MANOR VALE WOODLAND, KIRKBYMOORSIDE

Management Plan

Original Management Plan Created 1999
Reviewed: 02.02.2011
Revised: 05.09.2024
Adopted: 16.09.2024 Minute 24068

This page is intentionally blank

Contents

Part 1: Site Description 5
1.1 Location 5
1.2 Summary description 5
1.3 Tenure, management arrangements, rights of way and easements. 5
1.4 Map coverage 6
Part 2: Management Plan 7
2.1 Management objectives 7
2.2 Constraints on management 7
2.3 Management programme 8
2.3.1 Recent management 8
2.3.2 Future management 9
2.3.2.1 Annual tasks 9
2.3.2.2 Occasional tasks 10
2.3.2.3 Scheduled tasks 10
2.3.2.4 Volunteer Activities 10
2.4 Frequently asked questions: 11
Part 3. Environmental information 12
3.1 Physical environment 12
3.2 Ecology 12
3.2.1 Vegetation 12
3.2.2 Plant communities 13
3.2.3 Fauna 14
3.3 Archaeology and land use history. 14
Part 4. Evaluation 16
4.1 Conservation status 16
4.1.1 Nature conservation 16
4.1.2 Archaeology 16
4.1.3 Evaluation of nature conservation interest 16
4.1.4 Size 16
4.1.5 Diversity 16
4.1.6 Naturalness 17
4.1.7 Rarity 18
4.1.8 Fragility 18
4.1.9 Typicalness 19
4.2 Recorded history 19
4.3 Position in ecological units 19
4.4 Potential value 20
4.5 References 20
Appendix 1 Flowering plants and ferns recorded at Manor Vale, Kirkbymoorside1998-99 21
Appendix 2 Records compiled from 1983 to 1995 covering a range of disciplines 24
Appendix 3 Maps 31

This page is intentionally blank

Part 1: Site Description

1.1 Location

Manor Vale is situated on the northern edge of Kirkbymoorside at National Grid Reference SE 693 872. It is reached from Dale End to the south, passing the site of the former North Yorkshire Council Highways Depot. Footpaths from Gillamoor Road and Castlegate Lane lead into the site. Map 1 (Appendix 3) shows the site boundaries.

Manor Vale lies entirely in the Civil Parish of Kirkbymoorside in the district of Ryedale, North Yorkshire.

North Yorkshire Council is the relevant authority in relation to planning (formally Ryedale District Council) and Public Rights of Way.

1.2 Summary description

Manor Vale is a narrow, Y-shaped dry valley cut into the Jurassic strata of the Tabular Hills which form the southern fringe of the North York Moors. It is located at the northern edge of Kirkbymoorside, within easy reach of the town centre.

The limestone slopes of the Vale support semi-natural ash woodland with characteristic plants including field maple, wych elm, dog's mercury, wood speedwell, wood anemone and primrose. A number of uncommon plants of limestone woodlands occur including green hellebore, toothwort and lily-of-the-valley. Two areas of more acidic woodland featuring species such as oak, rowan, silver birch, bilberry and greater woodrush mark outcrops of sandstone. Small areas of limestone grassland can be found at Low Knoll and along the break of slope at the eastern edge of the site.

The site supports a range of birds characteristic of mature broadleaved woodland including Redstart and Nuthatch. Insects include the very rare flower beetle Oedemera virescens, a species associated with ancient woodland and parkland on the southern fringes of the North York Moors.

See Appendix 1and 2 for detailed information on the flora and fauna of Manor Vale Woodland.

Manor Vale was formerly part of a mediaeval deer park. The remains of a wall and Scheduled Ancient Monument, are located in the south-east corner of the site adjacent to Castlegate Lane.

Manor Vale is extensively used by the local community for quiet recreation and has open public access. It is owned and managed by Kirkbymoorside Town Council.

1.3 Tenure, management arrangements, rights of way and easements.

The site is owned in freehold by Kirkbymoorside Town Council, having been purchased from Mr. J. H. Holt in April 1993 with grant aid from Ryedale District Council and North Yorkshire County Council.

Following acquisition of the site, a Management Committee was established comprising representatives of Kirkbymoorside Town Council, Ryedale District Council (now North Yorkshire Council since devolution in 2022), Ryedale Naturalists' Society and Ravenswick Estates. Other members may be co-opted by the committee as required. An initial draft management plan was produced in 1993 which divided the wood into three compartments (see Maps at Appendix 3). Compartment 1 is the area west of the road, Compartment 2 is the area East of the road and

Compartment 3 including Low Knoll. To avoid confusion this report uses the same compartment boundaries.

The sporting rights to the wood are held by the Ravenswick Estate. Kirkbymoorside Golf Club holds responsibility for the upkeep of the road and, by mutual agreement, periodic cutting of the road verges. Short-term use by the club of a small area of open ground for overflow car parking has been agreed by the Manor Vale Management Committee.

The site is not subject to a Woodland Grant Scheme or other management agreement.
Public Rights of Way follow the road from Dale End to the golf club, the track through Low Knoll and a
path along the eastern boundary of the wood. In practice, there is open public access to the site throughout the year.

Easements for the utilities supplying the golf club are shown on map 3 (Appendix 3).

1.4 Map coverage

Ordnance Survey 1: 10,000 Sheet SE 68 NE
Ordnance Survey 1: 50,000 Sheet 100 (Malton and Pickering)
Geological Survey of England and Wales: 1: 50,000 – Sheet 53 (Pickering)

Part 2: Management Plan

2.1 Management objectives

Objectives of management are:

- To manage Manor Vale Wood for the enjoyment of the local community and as a wildlife habitat.
- To encourage community involvement in the management of the site and to promote public interest in the history, heritage and wildlife of Manor Vale, including educational use.
- To maintain the natural character of Manor Vale Wood.
- To maintain and promote biodiversity.
- To conserve scarce or threatened species inhabiting the site.

2.2 Constraints on management

The principal factors constraining management of the site include:

A. Availability of manpower, funding and resources.

Support from Ryedale District Council (now North Yorkshire Council since devolution in 2022) was made available through the design and funding of display boards, employment of the British Trust for Conservation Volunteers to undertake footpath and woodland management work and ongoing liaison with the Management Committee. As a site of district nature conservation importance, organisational support and modest funds may be available from the County Council for management projects but these are constrained by annual budgets and staff time. A small annual budget is allocated by Kirkbymoorside Town Council, the amount varying from year to year.

Due to these constraints, funding for more ambitious projects would need to be sought from other sources, e.g. landfill tax funds.

B. Legal liabilities e.g. those arising from the Occupiers' Liability Act regarding public safety, or those arising from wildlife protection legislation.

The main obligation regarding public safety is to deal with dangerous trees adjoining the road and footpaths. The Management Committee has an agreement with Ravenswick Estate to deal with potential hazardous timber and to remove fallen trees causing obstruction.

'Steep drop' signs had been installed to warn of hazardous old quarry cuttings on Low Knoll (Compartment 3).

None of the plants or animals recorded to date from Manor Vale receive special protection under the Wildlife & Countryside Act (1981), although it is likely that some trees contain bat roosts. If this is found to be the case, Schedule 5 of the act applies, and advice must be sought from English Nature before undertaking any work on such trees. In addition, most breeding birds receive general protection under the Act, which requires that reasonable measures be taken to avoid destruction of their nests, eggs or young. For this reason, and as

a matter of good practice, any felling or clearance of trees and shrubs should take place outside the period March to July.

C. Protection of the archaeological interest of the remains of Neville Castle within the site.

Works which may affect the Scheduled Monument, and its setting require consent from the Secretary of State via advice from the County archaeologist (North Yorkshire Council) and/or the local English Heritage Inspector of Ancient Monuments.

D. The location of easements for utilities such as electricity, water and telephones (see Map 3 Appendix 3).

The location of these supplies – and the possible need for repair and maintenance works – should be considered where appropriate. In practice, few foreseeable problems should arise.

It should be noted that lopping of trees along the route of the overhead electricity supply will be required from time to time (this work is usually undertaken by the supply company). This would mainly affect area C, an open glade with a few young trees, and is unlikely to have any detrimental impact.

E. The need to maintain road access for the golf club.

The golf club has responsibility for maintenance of the road and the immediate verge. The Management Committee is responsible for prompt removal of fallen timber which might obstruct the road, and for hazardous trees adjoining the road.

2.3 Management programme

This section summarises the work undertaken to date since the acquisition of the site in 1993 and outlines the management necessary to meet the objectives set out in the preceding section.

2.3.1 Recent management

In 1993, work began to thin encroaching hawthorn, fencing was completed and boundary markers installed, and steps were constructed on a steep section of footpath. Paths were opened up to improve access.

In 1994, a new gate was fitted at the Castlegate entrance to the site and the road verges mown several times.

In 1995, further thinning of the scrub on Low Knoll was undertaken and 'No Tipping' and 'Steep Drop' signs erected by one of the old quarries. Ivy growth on the castle wall was controlled by spraying and cutting the main stems.

In 1996, thinning work continued, and a notice board was erected in February. Two seats, made from timber from a fallen oak tree, were installed and the path at the Castlegate entrance stoned.

In 1997, further thinning was carried out and repairs to the steps were undertaken. Small scale thinning has continued in 1998-99 with scrub cut back from the margins on the limestone grassland area. Gaps in the boundary hedge along the eastern edge of Manor Vale have been planted up and a new gate installed at the Castlegate entrance.

Much of the thinning and footpath work has been undertaken by the British Trust for Conservation Volunteers with participation from members of the Management Committee. The

Ravenswick Estate have also undertaken a considerable amount of thinning, tree safety work and scrub control on behalf of the Management Committee.

Management Committee meetings are normally followed by an inspection of the site to identify any work required.

2.3.2 Future management

Future management needs can be divided into 'routine' annual tasks and more occasional tasks to be undertaken as and when necessary, or as resources allow.

2.3.2.1 Annual tasks

(a) Mowing of limestone grassland in Compartment 3 (area D): 50% should be cut and raked in September each year.

Note: cutting with a reciprocating blade or similar mower will make raking easier. A flail mower should not be used. Prompt removal of cuttings reduces the build-up of nutrients (thus discouraging rank grasses) and prevents smaller wildflowers becoming smothered by the mulch.

(b) The growth of Japanese knotweed should be monitored annually. If there are signs of spread, appropriate steps should be taken to control this invasive species.

Note: Japanese knotweed has established on tipped material on the embankment below the golf club car park in Compartment 2. Cutting and/or herbicide treatment should be considered to prevent further spread.

(c) Cutting of encroaching vegetation along footpaths should be carried out each summer where necessary.

Note: at present footpaths are well used and more or less self-maintaining.

(d) Hazardous timber should be dealt with on an ongoing basis as necessary. An inspection of potentially hazardous timber should be taken annually, and appropriate action taken.

Note: Cross reference with Manor Vale Woodland History and Environment document (Part 4) 'Evaluation of nature conservation interest' in respect of the ecological importance of dead wood and recommendations for its management:

> *Extract of 4.1.6 Naturalness*
> *Trees should be allowed to age naturally since aged trees provide one of the most important habitat features in woodland. The presence of dead and decaying timber is part of this natural process and should not be removed except where it presents a safety hazard. Where removal of hazardous timber is necessary, lopping, crown reduction, pollarding or leaving a standing bole should be considered in preference to felling.*
>
> *Extract of 4.1.7 Rarity*
> *The 'naturalness' of Manor Vale Wood contributes much to the character of the site, its appeal to local people and its value to wildlife. Maintaining its natural qualities should be a key consideration in all management decisions.*

(e) Hawthorn thinning: small-scale thinning of hawthorn in Compartment 2 should be continued each winter, at least for the next few years.

Note: dense, spindly hawthorn thickets have limited wildlife value and prevent re-establishment of a more natural woodland habitat. However, open-grown hawthorns along the rides and woodland edge are very valuable, providing nectar for insects and berries for birds. Old hawthorns may be particularly valuable for lichens, invertebrates etc and should never be removed.

(f) Mowing of the road verges (undertaken by the golf club).

Note: grass cuttings left to mulch down may be contributing to stinging nettle growth at the foot of the slope. The possibility of boxing cuttings should be investigated.

(g) Maintain a record of work undertaken each year.

(h) Reference to the North Yorkshire Council annual Public Rights of Way survey report.

2.3.2.2 Occasional tasks

(a) North Yorkshire Council to maintain and repair public rights of way, steps and stiles as necessary.

(b) Maintenance of public benches throughout the woodland as necessary.

(c) Encourage research into the history of Manor Vale.

(d) Encourage further biodiversity survey and publicise resulting information in an appropriate format as and when necessary.

(e) Cut back encroaching scrub and ash saplings around the margins of limestone grassland in area D as necessary.

(f) Check visibility of information boards.

(g) Periodically request status of the scheduled ancient monument (Neville Castle) from Historic England and report any safety concerns raised directly to them as and when necessary.

(h) Ensure the bridleway is cleared of encroaching growth as and when necessary.

2.3.2.3 Scheduled tasks

Triennial tree safety inspections to be carried out by an independent professional, in line with insurance requirements and good practice.

2.3.2.4 Volunteer Activities

The Town Council encourages agreed work activities that are sympathetic to the environment undertaken by Kirkbymoorside Environment Group and other voluntary organisation. These include:

- Hedge laying
- Haymaking
- Coppicing

2.4 Frequently asked questions:

Q. Why is the felled wood left in situ?

A. Wood decomposition is one of a woodland's essential recycling processes and a natural part of every tree's lifecycle. Dead and decaying wood also provides a nutrient-rich habitat for fungi, a nursery for beetle larvae and a larder for insectivorous birds and other animals.

Q. Why are the brambles not cleared?

A. The bramble is a source of food for many species of insect and mite, with some species feeding exclusively on bramble. The bramble is also important to dormice, which eat their flowers and fruit; they and other animals/birds seek refuge in bramble thickets. Brambles offer protection from grazing/browsing (by deer/rabbits) to young tree seedlings.

Q. Who is responsible for the surfacing of footpaths and bridleways?

A. North Yorkshire Council is the authority responsible for Public Rights of Way (PRoW) which includes footpaths, bridleways, restricted byways and byways open to all traffic. This responsibility includes liaising with landowners to ensure they meet their duties and responsibilities, maintenance of path surfaces, clearing undergrowth from the path surface and improving accessibility where funding is made available.

Q. Why are there no owl boxes in the wood?

A. Owls need nest sites adjacent to open fields in order to have a flight path to their hunting grounds.

Q. Who is responsible for keeping the access road to the golf course and the adjacent verges in good condition?

A. The Golf Club.

Part 3. Environmental information

3.1 Physical environment

Manor Vale is one of a series of valleys cutting north to south through the southern foothills of the North York Moors, known as the Tabular Hills. The underlying rocks are Corallian formations of the Upper Jurassic period, laid down in warm, shallow seas over 150 million years ago (Rayner & Hemingway, 1974). These consist of inter-bedded limestones and sandstones, which can give rise to quite complex stratification of the overlying soils, especially on valley slopes. The vegetation in Manor Vale suggests that the soils are predominantly lime-rich (calcareous) although there are distinct areas on the upper slopes where acidic and lime-deficient soils overlie outcrops of sandstone. Quarried (and natural?) rock exposures occur in several places.

The valley bottom is located at around 80 m. AOD with the top of the slopes at around 110m. AOD.

Mean annual rainfall in this area is around 750-800 mm.

3.2 Ecology

3.2.1 Vegetation

Most of the site supports semi-natural (i.e. unplanted) woodland. Ash is the dominant canopy tree with common oak and wych elm more patchily distributed. Field maple is widely but thinly scattered whilst sycamore is mainly confined to the southern and northern ends of the wood, although saplings occur more widely. Self-sown beech saplings occur very locally. Oak tends to become more frequent towards the top of the valley slopes, often with some holly in the understorey, marking a transition to less lime-rich soils.

The structure of the woodland is variable, ranging from 'high forest' with a continuous canopy of tall trees and little understorey through to shrub-dominated areas and dense stands of young ash. Spindly thickets of even-aged hawthorn at Low Knoll (Compartment 3) probably results from rapid scrub growth following the cessation of grazing. Hazel is locally distributed in the understorey throughout the wood and although there are some large, old specimens there is little indication of past coppice management. Blackthorn and elder occur in places, probably marking areas which have been disturbed.

Dog's mercury is the most abundant herb with wood anemone, pignut, enchanter's nightshade, primrose, wood speedwell, sweet violet and common dog violet found frequently through most of the wood. Ramsons, bluebell, wood sorrel, yellow pimpernel, sanicle, wood melick, wood false-brome and male fern are more localised whilst wild arum, goldilocks, buttercup, early dog violet, herb Robert, hairy St. John's wort, bugle, tussock grass, wood sedge and broad buckler fern occur occasionally.

Other species have a localised but very distinct distribution. Hard shield fern grows almost exclusively in rocky areas on the western side of the valley. Intermediate avens (a hybrid between wood avens and water avens) is locally abundant on damp ground at the foot of the slopes. Early purple orchid appears to be confined to Low Knoll. Lily of the valley, woodruff, green hellebore and toothwort have been recorded from single locations within the site.
Towards the northern end of Compartment 1, there is a marked transition to more acidic woodland on the upper slope (area A on Map 2 Appendix 3). This is characterised by oak, silver birch and rowan with greater woodrush, downy woodrush, wavy hair-grass and bilberry in the field layer. Associated species include bitter vetch, wood sorrel and slender St. John's wort. A massive specimen of sessile oak stands at the edge of the wood.

A second pocket of acidic woodland is located towards the brow of the slope in Compartment 2 (Area E). This comprises a mixture of common oak and silver birch, some holly, honeysuckle, rowan and scattered gorse bushes. The herb flora here includes tormentil, betony, devilsbit scabious, heath bedstraw, slender St. John's wort, bitter vetch and sweet vernal grass.

Small areas of limestone grassland are found adjacent to Low Knoll (within the golf course boundary) and alongside the footpath following the eastern edge of the wood (Area D). An additional area occurs just north of the site boundary, on a bank adjoining to the footpath leading towards High Park Farm. Species characteristic of this type of grassland include lady's bedstraw, cowslip, common birdsfoot trefoil, salad burnet and quaking grass.

A clearing occupies the valley floor at the northern end of Compartment 1 (area C on Map 2 Appendix 3). This supports coarse grassland with cocksfoot, false-oat, tussock grass, hogweed, stinging nettle and spear thistle.

An old hedgerow runs along part of the eastern boundary of the wood, containing wych elm, hazel, field maple, blackthorn, holly, ash and oak.

176 species of flowering plants and ferns have been recorded from Manor Vale in recent years (see Appendix 1).

Mr. D.H. Smith has surveyed the lichen flora of Manor Vale (see Appendix 2 for species lists). No scarce species have been found but a number of interesting epiphytic lichens grow on tree trunks and branches.

3.2.2 Plant communities

The National Vegetation Classification (NVC) provides a standard ecological description of British plant communities (Rodwell, 1991) and is now widely used in site survey and assessment.

The majority of the site supports ash-field maple-dog's mercury woodland, coded W8 in the NVC. This is the typical semi-natural woodland found on freely-draining, lime-rich soils in lowland England. Ancient stands have a characteristically rich flora and have often been managed by coppicing in the past, although there is little evidence of this at Manor Vale.

Area A contains oak-birch-wavy hair grass woodland (W16), a community of well-drained, very acid, nutrient poor soils. This marks an outcrop of sandstone with thin, very lime-deficient soil. Ash and dog's mercury are absent whilst bilberry, wavy hair-grass and sessile oak[1] are particularly characteristic species of this type of woodland. Oak-birch-wavy hair-grass woodland is widespread on steep valley slopes within the North York Moors National Park (Jerram et al, 1998) but of very localised occurrence in lowland Ryedale.

Area E is similar but lacks bilberry and wavy hair-grass; this stand is not easy to place in relation to the National Vegetation Classification.

One massive sessile oak stands at the edge of this area. A brief examination of oaks in the wood as a whole suggests that the majority are common oak, but a proportion are hybrids between the common and sessile species.

3.2.3 Fauna

The 1993 Management Plan lists 38 birds recorded during the preceding ten years and considered to be probable or possible breeders. Many of these are typical woodland species

such as Great Spotted Woodpecker, Tawny Owl, tits and finches. More localised species include Marsh Tit, Nuthatch, Redstart and, most notably, Pied Flycatcher. A further ten species are listed as having been seen in or around the wood but not considered to be breeding (e.g. winter visitors such as Fieldfare and Redwing).

Further survey is required to update this information, and particularly to assess the current status and distribution of the more localised breeding species.

Little information seems to be available on mammals. Roe Deer are reported to pass through occasionally. Species noted in 1998 include Mole, Grey Squirrel, Bank Vole and Rabbit.

Mr. D.H. Smith has compiled species lists for several Orders of invertebrates (see Appendix 2). Most notable amongst these is the flower beetle *Oedemera virescens,* which was collected on buttercup flowers in May 1993.

This is an extremely localised insect with its British stronghold in ancient wood-land in the Jurassic limestone valleys on the southern edge of the North York Moors, between Rievaulx and Pickering (Hyman & Parsons, 1992; Hammond & Crossley, 1996). *Oedemera virescens* is thought to develop as a larva in dead wood, the adults visiting flowers to obtain nectar. The presence of a number of other insects associated with dead wood or ageing trees is noteworthy; these include the Cardinal Beetle, *Pyrochroa serraticornis*, and the Wasp Beetle, *Clytus arietis*.

3.3 Archaeology and land use history.

Archaeological interest centres on the site of Neville Castle, located at the south-eastern edge of Manor Vale (grid. ref. SE 6946 8694). The castle and associated remains were excavated over several seasons between 1962 and 1974 and the findings published (see Dornier, 1967 and Williams, 1977). The later excavations were funded by the Department of the Environment in advance of building development on part of the castle site.

12th Century pottery shards suggest a long history of human occupation of the castle site with a timber-framed hall established there from around 1300. The original buildings were occupied until the late 15th or early 16th Century then demolished to make way for a more substantial hunting lodge.

This lodge, Neville Castle, replaced Stuteville Castle (a moated enclosure on Vivier's Hill, 500 m. to the east) as the seat of Manor of Kirkbymoorside, held by the Neville family. This was a high-status dwelling of domestic rather than defensive or military purpose, and comprised a set of stone buildings surrounding a courtyard.

By around 1600 the castle had fallen into disuse, the seat of the Manor having been transferred to High Hall, some 200 m. to the south. Rimington (1977) states that the castle was dismantled in 1616 to provide building material for High Hall.

Neville Castle was attached to a pre-existing deer park enclosing an area between Park lane and the Gillamoor Road with a perimeter of 3.75km. Low and High Park Farms are reminders of this, the former probably being the original park warden's residence (Rimington, 1977). The presence of a deer park is of considerable ecological as well as historical interest, since these enclosures often protected areas of natural woodland and provided a link between the

prehistoric 'wild wood' and the modern landscape. Manor Vale lay within the park pale (perimeter) and ancient woodland here may be a vestige of the mediaeval landscape.
Oak timber from Kirkbymoorside park was sent to repair Meaux Abbey near Beverley in the early 12th Century. Rimington (1970) mentions that Baldwin de Wake owned the Kirkbymoorside park in the 13th Century with 2 glades kept open for grazing deer.

Century and in 1282 it was said to be "of a legue in circuit and to contain seven score beasts". In 1570, the park was described as adjoining the site of the Neville Castle, being

> "...very well planted with wood and timber, wherein large laundes[2] and is well replenished with fallow deer and containeth in compass two miles and a half in measure and CLXXVII acres, wherein one Keeper, William Bankes, which hath stipend yearly of LX s., VIII d..." (cited in Rimington, 1977)

The park was shown as an enclosure on Saxton's Map of Yorkshire of 1577 and John Speede's map of the North and East Ridings of 1610. By the 17th Century however, most of the park had been turned over to agriculture, presumably coinciding with the dereliction of Neville Castle.

More recent land use does not appear to be well-documented. Quarrying has clearly taken place within Manor Vale and the amount of woodland has probably varied over time. The former County Council highways depot located at the entrance to Manor Vale woodland from Manor Vale Lane, (converted to storage units and office space in 2022) is located in a former quarry cutting. More small-scale quarrying has taken place in the north of the wood.

Photographs of the northern end of the Vale, taken ca. 1911, are on display at Kirkbymoorside Golf Club. At this time the Vale formed part of the course and was open 'park' woodland, presumably grazed by sheep. The photographs show that there was little undergrowth, at least in the northern part of the wood, but some of the mature trees still stand today. This indicates that the wood has not been clear-felled during the present century and there has probably been a long continuity of mature timber habitat.

Part of the site was used by the army during World War II, with Nissen huts present in the early 1940s.

For a period up until the 1960s, part of Manor Vale continued to be grazed by live-stock. Evidence of this can be seen around Low Knoll where there has been dense, even-aged regeneration of thorn scrub after grazing ceased.

Although there are a number of old hazel stools within the wood, there is no evidence of coppicing during the recent history of the site.

Part 4. Evaluation

4.1 Conservation status

4.1.1 Nature conservation

Part of Manor Vale Wood (including Spring Wood to the northwest) is mapped as Ancient Semi-natural (i.e. unplanted) Woodland in English Nature's Ancient Woodland Inventory (Philips, 1994). The whole of Manor Vale can be characterised as ancient semi-natural woodland, although Spring Wood is largely planted with ash, beech and sycamore.

In April 1995, Ryedale District Council included Manor Vale Wood amongst a list of Nature Conservation Sites of District Importance in the draft Ryedale Local Plan. This does not confer statutory legal protection (as in a site of Special Scientific Interest) but Local Plan policies aim to protect such 'second tier' sites against damaging development. These sites also receive priority in terms of practical support for conservation management.

4.1.2 Archaeology

Neville Castle was originally scheduled as an Ancient Monument in December 1962 and this designation was amended in April 1974.

In January 1998, English Heritage proposed amending the Scheduled Monument boundaries to include the exposed mediaeval masonry within Manor Vale. Section 1 of the Ancient Monuments and Archaeological Areas Act (1979) applies.

4.1.3 Evaluation of nature conservation interest

It is useful to evaluate the nature conservation interest of the site in order to identify important features and management objectives. Well-established criteria are set out in A nature conservation review (Ratcliffe, 1977) are followed in this section and their implications for management are discussed. Management recommendations are given in italics.

4.1.4 Size

Small sites may be vulnerable to the effects of neighbouring land use (e.g. intrusion of urban development, drift of agricultural chemicals). At around 6.5 ha., Manor Vale is a relatively small woodland but its location in a valley limits the impact of adjoining land use.

4.1.5 Diversity

For a small woodland site, Manor Vale supports a high diversity of plantlife, with nearly 180 flowering plants and ferns recorded in recent years.

Although most of the woodland is calcareous ash wood (NVC community W8), small areas of acidic woodland, limestone grassland, scrub and the clearing south of Spring Wood add to the diversity of habitat within the site boundaries. There is considerable diversity of woodland structure which reflects the varied landform of Manor Vale and the absence of commercial forestry management, which tends to create uniformity. Important features which contribute to habitat diversity are marked on Map 2 Appendix 3.

The existing range of habitats and vegetation structure should be maintained. This requires minimal management of the woodland, but periodic mowing of the grassland areas is

necessary to prevent these becoming overgrown and eventually reverting to scrub. Occasional cutting or at least removal of invading scrub will be necessary to maintain the open glade below the golf club (Area C).

A small area of open, rocky slope toward the northern end of Compartment 1 (area B on Map 2 Appendix 3) has been identified as supporting a particular diverse flora. Occasional removal of saplings is necessary to maintain this feature.

4.1.6 Naturalness

Ryedale is relatively rich in ancient woodlands (see Weston, 1994) but the majority of these have been replanted with non-indigenous species such as sycamore, beech or conifers, Even in semi-natural woodlands (those where native tree species such as ash or oak predominate), recent management has often resulted in unnatural uniformity, typically with nearly all the trees of a similar age, little variation in canopy structure and very few, in any, old trees. Manor Vale is unusual in that it appears to be relatively natural with no evidence of recent replanting. Important features include:

- a varied age structure (see 1993 Management Plan, p2)
- varied canopy structure
- the presence of old trees and dead wood
- a predominance of indigenous species
- ample natural regeneration of the principal tree and shrub species[3].

Less natural features include an abundance of dense, even-aged hawthorn on Low Knoll (Compartment 3), probably resulting from rapid scrub growth after grazing ceased.

The 'naturalness' of Manor Vale Wood contributes much to the character of the site, its appeal to local people and its value to wildlife. Maintaining its natural qualities should be a key consideration in all management decisions.

Ash regeneration is abundant with holly seedlings locally frequent on the upper slopes. Regeneration of wych elm and oak is localised. Small numbers of saplings or young plants of field maple, hazel, sycamore and beech were noted in 1998.

Large scale felling and replanting is inappropriate and natural regeneration will ensure the continuity of the habitat for the foreseeable future. If natural regeneration of individual species is considered poor, seedlings can be protected with tree tubes or rabbit guards to promote survival, and competing vegetation can be cut back.

At present there is no need for additional planting. If this should be considered necessary in future, transplants from within the site or other local woodlands should be used, or nursery-grown stock of locally-native provenance[4].

Trees should be allowed to age naturally since aged trees provide one of the most important habitats features in woodland. The presence of dead and decaying timber is part of this natural process and should not be removed except where it presents a safety hazard. Where removal of hazardous timber is necessary, lopping, crown reduction, pollarding or leaving a standing bole should be considered in preference to felling.

Thinning of dense hawthorn growth on Low Knoll will help restore a more balanced vegetation structure and allow canopy trees to re-establish as well as benefiting the ground flora. Areas thinned within the past few years are already supporting a rich and attractive ground flora.

Potentially invasive species such as Japanese knotweed, beech and sycamore, which are not indigenous to this site, should not be allowed to spread.

4.1.7 Rarity

None of the flowering plants or ferns recorded from Manor Vale are nationally scarce although lily of the valley is described as rare in the context of the North York Moor National Park (Sykes, 1993). This species, along with sessile oak, green hellebore, toothwort, woodruff, greater woodrush and hard shield fern are uncommon or very local in Ryedale district (outside the National Park).

The beetle *Oedemera virescens* has its British stronghold in old woodland on the southern edge of the North York Moors. This is a 'Red Data Book' species*, classed as Vulnerable (RDB2), i.e. likely to become endangered in Britain if existing populations decline.

The special needs of rare, threatened or declining species should be considered. Oedemera virescens is probably associated with the presence of dead or decaying timber and the adults visit hawthorn blossom and flowers such as buttercups to obtain nectar (Hyman & Parsons, 1992).

Allowing trees to age naturally, retaining dead wood (where safety permits), keeping a fringe of open-grown hawthorn bushes and other flowering shrubs around the woodland edge and maintaining flower-rich glades will benefit this and many other woodland insects.

Imported stock, even of native species, may be unsuited to the local climate, soils, pollinating insects etc. Also, commercially-grown stock is often selected for timber value, uniform growth form or other attributes which are not appropriate to semi-natural woodland.

[*Red Data Books are inventories of rare or threatened species, compiled in Britain by the Joint Nature Conservation Committee.]

4.1.8 Fragility

Woodlands such as Manor Vale with a long continuity of natural vegetation cover, undisturbed by modern forestry practices, are now scarce. Although there are many ancient woods in Ryedale, Manor Vale is one of the few that have not been managed for intensively for timber production.

Clear-felling and replanting, spread of invasive species (e.g. sycamore, Japanese Knotweed) and excessive trampling could all disturb the ecology of the site. However, small scale management (e.g. removal of hazardous trees for safety reasons, thinning of limited areas, clearance of some hawthorn scrub) is beneficial in maintaining open areas and encouraging a diverse vegetation structure. Present levels of recreational use have only a very localised impact and the paths provide open verges used by woodland-edge species.

Large scale management operations are inappropriate on this site. Potentially invasive species should be kept under control. Footpaths should be maintained to encourage use of well-defined routes. Quiet recreation (e.g. walking, dog-exercising) is an important – and welcome – use of the wood but more damaging activities (e.g. mountain biking) should be discouraged.

4.1.9 Typicalness

Manor Vale Wood is fairly typical of semi-natural ash woodland (NVC community W8) in Ryedale. Such woodlands are a very distinctive feature of the limestone valleys on the southern fringe of the North York Moors and make an important contribution to the special landscape character of northern Ryedale.

4.2 Recorded history

The history of Manor Vale is known mainly in relation to the mediaeval deer park, of which it appears to have formed part (see section 1.2.3.). Collation of more recent historical information would be valuable in understanding the heritage of the site and kits evolution as a woodland. This could be used in any interpretive or educational material which might be produced in future.

There seems to be little information on the wildlife of Manor Vale until quite recently, although Henry Baines' Flora of Yorkshire, published in 1840, mentions frog orchid at this locality. This would suggest that there was some open limestone grassland within the site in the early 19th century.

Local naturalists have kept records of wildlife during 1980s and 1990s, which have been compiled by Mr.D.H. Smith (see Appendix 2). Formal vegetation-based surveys have been undertaken in 1989 (Ryedale Phase 1 habitat survey) and 1993 (Ryedale Woodland Survey). Further botanical survey has been carried out during the preparation of this report (see Appendix 1).

> *Research into the history of Manor Vale should be encouraged. Further biological survey should be encouraged to provide additional information on the nature conservation interest of the site, guide management and monitor ecological changes. Specific needs include an up-to-date survey of breeding birds.*

4.3 Position in ecological units

Manor Vale is one of a series of ancient valley woodlands distributed along the southern foothills of the North York Moors. The ecological importance of this can be seen in relation to the distribution of the beetle *Oedemera virescens,* which has its British stronghold in these woodlands. Other sites for this species include Ashberry, Castle Hill, Duncombe Park, Rievaulx Woods, the banks of the River Rye downstream of Helmsley and Gundale near Pickering.

On a more local scale, Manor Vale Wood adjoins Spring Wood as well as small areas of limestone grassland and scrub on the golf course boundaries. These add to the ecological interest and diversity of the site and provide additional areas of semi-natural habitat on its periphery.

In addition, the golf course itself contains extensive areas of limestone grassland, scrub, hedgerows and fragments of ancient woodland which provide valuable wildlife habitats to the north of Manor Vale. A nature conservation plan for the golf course is currently in preparation.

> *Conservation of adjoining areas of semi-natural habitat should be encouraged. Patches of limestone grassland within the golf course boundary at Low Knoll are in urgent need of clearing to prevent scrub invasion.*

Manor Vale is one of a series of valley woodlands in the Helmsley-Pickering area and could provide a model for conservation management of similar sites, e.g. through the Ryedale Biodiversity Action Plan.

4.4 Potential value

This criterion applies mainly to sites where there is potential to restore, re-create or enhance habitats. At Manor Vale, management is mainly concerned with maintaining the existing interest of the site.

4.5 References

BAINES, H. (1840). **The flora of Yorkshire.** Longman & Co.: London.

DORNIER, A.M. (1967). Neville Castle, Kirkbymoorside: excavations 1963 and 1965. Yorkshire Archaeological Journal, **42:** 98-102

HAMMOND, M & CROSSLEY, R. (1992). **The scarce and threatened wildlife of Ryedale: a biodiversity audit.** Report to Ryedale District Council (unpublished).

HYMAN. P.S. & PARSONS, M.S. (1992). **A review of the scarce and threatened Coleoptera of Great Britain.** Vol.1, UK Nature Conservation no.3. Joint Nature Conservation Committee: Peterborough.

JERRAM, R., CLAYDEN, D. & REES, S. (1998). **North York Moors National Park: upland vegetation survey – summary report.** English Nature Research Reports No.245. English Nature: Peterborough.

KIRBY, K.J. & DRAKE, C.M. (1993). **Dead wood matters: the ecology and conservation of saproxylic invertebrates in Britain.** English Nature Science No. 7. English Nature, Peterborough.

NATURE CONSERVANCY COUNCIL (1987). **Site management plans for nature conservation: a working guide.** NCC.

PHILLIPS, P.M. (1994). **Inventory of ancient woodland (provisional), North Yorkshire.** Part III: Ryedale & Scarborough. English Nature: Peterborough.

RATCLIFFE, D.A. (ed) (1977). **A nature conservation review.** Cambridge University Press.

RAYNER, D.H. & HEMINGWAY, J.E. (eds). (1974). **The geology and mineral resources of Yorkshire.** Yorkshire Geological Society.

RIMMINGTON, F.C. (1970). The early deer parks of north-east Yorkshire. Part I: Introduction. Transactions of the Scarborough & District Archaeological Society, **2** (13): 3-16.

RIMMINGTON, F.C. (1977). The early deer parks of north-east Yorkshire. Part II: Catalogue. Transactions of the Scarborough & District Archaeological Society, **3** (20): 31-39.

RODWELL, J.S. (ed) (1991). **British plant communities, 1: woodlands and scrub.** Cambridge University Press: Cambridge.

SYKES, N. (1993). **Wild plants and their habitats in the North York Moors.** North York Moors National Park: Helmsley.

WESTON, A. (1994). **Ryedale ancient woodland survey.** Department of Biology, University of York: TMRU Reports & Papers No. 94/2

WILLIAMS, R.A.H. (1977). An excavation at Neville Castle, Kirkbymoorside, North Yorkshire, 1974. Yorkshire Archaeological Journal, **49**: 87-96

Appendix 1 Flowering plants and ferns recorded at Manor Vale, Kirkbymoorside1998-99

Scientific name	English name	status
Acer campestre	field maple	o
Acer pseudoplatanus	sycamore	l
Achillea millefoleum	yarrow	vl
Aegopodium podagraria	ground elder	l
Agrimonia eupatoria	agrimony	r
Agrostis capillaries	common bent	vl
Agrostis stolonifera	creeping bent	l
Ajuga reptans	bugle	l
Alchemilla filicaulis ssp. vestita	hairy lady's mantle	l
Alchemilla xanthochlora	intermediate lady's mantle	r
Allium ursinum	ramsons	lf
Alopecurus pratensis	meadow foxtail	l
Anemone nemorosa	wood anemone	lf
Anisantha sterilis	baren brome	vl
Anthoxanthum odoratum	sweet vernal grass	l
Anthriscus sylvestris	cow parsley	l
Aphanes arvensis	parsley-piert	vl
Arctium minus	burdock	r
Arenaria serpyllifolia	thyme-leaved sandwort	vl
Arrhenatherum elatius	false-oat	l
Arum maculatum	wild arum	o
Athyrium filix-femina	lady fern	vl
Bellis perennis	daisy	r
Betula pendula	silver birch	l
Brachypodium sylvaticum	wood false-brome	lf
Briza media	quaking grass	l
Bromus hordeaceus	soft brome	r
Bromus ramosus	hairy brome	o
Calystegia sepium	large bindweed	l
Carex flacca	glaucous sedge	vl
Carex sylvatica	wood sedge	l
Centaurea nigra	common knapweed	vl
Cerastium fontanum	common mouse-ear	vl
Chamerion angustifolium	rosebay	l
Circaea lutetiana	enchanter's nightshade	lf
Cirsium arvense	creeping thistle	o
Cirsium palustre	marsh thistle	r
Cirsium vulgare	spear thistle	o
Conopodium majus	pignut	lf
Corylus avellana	hazel	lf
Crataegus monogyna	hawthorn	f/la
Cruciata laevipes	crosswort	l
Cynosurus cristatus	crested dogstail	l
Dactylis glomerata	cocksfoot	l
Deschampsia cespitosa	tussock grass	o
Deschampsia flexuosa	wavy hair-grass	l
Digitalis purpurea	foxglove	r
Dryopteris dilatata	broad buckler fern	l
Dryopteris filix-mas	male fern	lf
Elytrigia repens	couch grass	vl
Epilobium hirsutum	greater willowherb	l
Erophilla verna	whitlow grass	r
Euphrasia nemorosa ag.	eyebright	r
Fagus sylvatica	beech	vl
Fallopia japonica	Japanese knotweed	vl
Festuca gigantea	giant fescue	vl
Festuca ovina	sheep's fescue	r
Festuca rubra	red fescue	l
Filipendula ulmaria	meadowsweet	lf
Fragaria vesca	wild strawberry	o
Fraxinus excelsior	ash	a/ld
Galium aparine	cleavers	o
Galium saxatile	heath bedstraw	vl

Manor Vale Woodland, Kirkbymoorside

Galium verum	lady's bedstraw	l
Geranium pratense	meadow cranesbill	l
Geranium robertianum	herb Robert	o
Geum urbanum	wood avens	lf
Geum x intermedium	hybrid avens	lf
Glechoma hederacea	ground ivy	l
Hedera helix	ivy	la
Helianthemum nummularium	common rockrose	r
Helleborus viridis	green hellebore	r
Heracleum sphondylium	hogweed	lf
Holcus lanatus	Yorkshire fog	l
Holcus mollis	creeping soft-grass	vl
Hyacinthoides non-scripta	bluebell	lf
Hypericum hirsutum	hairy St John's wort	l
Hypericum pulchrum	slender St John's wort	vl
Ilex aquifolium	holly	l
Lamium album	white deadnettle	r
Lapsana communis	nipplewort	o
Lathraea squammaria	toothwort	r
Lathyrus montanus	bitter vetch	vl
Lathyrus pratensis	meadow vetchling	vl
Lonicera periclymenum	honeysuckle	l
Lotus corniculatus	common birdsfoot trefoil	l
Luzula campestris	field woodrush	r
Luzula pilosa	downy woodrush	l
Luzula sylvatica	greater woodrush	la
Lysmachia nemorum	yellow pimpernel	o
Malus sp.	apple	r
Matricaria discoides	pineapple weed	r
Medicago lupulina	black medick	r
Melica uniflora	wood melick	l
Mercurialis perennis	dog's mercury	a
Mycelis muralis	wall lettuce	r
Myosotis arvensis	field forget-me-not	r
Myosotis sylvatica	wood forget-me-not	r
Oxalis acetosella	wood sorrel	l
Petasites hybridus	butterbur	vl
Phleum pratense	timothy	r
Pilosella officinarum	mouse-ear hawkweed	vl
Plantago lanceolata	ribwort	vl
Plantago major	greater plantain	o
Poa annua	annual meadow-grass	o
Poa trivialis	rough meadow-grass	l
Polystichum aculeatum	hard shield fern	l
Potentilla anserine	silverweed	l
Potentilla erecta	tormentil	l
Potentilla sterilis	barren strawberry	o
Primula veris	cowslip	vl
Primula vulgaris	primrose	lf
Prunus spinosa	blackthorn	l
Quercus petraea	sessile oak	r
Quercus robur	common oak	o/lf
Quercus x rosacea	hybrid oak	?r
Ranunculus auricomus	goldilocks buttercup	lf
Ranunculus bulbosus	bulbous buttercup	vl
Ranunculus ficaria	lesser celandine	lf
Ranunculus repens	creeping buttercup	lf
Ribes rubrum	red currant	r
Ribes uva-crispa	gooseberry	r
Rosa canina agg.	dog rose	o
Rosa arvensis	field rose	o
Rubus fruticosus agg.	bramble	l
Rubus idaeus	raspberry	vl
Rumex acetosa	common sorrel	l
Rumex obtusifolius	broad-leaved dock	o
Rumex sanguineus	wood dock	l
Salix caprea	goat willow	r
Sambucus nigra	elder	o
Sanguisorba minor	salad burnet	l
Sanicula europaea	sanicle	l

Scabiosa columbaria	small scabious	vl
Scrophularia nodosa	common figwort	r
Senecio jacobaea	ragwort	r
Silene dioica	red campion	vl
Sonchus arvensis	perennial sow-thistle	r
Sonchus asper	prickly sow-thistle	r
Sorbus aucuparia	rowan	l
Stachys officinalis	betony	l
Stachys sylvatica	hedge woundwort	lf
Stellaria holostea	greater stitchwort	l
Succisa pratensis	devilsbit scabious	vl
Tamus communis	black bryony	o
Tanacetum parthenium	feverfew	r
Taraxacum officinale agg.	dandelion	r
Trifolium pratense	red clover	l
Trifolium repens	white clover	l
Trisetum flavescens	yellow oat-grass	l
Ulex europaeus	gorse	vl
Ulmus glabra	wych elm	o/lf
Urtica dioica	stinging nettle	l
*Vaccinium myrtilus**	bilberry	l
Veronica arvensis	wall speedwell	vl
Veronica chamaedrys	germander speedwell	l
Veronica montana	wood speedwell	lf
Veronica officinalis	heath speedwell	r
Veronica serpyllifolia	thyme-leaved speedwell	l
Vicia cracca	tufted vetch	r
Vicia sativa	common vetch	r
Vicia sepium	bush vetch	l
Viola odorata	sweet violet	lf
Viola reichenbachiana	early dog violet	o
Viola riviniana	common dog violet	lf

STATUS (within site boundaries):
d – dominant; a – abundant; f – frequent; o – occasional; r – rare; l – local(ly);
v – very.

Additional records of flowering plants

*Alliaria petiolata**	garlic mustard	o
Convallaria majalis	lily-of-the-valley	r
*Epilobium montanum**	broad-leaved willowherb	o
Galium odoratum	woodruff	r
*Geum rivale**[1]	water avens	l
*Hypochaeris radicata***	catsear	?
*Leontodon hispidus***	rough hawkbit	?
Linum catharticum	fairy flax	r
*Orchis mascula**	early purple orchid	l
*Rumex acetosella**	sheep's sorrel	l
*Senecio vulgaris***	groundsel	?
*Torilis japonica**	upright hedge parsley	l
*Viola hirta**	hairy violet	l

* source: Ryedale Woodland Survey, 20/6/93 (A. Weston)
** source: Phase I survey, 13/9/98
[1] may refer to *Geum x intermedium* – no pure rivale could be found in 1998

Appendix 2 Records compiled from 1983 to 1995 covering a range of disciplines

The following records were compiled from 1983 to 1995 covering a range of disciplines including some flowering plants discovered since the woodland surveys of 20/6/93 (A.Weston) and 13/9/98. Since the contributors gave of their time freely without claiming any expenses it is only right that acknowledgement be made.

Compiler codes

ag	Andrew Grayson, Kirkbymoorside. 1994	Y.N.U. County Diptera recorder
cs	Clifford Smith, York	Y.N.U. County Recorder
ds	Don Smith,FRES., Kirkbymoorside. 1993-5 Compiler.	Ryedale Natural History Society Recorder.
jb	John Blackburn, Stockton-on-Tees. May 1995	Y.N.U. County Bryophyte recorder
mr	Michael Rowntree, Kirkbymoorside. 1983-93	
ns	Nan Sykes, Thornton-le-Dale. Aug. 1993	Author of N.Y.M.N.P. Botanical handbook.
rd1	Ryedale District Phase 1 Survey. 13.9.1989	

The compiler takes responsibility for the addition of English names and habitat notes to the records. Identifications have been made by the use of specific keys except for the micro moths, named with the help of a comprehensive reference collection belonging to the late Arthur Smith of York and except for spiders, for which I am grateful to the late Clifford Smith of York, Y.N.U. Recorder, for their identification. Bird records supplied by Michael Rowntree, late of the Manor Vale Management sub-committee: p=present in/around the wood, b=possible/probable breeders. Nan Sykes has considerably extended the original flowering plant list and added some fern species. Andrew Grayson, a local entomologist, has added more insect records and John Blackburn, mosses, liverworts and some additional flowering plants.

Birds

Accipiter nisus	Sparrowhawk	P
Argithalos caudatus	Long-tailed Tit	B
Carduelis carduelis	Goldfinch	P
Carduelis chloris	Greenfinch	B
Certhia familiaris	Tree creeper	B
Columba oenas	Stock dove	B
Columba palumbus	Wood pigeon	B
Corvus corone	Carrion crow	B
Corvus frugilegus	Rook	B
Corvus monedula	Jackdaw	B
Cuculus canorus	Cuckoo	P
Dendrocopos major	Great spotted woodpecker	B
Erithacus rubecula	Robin	B
Falco tinnunculus	Kestrel	P
Ficedula hypoleuca	Pied flycatcher	B
Fringilla coelebs	Chaffinch	B
Fringilla montifringilla	Brambling	P
Motacilla alba	Pied Wagtail	P
Muscicapa striata	Spotted Flycatcher	B
Parus ater	Coal tit	B
Parus caeruleus	Blue tit	B
Parus major	Great tit	B
Parus palustris	Marsh tit	B
Passer domesticus	House sparrow	B
Passer montanus	Tree sparrow	B
Phasianus colchicus	Pheasant	P
Phoenicurus phoenicurus	Redstart	B
Phylloscopus collybita	Chiffchaff	B
Phylloscopus trochilus	Willow warbler	B
Pica pica	Magpie	B
Picus viridis	Green woodpecker	B
Prunella modularis	Dunnock	B
Pyrrhula pyrrhula	Bullfinch	B
Regulus regulus	Goldcrest	P
Sitta europaea	Nuthatch	B
Streptopelia decaocto	Collared dove	B
Strix aluco	Tawny owl	B
Sturnus vulgaris	Starling	B
Sylvia atricapilla	Blackcap	B

Sylvia borin	Garden warbler	B
Sylvia communis	Whitethroat	B
Trogloytes troglodytes	Wren	B
Turdus iliacus	Redwing	P
Turdus pilaris	Fieldfare	P
Turdus viscivorus	Mistle thrush	B

Flowering plants (additional)

Arctium minus - ssp.nemorosum	Wood Burdock	jb
Campanula latifolia	Giant bellflower	ns
Campanula rotundifolia	Harebell	ns
Cardamine hirsuta	Hairy bittercress	jb
Elymus caninus	Bearded couch	ns
Epilobium obscurum	Short-fruited willowherb	ds
Epilobium roseum	Pale willowherb (small patch)	ds
Knautia arvensis	Field scabious	ns
Leucanthemum vulgare	Ox-eye daisy	ds (one plant)
Odontites verna	Red bartsia	ds (on path in C)
Prunus avium	Wild cherry	ns
Spiraea salicifolia	Bridewort (Willow-leaved Spiraea)	ds (one in area C)
Tanacetum vulgare	Tansy	ns
Thymus praecox	Wild thyme	ns
Torilis arvensis	Spreading hedge-parsley	ds

Ferns

Dryopteris dilatata	Broad buckler fern	ns
Dryopteris filix-mas	Male-fern	ns

Lichens

Amandina(Buellia) punctata	ds - frequent on bark
Calicium viride	ds - occasional & fertile (pin lichen)
Caloplaca citrina	ds - a calcicole, on limestone outcrops
Caloplaca flavescens	ds - ditto
Candelariella reflexa	ds - occasional
Candelariella vitellina	ds - a calcifuge, on dead wood
Chaenotheca ferruginea	ds - frequent on bark, another pin lichen
Cladonia ochrochlora	ds - occasional
Cliostomum griffithii	ds - frequent on bark, fertile
Evernia prunastri	ds - occ; pendulous, on bark
Hypogymnia physodes	ds - frequent on twigs and trunks
Hypogymnia tubulosa	ds - occasional
Lecanactis abietina	ds - frequent on trunks
Lecania cyrtella	ds - on one Crataegus in C
Lecanora albescens	ds - limestone outcrops
Lecanora chlarotera	ds - occasional on branches
Lecanora conizaeoides	ds - abundant
Lecanora expallens	ds - frequent and fertile
Lecanora intumescens	ds - occasional
Lepraria incana	ds - abundant
Lepraria lobificans	ds - on rock face
Leproplacachrysodeta	ds - mustard coloured powdering on limestone outcrops
Melanelia fuliginosa ssp. glabratula	ds - occasional
Melanelia subaurifera	ds - occasional on branches
Ochrolechia androgyna	ds - frequent
Parmelia saxatilis	ds - abundant on branches
Parmelia sulcata	ds - occasional
Pertusaria amara	ds - frequent on bark
Pertusaria hemisphaerica	ds - occasional
Phlyctis argena	ds - occasional (in its original bark habitat)
Physcia adscendens	ds - frequent
Physcia tenella	ds - occasional
Xanthoria candelaria	ds - frequent
Xanthoria parietina	ds - occasional on bark
Xanthoria polycarpa	ds - frequent

Mosses

Anomodon viticulosus	jb	*Isothecium myurum*	jb
Atrichum undulatum	jb	*Mnium hornum*	jb
Brachythecium rutabulum	jb	*Neckera complanata*	jb
Bryum capillare	jb	*Orthodontium lineare*	jb
Calliergon cuspidatum	jb	*Orthotrichum affine*	jb
Ctenidium molluscum	jb	*Plagiomnium undulatum*	jb
Dicranoweisia cirrata	jb	*Plagiothecium succulentum*	jb
Eurhynchium praelongum	jb	*Polytrichum formosum*	jb
Eurhynchium striatum	jb	*Pseudoscleropodium purum*	jb
Eurhynchium swartzii	jb	*Rhynchostegium confertum*	jb
Fissidens taxifolius	jb	*Rhytidiadelphus squarrosus*	jb
Homalothecium sericeum	jb	*Thamnobryum alopecurum*	jb
Hypnum cupressiforme	jb	*Thuidium tamariscinum*	jb
Isopterygium elegans	jb	*Tortula muralis*	jb

Liverworts

Calopogeia fissa	jb	*Metzgeria furcata*	jb
Lophocolea heterophylla	jb	*Plagiochila porelloides*	jb
Lophocolea rivularis	jb		

Fungi (larger)

Pleurotus cornucopiae	ds	Oyster mushroom (felled trunk, uncommon)

Fungi (micro)

Epichloe typhia	ds	white 'Choke' on ?Cocksfoot
Trachspora ?intrusa	ds	orange rust on Alchemilla

Molluscs

Arianta arbustorum	ds	snail, damp places
Arion ater	ds	large slug, brown form

Spiders

Amaurobius fenestralis	cs	fluffy-web spinner, under bark
Enoplognatha ovata	cs	
Entelecara acuminata	cs	tiny black spider, stalked eyes
Lepthyphantes obscurus	cs	spins a sheet web in bushes
Linyphia peltata	cs	horizontal sheet web
Metellina (Meta) mengei	cs	spins a small orb web in woods, wasteland etc
Pardoa amentata	cs	a ground wolf spider
Pisaura mirabilis	cs	a wandering hunter in woods and heaths
Tetragnatha extensa	cs	a very long-legged grass spider
Tetragnatha montana	cs	
Theridion bimaculatum	cs	a tiny (3mm) meadow s[pider
Theridion mystaceum	cs	often on tree trunks
Theridion sisyphium	cs	bushes and low vegetation
Xysticus cristatus	cs	a crab spider

Harvestmen - Opiliones

Leiobunum rotundatum	ds	abundant, ubiquitous

Millipedes - Diplopoda

Cylindroiulus punctatus	ds	in a rotting stump
Iulus scandinavius	ds	rotten wood stump

Centipedes - Chilopoda

Crytops hortensis	ds	one of the longer brown centipedes, at least 20 pairs of legs: under bark

Lithobius forficatus	ds	very common, robust brown centipede. Found under bark

Woodlice - Isopoda

Oniscus asellus	ds	very common ubiquitous Isopod

Silverfish - Thysanura

Dilta hibernica	ds	an unusual species from a stone wall

Earwigs - Dermaptera

Forficula auricularis	ds	the common earwig

Dragonflies – Odonata

Coenagrion puella	ag	Azure damselfly
Ischnura elegans	ds	Blue-tailed damselfly

Plant & Water bugs - Hemiptera-Heteroptera

Anthocoris nemorum	ds	abundant flower bug
Calocoris sexguttatus	ds	brightly coloured plant-bug
Dryophilocoris quadrimaculatus	ds	found on oak
Leptopterna dolobrata	ds	meadow plantbug - in various grassy places/moist conditions
Lygus maritimus	ds	common, on a range of host plants
Lygus wagneri	ds	on dock, nettle in clearings & hedgerows
Mecomma ambulans	ds	common among rank vegetation at wood margins
Nabis rugosus	ds	the Common Damsel bug - a predator
Orthops campestris	ds	feeds on many Umbelliferae
Orthops kalmi	ds	ditto
Psallus wagneri	ds	taken on hawthorn, also found on oak
Scolopostethus affinis	ds	taken on nettles
Stenodema laevigatum	ds	from grass in moist localities
Stenotus binotatus	ds	feeds on grasses; Yorkshire at northern limit

Leaf Hoppers - Hemiptera Homoptera

Alebra albostriella	ds	
Aphrophora alni	ds	a large froghopper
Cercopis vulnerata	ds	a brightly coloured red and black froghopper
Cixius nervosus	ds	
Evacanthus nervosus	ds	
Philaenus spumarius	ds	the common 'Cuckoo-spit' froghopper
Stenocranus minutus	ds	

Butterflies - Lepidoptera

Anthocharis cardamines	ds	Orange Tip
Aphantopus hyperantus	ds	Ringlet - occasional
Inachis io	ds	Peacock
Maniola jurtina	ds	Meadow Brown
Pieris brassicae	ds	Large Cabbage White
Pieris rapae	ds	Small Cabbage White

Larger Moths - Lepidoptera (macro)

Colostygia pectinataria	ds	Green Carpet - to light, after dark
Epirrhoe alternata	ds	Common carpet
Hepialus humuli	ds	Ghost moth
Odezia atrata	ds	Chimney Sweeper

Orgyia antiqua	ds	Vapourer moth (the catepillar stage noted)
Orthosia incerta	ds	Clouded Drab - to light, after dark
Plusia gamma	ds	Silver Y - after dark, at Hogweed
Timandra griseata (amata)	ds	Bloodvein moth - after dark
Xanthorhoe montanata	ds	Silver-ground Carpet - after dark, very common

Smaller Moths - Lepidoptera (micro)

Adela fibulella	ds	
Anthophila fabriciana	ds	
Cydia aurana	ds	
Glyphipterix simpliciella	ds	Cocksfoot moth (wing-span 2mm)
Olethreutes lacunana	ds	
Scoparia ambigualis	ds	after dark
Stenoptilia bipunctidactyla	ds	plume moth
Udea olivalis	ds	Olive-brindled Pearl

Scorpionflies & others - Megaloptera

Panorpa germanica	ds	'Scorpionfly'

Beetles - Coleoptera

Abax parallelopipedus	ds	large, black ground beetle
Agriotes pallidulus	ds	click beetle
Altica sp.	ds	flea beetle
Amara plebeja	ds	small ground beetle
Athous hirtus	ds	click beetle
Cantharis nigricans	ds	soldier beetle
Cantharis pallida	ds	soldier beetle
Cassida viridis	ds	tortoise beetle (on thistle)
Clytus arietis	ds	wasp beetle - a wood borer
Coccinella 7-punctata	ds	7-spot ladybird
Demetrias atricapilla	ds	
Hypostenus similis	ds	predatory 'brachelytra'
Malachius bipustulatus	ds	a predatory flower beetle
Malthodes marginatus	ds	ditto
Oedemera virescens	ds	small wood borer - RDB3 status, at buttercup
Philonthus cognatus	ds	small brachelytra ground beetle with irridescent wingcases.
Phyllobius calcaratus	ds	common metallic green weevil
Propylea 14-punctata	ds	14-spot ladybird - abundant
Pterostichus madidus	ds	very common black ground beetle - pit trap
Pyrochroa serraticornis	ds	Cardinal beetle
Rhynchophora assimilis	ds	weevil, abundant on Alliaria
Sinodendron cylindricum	ds	wood borer, emerging from hole
Sphaeridium lunatum	ds	dung beetle

Sawflies - Hymenoptera/Symphyta

Macrophya ribis	ds	
Tenthredo livida	ds	
Tenthredo mandibularis	ds	larvae feed on Burdock

Ants, Bees & Wasps - Hymenoptera/Aculeata

Ancistrocerus parietinus	ds	potter wasp
Andrena haemorrhoa	ds	mining bee
Andrena jacobi	ds	ditto
Apis mellifera	ds	honey bee
Bombus hortorum	ds	Small Garden Humble-bee
Bombus lapidarius	ds	Large Red-tailed Humble-bee
Bombus lucorum	ag	Small Earth Humble-bee
Bombus pascuorum(agrorum)	ds	Common Carder Bee
Bombus pratorum	ds	Early Humble-bee
Bombus terrestris	ds	Buff-tailed Humble-bee
Dolichovespula sylvestris	ds	Social wasp
Mellinus arvensis	ds	digger wasp
Nomada flavoguttata	ds	a parasitic nomad bee, breeds in Andrena nests
Nomada marshamella	ds	parasitic nomad bee
Nomada panzeri	ds	ditto

Osmia rufa	ds	the Red Mining bee
Psithyrus bohemicus	ds	Gipsy Cuckoo bee - takes over nest of Bombus lucorum
Psithyrus vestalis	ds	Vestal Cuckoo bee

Craneflies - Diptera

Limonia nubeculosa	ds	small, delicate cranefly
Limonia tripunctata	ds	ditto - wings with 3 spots
Nephrotoma flavescens	ds	yellow & black bodied cranefly
Tipula hortorum	ds	large 'agricultural' cranefly
Tipula lunata	ds	
Tipula variipennis	ds	
Tipula vernalis	ds	

Empids & Asilids - Diptera

Chrysopilus asiliformis	ag	
Dioctria rufipes	ds/ag	robber fly
Empis femorata	ag	
Empis livida	ag	
Empis tessellata	ds	
Empis trigramma	ds	
Hybos grossipes	ds	very small empid
Rhamphomyia atra	ag	
Rhamphomyia sulcata	ag	

'Dollie' flies & rest of the Brachycera - Diptera

Beris chalybata	ds/ag	
Beris vallata	ds	
Bibio johannis	ds	
Bibio lepidus	ds	
Bibio marci	ds	St.Mark's fly
Bibio nigriventris	ds	
Bombylius major	ds	Bee fly - only one seen
Chrysopilus cristatus	ds	
Dilophus femoratus	ds	Fever fly
Dolichopus ungulatus	ds	a common 'dollie'
Microchrysa polita	ds	
Poecilobothrus nobilitatus	ds	handsome 'dollie' with white-tipped wings
Rhagio tringarius	ds	Snipe-fly
Rhaphium appendiculatum	ag	
Sargus flavipes	ds	Soldier fly, breeds in dung

Hoverflies & Conopidae - Diptera

Cheilosia albitarsis	ds	
Cheilosia antiqua - var.A	ds/ag	
Cheilosia illustrata	ds	a hairy Cheilosia
Cheilosia pagana	ag	
Cheilosia variabilis	ds	
Conops quadrifasciata	ag	an internal bumble-bee parasite
Dasysyrphus venustus	ag	
Epistrophe eligans	ds/ag	
Episyrphus balteatus	ds	a regular migrant
Eristalis arbustorum	ag	
Eristalis pertinax	ds/ag	
Eristalis tenax	ag	the Drone-fly
Melanostoma mellinum	ag	
Melanostoma scalare	ds/ag	
Merodon equestris	ds/ag	Narcissus bulb fly
Myathropa florea	ds	
Neoascia podagrica	ag	
Pipiza noctiluca-form.F	ds	
Platycheirus albimanus	ag	
Platycheirus manicatus	ds/ag	
Platycheirus tarsalis	ag	
Portevinia maculata	ag	

Rhingia campestris	ds/ag	Snout fly
Sericomyia silentis	ag	a large, wasp-like hoverfly
Sicus ferrugineus	ds	internal bumble-bee parasite
Sphegina clunipes	ag	possibly the smallest british hoverfly
Syritta pipiens	ds/ag	
Syrphus ribesii	ds/ag	
Volucella pellucens	ds/ag	larva scavenges in bees' nests
Xylota segnis	ag	
Xylota sylvarum	ag	

Remainder of Cyclorrhapha - Diptera

Anthomyia pluvialis	ds	a black & white marked muscid fly
Calliphora vicina	ag	a bluebottle
Calliphora vomitoria	ds/ag	the Common bluebottle
Chaetostomella cylindrica	ds	
Cynomya mortuorum	ds	a large, brilliant green blowfly
Dryomyza analis	ds	
Eriothrix rufomaculata	ds/ag	a parasitic tachinid
Euleia heraclei	ds	the Celery fly
Graphomya maculata	ds	a muscid
Gymnochaeta viridis	ds	a large green parasitic fly, larvae internal caterpillar parasites.
Limnia unguicornis	ds	larvae attack snails
Lucilia caesar	ds	Greenbottle
Mesembrina meridiana	ds	a large, black muscid, breeds in dung
Opomyza florum	ds	
Opomyza germinationis	ds	
Orthellia caesarion	ds	a Greenbottle
Pelidnoptera fuscipennis	ds	
Phaonia variegata	ag	
Pherbellia albocostata	ds	
Psila merdaria	ds	
Psila obscuritarsis	ds	
Scathophaga stercoraria	ds	the Yellow dungfly - abundant
Sepsis violacea	ds	
Tephritis ??ruralis	ds	
Tricholauxania praeusta	ds	
Xyphosia miliaria	ds	larva galls thistle heads

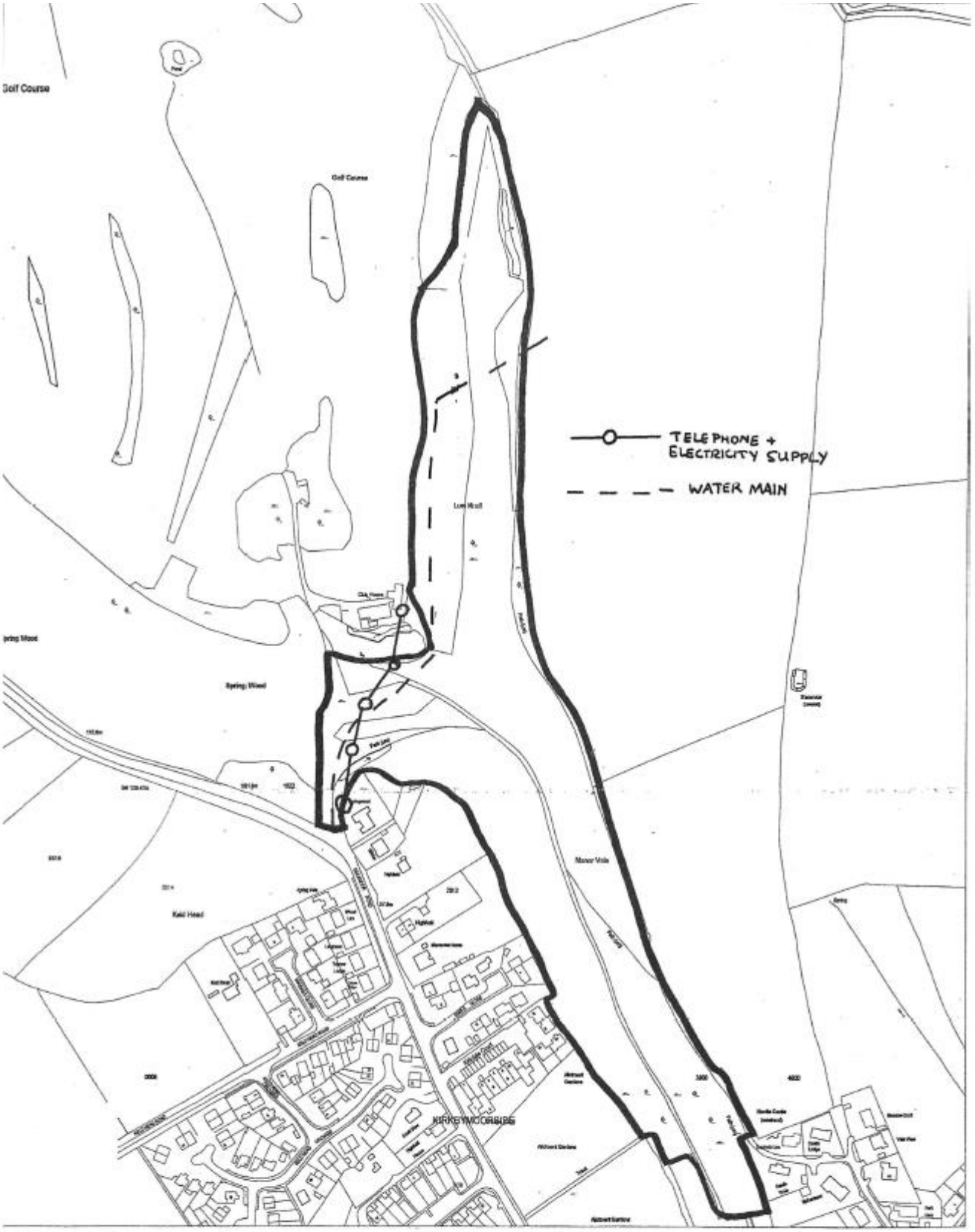
Galls

Dasyneura ulmariae	ds	midge galls on Meadowsweet leaves
Dasyneura urticae	ds	midge galls in axils of Stinging nettle
Eriphyes macrochelus	ds	mite galls on Field Maple
Eriophyes macrorhynchus	ds	red mite galls on Sycamore leaves
Geocrypta galii	ds	midge galls on Galium terminal leaves

Appendix 3 Maps

Manor Vale Woodland, Kirkbymoorside

Manor Vale Woodland, Kirkbymoorside



MAP 3: LOCATION OF UTILITIES

SCALE: 1:2500 DRAWN BY: DATE: 20th March 2009

Originating Group: Planning Services Drawing No.