visible through the gateway are Oak (*Quercus petraea*), whilst the saplings in the centre of the photograph are Red Oak (*Q. borealis* [*Q. rubra*]) and Sycamore (*Acer pseudoplatanus*).

PLATE 4: Old entrance and stile, October 1974



This is the original gate and stile referred to previously. Note the form of the stile which is an integral part of the wall. The original path in the wood leading to the gate is now very overgrown and has been planted with saplings. It is, however, still discernible.

PLATE 5: View of the western end of Gillfield Wood, October 1974

This is a broad view of the whole area concerned with the two previous photographs. This shot was taken from Broad Carr Meadow facing south-east. In the centre, the new gateway can be seen, whilst the original gateway is partially obscured by the trees at the

extreme right. The truth of these reports is reflected in the marked shortness of the grass at the bottom right-hand corner of the frame - this follows the route of the old pathway. If the old path is projected across Baslow Road on a map, it leads directly to the site of the original Fire Brick Works.

