# Mercian Archaeology

-taking the past into the future

An Assessment of an Historic landscape at Old Parsonage Farm, Kyre, Worcestershire An Archaeological Assessment of Landscape Components at Old Parsonage Farm, Kyre, Worcestershire

A report for John and Nicky Beavan

August 2004 © Mercian Archaeology

Project: PJ 101

Mercian Archaeology undertake archaeological projects across much of the West Midlands and the Welsh Marches. We specialise in Historic Building Recording and Analysis. We also undertake archaeological watching-briefs, evaluation and excavation, desk-based assessment, historic landscape assessment and osteological analysis. We now also carry out historic reconstruction and can produce illustrations for publication, website or interpretative panels.

We work with clients to ensure that archaeological considerations are resolved in reasonable time and at competitive rates. Our services are aimed at:

- **Commercial Developers** who need archaeological provision under current planning legislation
- □ Agricultural Managers and Farmers who may require archaeological input under grant funded project designs
- □ Architects and Architectural Practices who seek to alter or demolish listed or locally important historic buildings
- **Public Utilities** who seek to lay new services in archaeologically sensitive areas
- Government and Local Government Bodies who may wish to subcontract our services
- □ Individuals who may wish to carry out small-scale development and require the services of an archaeologist according to their local planning department

Mercian Archaeology Flat 1 Malvern House 7 Malvern Road Worcester WR2 4LE

Martin Cook Tel: 01905 616652 Mobile: 07850 918755 E-mail: mjcook@globalnet.co.uk Paul Williams Tel: 01905 420087 Mobile: 0773 604 1925 E-mail: paulwilliams@mercianarchaeology.co.uk

Fax: 01905 420087

www.mercianarchaeology.co.uk

# 1. Project Background

#### 1.1. Location of the Site

Old Parsonage Farm (NGR SO 623632) is located around 6 kilometres to the south-east of Tenbury Wells in the north-west corner of the county of Worcestershire. It is set back from the B4214 Tenbury road, along the minor road approach to Kyre Park House and Kyre Green (Figure 1).

#### 1.2. Project Details

Old Parsonage farm was entered into a Countryside Stewardship Scheme in 2002 (DEFRA Ref: 17/462/0050) to 'maintain and enhance existing grassland and waterside habitats, public access, landscape features and historic features across the holding'. Officers from DEFRA and Worcestershire Historic Environment and Archaeological Service, observed certain landscape features during their preliminary site visits, which may be incorporated into the proposed 10 year restoration scheme, subject to their historic, archaeological, ecological and amenity value being determined. In order to place these features into context and assess their importance, the owners of Old Parsonage Farm, John and Nicki Beavan have commissioned an archaeological and ecological assessment (based on information contained within the project brief (WHEAS 2002). The results of the assessment contained in this report and the collective data be used to commission a management plan to inform on the restoration and maintenance of the historic features as part of a 10 year Stewardship Agreement. A further component of this initial work involves the assessment of the fabric and habitat value of a tithe barn and associated features located on the farm; this work will be carried out by *HH Heritage*, who will produce their own report.

The landscape features specifically identified within the brief are a 'pond complex' in woodland to the north-west of the farm buildings and an area of 'parkland meadow' to the north and west of the farm buildings.

#### 1.3. Site Description

Old Parsonage Farm comprises three key elements: the buildings and yard; woodland and pond; grassland. The study area takes into account the woodland, pond and grassland and is highlighted on Figure 6. The grassland (referred to in the brief as parkland meadow) lies to the north and south of the line of the public footpath. These areas are referred to in section 6.2.1 and 6.2.2.

The woodland lies along the western boundary of the study area, which is also the property boundary. A brook (unnamed) runs from south to north through the woodland and supplies water to the existing pond, which is shown on Figure 7. This pond does not appear on the map dating from 1904 (Figure 6), as it was constructed later.

By the mid 19<sup>th</sup> century the woodland and grassland was under the ownership of Kyre Park. At this time, there was a substantial pond at the southern end of the wooded area, which no longer exists. This pond (referred to below) would have been part of the pleasure gardens of Kyre Park, much of which remain today in the adjoining property to the north.

# 2. Methods and Process

# 2.1. Project Specification

- □ The project fieldwork conforms to the Standard and Guidance for an Archaeological Field Evaluation (IFA 1999).
- □ The archive conforms to the standards and guidelines established by the Archaeological Data Service.
- □ The project conforms to a brief prepared by the Countryside Section, Worcestershire Historic Environment and Archaeology Service (WHEAS, 2002) and for which a project proposal and detailed specification was produced (Mercian Archaeology 2003).

### 2.2. Specific Aims of the Project

#### The archaeological landscape assessment aims to:

- □ Build up a profile of the static and modified topography of the site from cartographic and documentary sources.
- □ To record by survey, text and photograph the pond complex and the profile of the water courses and ponds; record any associated structures and features by the same methods; carry out a walk-over survey of the meadowland defined within the brief and record any archaeological features encountered.
- □ Assess the structural integrity (where possible) of any structures encountered and comment on their restorability.

#### The ecological component of the landscape project aims to:

- □ Make an assessment of the wildlife value of the pond complex and locate principal ecological features and habitats that should be retained or enhanced.
- □ Compile a species list for the meadowland area and recommend a scheme for restoration and maintenance of grassland, taking into account a grazing regime.
- □ To use the results of the archaeological work to produce a report highlighting: -
  - 1. The survival and location of any archaeological deposits.
  - 2. Analysis of identified natural and cultural deposits and their interpretation.
- □ Based on the above, suggest a scheme of restoration, management and maintenance of the landscape features and ecological habitats taking into account relevant issues.

# 3. The Documentary Research

#### 3.1. The Topographical, Archaeological and Historic Background

The earliest remaining parts of Old Parsonage Farm, to give its modern name, appear to have been built during the early 14<sup>th</sup> century, possibly for either Robertus de Frome, who was rector of Kyre from 1334, or Ricardus de Wodemanton who followed him in 1353 (Nash 1894). The cruck-framed hall house and its later additions represented the rectory at Kyre until a cottage located to the north, was altered to form the new rectory of Kyre in 1867 (WRO BA 4600/998 705:550). There is a barn within the former glebe holding, adjacent to the eastern end of the house. This was probably, at some stage, the parish tithe barn where produce collected as tithe rents from parish holdings was stored. It is possible that the house was occupied by a reave or curate, to oversee the economic affairs of the church in the parish, rather than a parson.

From at least the mid to late 19<sup>th</sup> century the parsonage was used as a boarding school for girls. Billings trade directory of 1851 records the school as 'The Misses Ladies Boarding School' and there were eight children attending the school at this time (WRO BA 4675/4 899:369). The 1841 census returns show that schoolmistress Elizabeth Winton rented the property from William Lacon Childe, who owned Kyre Park and all the non-glebe land in the parish of Kyre.

The landscape at Kyre is still dominated by the grounds, house and pleasure gardens of Kyre Park. A deer park was laid out at Kyre in 1328 when John Wyard was licensed to impark his woods (Shirley 1867, 166). A deer park is shown on early maps such as those by cartographers Saxton (1577) and Morden (1695), who depict a park with pale fence and ditch to the north east of the Kyre Brook (not the site of the present Kyre Park).

The existing park garden, shrubberies and pleasure grounds of Kyre Park, were probably laid out piecemeal between the 16<sup>th</sup> and 19<sup>th</sup> centuries, although specific dating evidence is obscure. The park has long been famous for its trees, the antiquary John Leland praised the park for its oak trees during his travels across England in the 16<sup>th</sup> century. The arboretum in the 18<sup>th</sup> and 19<sup>th</sup> century contained yew, cedar, cypress, beech, oak, ash, plane, alder, acacia, horse chestnut and Scots pine (Lockett 1997). Much timber from the estate would have been used during the construction and maintenance of the buildings at Kyre, although the pleasure ground trees would have been managed for their aesthetic properties. It is recorded that in 1595 a quantity of oak planks and ash and alder scaffolding were used at Kyre Park (Airs 1995, 119). There are also references to timber being used to provide fuel for brickmaking on the estate. In 1594 Sir Edward Pytts, who then owned the estate, said of his brick making process, 'the side toward the meadow is worst burnt because the wind lay always in that end' (Airs 1995, 116). The brick kilns, or 'clamps', must have been located to the south of Brick Kiln Meadow, probably adjacent to Brick Kiln Orchard (Figure 2). It has been suggested that the remaining pleasure grounds we see today were the work of the 18<sup>th</sup> century landscape architect Lancelot 'Capability' Brown (Mee 1938, 172), although there appears to be insubstantial evidence for this claim

Water and water features, part of which form the basis of this study have long dominated the pleasure grounds. Eminent 19<sup>th</sup> century historian Nash wrote of the park:

'Here is a handsome mansion house, which the present owner Sir Edmund Pytts has very much improved. The water and pleasure garden is well designed, the views are pleasing. Timber, especially oak grows well and the water (which in the park and about the house is 25 acres) affords excellent carp, tench, bream and pyke. There is a trout stream in the park, but the fish are not remarkably good. It is a pleasant habitation in the summer, but in the winter it is rather dirty'.

Ponds have always been pleasing to the eye, but also functional. It is clear from Nash's statement that the water at Kyre Park fulfilled both roles, although there is no differentiation in the statement between fish stocked for commerce or for angling.

There is no doubt that the formal parks and gardens of the 17<sup>th</sup> to 19<sup>th</sup> century were status symbols. The 18<sup>th</sup> century saw the increased use of professional designers to create and enhance landscaped gardens, with lakes, water features, tree lined avenues, woodland walks, follies and bowling greens. As outlined above, it has been suggested that Capability Brown designed the present gardens at Kyre, this would put their laying out into the period between 1740 and 1783 when he died.

#### 3.2. The Cartographic Sources

The earliest available and significantly detailed plan is of the Kyre Shrubbery (WRO BA 4675/4 899:369) dating to 1774 (Figure 2). The plan shows the northern boundary of the park to be the same as today, with the exception of the northern part of the pastureland (Parsonage Piece) adjacent to the south of The Old Parsonage and a modern straightening of a boundary across the southern end of Parsons Piece to the east of the parsonage buildings (compare Figure 2 with Figure 6). There was a 'sallow bed' located at the foot of the valley from where the modern existing pool is fed by the stream from the north. This indicates the wetness of this area at this time; sallows (willow) thrive in such conditions. Interestingly, the plan depicts the gardener's cottage, as shown on the later tithe map and now demolished, as 'The Rectory'.

A Plan of The Glebe Land of The Rectory of Great Kyre dating from 1801 (WRO BA 1545 f 705:255 Parcel 74) shows the buildings, yard, cart pond and surrounding gardens and orchard in great detail, including the use of fencing or hedges (Figure 3). The only remaining glebe fields in the parish at this time were located on the opposite side of the road, outside the study area.

The detailed Tithe Apportionment Map of Kyre Parish dating from 1840 (WRO BA 1572 s760/409) indicates that water had become the main feature of the pleasure gardens at Kyre Park. William Lacon Childe, the owner of the park, held the subject strip of woodland in the study area and this appears to have been the limit of the pleasure gardens at this time. The map shows a pond covering 1 perch and 12 roods at the southern end of the valley, just inside the park boundary. It is not known if this pond existed before this date, but its straight edges and parallel sweeping outlet, suggest it was a manufactured park feature and probably dates from the late 18<sup>th</sup> or early 19<sup>th</sup> century, when there was expansion of the water features in the park. The remainder of this area was set to ash bed, where ash trees would have been pollarded.

The tithe map also indicates that the holdings of the parsonage (glebe) were restricted to the farmyard, buildings and adjacent orchard to the west (Figure 4). The owner was listed as

Reverend Arthur Severne, the rector of Kyre, and the occupiers as Elizabeth and Decima Winton. Parsonage Piece, the second component of the landscape survey (the grassland), was rented to John Patrick.

The later 1874 plan of the shrubbery (WRO BA 4675/4 899:396) shows there had been large-scale expansion of the ponds within Kyre Park since the earlier plan, although the boundary between the park and the glebeland remained the same (see additions in green to Figure 2).

The 1<sup>st</sup> edition Ordnance Survey map shows a smaller quadrant shaped pond within the wooded area, replacing the large pond that was depicted on the tithe map. The small pond lay to the south of the footpath running east to west across the site. The central watercourse was still used to feed the substantial Hannings Pool within the bounds of Kyre Park. There was now a further area of orchard attached to the Old Parsonage, just to the rear of the barn in the corner of the Parsons Piece (Figure 5).

The revised 2<sup>nd</sup> edition Ordnance Survey map (Figure 6) sheds no further light on landscape development within the study area. Auctioneers sales particulars from the sale of The Old Parsonage Farm in the ?1970's refer to the Ordnance Survey field numbers from this map. They indicate that part of the orchard to the south of the house, was now used to grow blackcurrants (No. 126). Parsons Piece was listed as pasture (No.128) and the woodland in the valley is referred to (No. 128a). There appears to be a mistake in the details; the area of orchard to the north of the barn is also listed as number 128, when it should be 127a an area of blackcurrant orchard.

### **Cartographic Sources Consulted**

Source	Reference Number
Plan of Kyre Shrubbery and Bowling Green (1774)	WRO BA 4675/4 899:369
Plan of The Glebe Land of The Rectory of Great Kyre (1801)	WRO BA 1545 f 705:255 Parcel 74
Plan of Kyre Shrubbery (1874)	WRO BA 4675/4 899:369
Plan of Glebe Land Exchanged at the Request of Rector Reverend J.T. Kelly (1864)	WRO BA 1545/73 f705:225
Plan in 'Sale Particulars of Kyre Park' (1963)	WRO BA 10653 705:1180
Tithe Map and Apportionment of Kyre Parish (1840)	WRO BA 1572 s760/409
Ordnance Survey 1 <sup>st</sup> Edition 25". Worcestershire Sheet XIX.14 (1895)	WRO BA 1545 705:225
Ordnance Survey 2nd Edition 25". Worcestershire Sheet XIX.14 (1903)	

#### WRO ~ Worcestershire Records Office

# **Other Sources Consulted and Used**

Source	Reference Number
Documents Concerning the Restoration of Rectory House (1867)	WRO BA 4600/998 705:550
Nash, Dr T.R (1845). Collections for the County of Worcestershire, Volume II	WRO AS/43/38(307)
Plan of the Glebe Lands of the Rectory of Great Kyre	WRO BA 1545 f705:255 Parcel 74
Survey of the Kyre Estate (various parcels)	WRO 4675 b899:396

Other sources used are referenced within the report.

# 3.4. The Fieldwork Methodology

The archaeological field survey undertaken between March 20<sup>th</sup>-26<sup>th</sup> 2004.

The photographic survey was carried out using digital imaging at a resolution of 800 x 600. A 1-metre scale was used where possible.

The site was recorded in note form and the details are contained within this report.

The methodology adopted and the favourable working conditions meant that the aims and objectives of the brief could be fully met and the fieldwork was successfully concluded.

# 4. The Archaeological Fieldwork

The archaeological fieldwork comprised three elements, a survey of the pond features in the wooded area using Electronic Distance Measurement, recording of identified features photographically and textually and a walk over survey and recording of the pasture / meadow area.

# 4.1. The Survey

The resulting horizontal data from the field survey are contained within Figure 7. This has been amended with detail from the tithe and Ordnance Survey map by digital overlay. The vertical data has been used to produce a section across the site showing relevant water levels and flow pattern (Figures 8 and 11) and basic topographic models showing the valleys and plateaus, that may assist understanding of water flow patterns (Figures 9 and 10).

### 4.2. The Recording of Woodland Features

The features encountered during the woodland pond survey are located in Figure 7. There was no definitive sign of an excavated pond at the southern end of the site as depicted on the tithe and Ordnance Survey maps, although the land at this end was very level, indicating rapid silting of the pond and regeneration of tree growth. The sides of the valley in this area and across the site as a whole show evidence of slippage into the base of the valley from the sides, thus possibly masking detail. The work was also hindered by tree and vegetation growth, masking of evidence by the rapid silting caused by the natural meander of the watercourse and physical dumping of debris.

It is likely that simply damming back the watercourse created the pond. A denuded earthen dam was located to the north (Plates 1 and 2), still standing to a height of around 1 metre high.

The small quadrant shaped pond depicted on the Ordnance Survey plans could be located as being adjacent to the south of the dam. Overlaying a digital copy of the tithe map onto the Ordnance Survey map revealed that the small quadrant shaped pond was in fact the remnant north-west corner of the larger pond shown on the tithe map (Figure 7), indicating the level of silting and tree regeneration in less than 50 years. Latterly, the small pond may have been a header supply for a rockery waterfall below the present bridge that carries the public footpath across the watercourse (Plate 3).

The remains of an earlier footpath bridge were located around 7 metres to the south of the modern timber bridge (Plate 4). This was of rammed red clay abutments; the span had collapsed and was not evident. The water in the stream had apparently been culverted through earthenware pipe, suggesting that the span was also of clay simply laid across the pipes and compressed, although a spread of stone across the area (Plate 5) suggests that the bridge facings may have been, at least in part, of rough sandstone coursing.

Below and adjacent to the south of the modern bridge, there were possible water features that may be directly linked to the leisure aspect of Kyre Park. A waterfall and possible rapids were noted. The waterfall had a drop of over 1.5 metres and the associated rapids would make the feature appear larger.

On the opposite (northern) side of the footpath bridge there was a flat scarred area that may represent a small, possible natural pond, although this is somewhat confused by a mound of earth and discarded tree stumps that at first sight appear to be a further dam. The evidence is inconclusive, although it does appear the material is dumped rather than a constructed dam (Plate 8). Further to the north at the head of the large pond there is a low level dry stone arched footbridge, almost totally obscured by vegetation (Plates 6 and 7).

On the opposite side of the modern trackway embankment, which carries the track from Old Parsonage Farm into the property to the west, the stream meanders down towards Hannings Pool, which can be seen from the track away to the north in Kyre Park. There were no visible archaeological features in this area.

#### 4.3. The Meadow

The meadowland, or more correctly pasture, was walked over with the aim of identifying possible parkland or other features. The survey was negative, with the exception of a slight hollow in the area of land to the north of the barn. This may represent the remains of either a natural pond or a man made dewpond. Equally, the depression may have been entirely natural.

# 5. Discussion of the Physical and Documentary Evidence

#### 5.1. Land Ownership

Land ownership is outlined above (Section 3.2) and is summarised here.

The plan of 1774 (Figure 2) shows that the whole of the study area was at this time glebe land, but by 1801 only the buildings, yard, gardens and orchard in the study area belonged to the church (Figure 3).

The information from Tithe Apportionment of 1840 indicates that the grassland, which forms part of the study area, was then known as Parsonage Piece. The field was now owned by William Lacon Childe of Kyre Park and managed as pasture, it was leased to local farmer John Patrick. The subject woodland area was also now owned by Lacon Childe and was part of the pleasure gardens and shrubbery of Kyre Park, that had been extended since the late 18<sup>th</sup> century.

This pattern of land ownership was mirrored across much of England around this time, when the landed gentry were buying plots of land piecemeal in order to enhance their status and standing within the community. The Tithe Commutation Act of 1836, which converted tax in kind (one tenth of production) to a monetary tax, must have accelerated this pattern of change, with small farmers selling their holdings to estate owners and becoming their tenants. Of course this only goes part of the way in explaining land ownership, but it gives an idea of the logistics behind the exchange of land from church to estate ownership at Kyre.

#### 5.2. The Earliest Pond

The earliest (former) pond in the study area appears on the tithe map of 1840. Overlay of a digitised plot of the tithe map onto the Ordnance Survey map of 1903 shows that the quadrant shaped pond shown on the 1903 map is the shrunken remains of the earlier pond, which had silted up. The extent of the water is, therefore, known at two dates. The date of original construction, is however, not known, as there is no specific documentary evidence concerning this pond, but it is likely to have been a feeder pool for the ponds in Kyre Park and probably dates from the late 18<sup>th</sup> or early 19<sup>th</sup> century. The pond may also have acted as a silt trap to combat the acknowledged deluge during the winter months (refer to the comments of Nash: Page 4 above). Ponds may fall into four basic categories; natural ponds, excavated ponds, ponds caused by damming against the water flow and a combination of dammed and excavated. Given the steep valley sides in this area it seems likely a pond at the southern end of the site would have been created, at least in part, by damming the flow of the brook. There are remains of an earthen dam still standing to over 1 metre high at the head of the former pond area adding weight to the theory.

#### 5.3. The Quadrant Shaped Pond

The quadrant shaped pool that first appears on the 1<sup>st</sup> edition map of 1885 represents the shrunken remains of the larger pond on the tithe map, only the north-west corner of the original larger pond remaining. The area is now dry and the watercourse has cut, or been cut through the central part of the dam. The dam would have raised the water by over metre and the exiting outflow would have consequently been faster.

#### 5.4. The Proposed Rapids and Waterfall

The simple process of placing stone slabs in the increased flow of water at the exit of the header pond, would create 'rapids', these would have been an aesthetically pleasing part of a woodland walk. There are stone slabs and fragments spread across this area, although some may have come from the dilapidated former footpath bridge (see below). At the modern footpath bridge, the water level drops by over 1.5 metres and below the bridge the remains of a stone waterfall are visible. There are other waterfalls recorded at the north-eastern end of Hannings Pool in Kyre Park. It is likely that there was a small splash pool at the foot of the waterfall, although the area is overgrown with vegetation and there is no visible evidence for a pool.

### 5.5. The Former Footpath and Bridge

The route of the pre-modern footpath and footbridge is marked on the 1<sup>st</sup> edition Ordnance Survey map but not on the earlier tithe map. The modern path runs parallel to the former path but some 7 metres further to the north. The bridge is dilapidated and all that remains are rammed clay abutments, standing around 1 metre high, on either side of the stream. The construction of the bridge is, therefore, unclear. However, the presence of ceramic pipes in the watercourse suggests that the water was culverted below an earthen bridge span; this may or may not have been faced with stone. The abundance of displaced stone along the stream course in this area indicates this may have been the case, although the stone may relate to other water features, such as rapids. The remaining stone footbridge further to the north (see below), although of a lower profile, is of dry stone rubble construction.

#### 5.6. A Possible Former Pond

On the southern side of the existing pond and stone footbridge there is a flattish semi-wet area with slight scarping to the east and west, suggesting this may be a denuded former pond (either naturally formed or man made). There is no cartographic evidence for a pond here, which suggests that if it were a pond, it went out of use quickly.

#### 5.7. The Footbridge

A rubble dry stone footbridge spans the watercourse to the north of the present footpath, adjacent to the modern pond. The date of this bridge is unclear. It does not appear on any of the early maps of the area, although it seems to relate to the existing modern pond at the northern end of the site, which probably dates from the mid-20<sup>th</sup> century. The bridge is set low and is constructed of rough dry stone masonry with a low arch over the stream. It is now almost obscured by vegetation.

#### 5.8. The Existing Pond

The existing pond is at the northern end of the site, dammed back by a rubble and concrete dam that carries the trackway from Old Parsonage Farm into the adjacent field to the west. The pond has a sunken overflow, which culverts the water below the track and back into the watercourse on the opposite side as it meanders down to Hannings Pool in Kyre Park to the north. The pool is likely to date from the mid-20<sup>th</sup> century.

#### 5.9. The Grassland

The boundaries of areas of former orchard were not evident on the ground, although they can be accurately equated from the early mapping. A hollow noted within the grassland is likely to have been natural; although it may be that there was a shallow pond here at some time, perhaps even a man made dewpond. This can only be speculative; as such hollows are common in the hummocky terrain of this area of North Worcestershire, as laid down during the last ice retreat.

The area to the south of the farm buildings is depicted in some detail on the 1801 map of glebe lands of Kyre Rectory (WRO BA 1545 f705:255 Parcel 74). The map is detailed enough to show gates, fences, garden walks, a possible summerhouse, trees and a cart pond (Figure 3).

# 6. The Ecology

By Will Watson

#### 6.1 The Stream

The stream that feeds the modern pond is a tributary of the Kyre Brook . The total length of the stream from source to confluence with the Kyre Brook is 180 metres. There is a fall of 70 metres over its entire 180 length. The width of the stream channel on Old Parsonage Farm varies from 1.5 metres to the north of the pool to 20 centimetres wide to the south of the pool. The average width is about 30 centimetres. The maximum depth measured in summer was found to be 30 centimetres. The minimum depth was 3 centimetres. The average depth is about 5 centimetres. It has a moderate flow as gauged in summer.

There are incised steep banks to the channel indicating periodic seasonal flooding events have occurred. The stream feeds into Hanning's Pool at Kyre Park about 50 metres down stream and then into the Kyre Brook 90 metres down stream. The valley sides to the stream are typically colonised by Alder (Alnus glutinosa) with an abundance of Common Nettle (Urtica dioica) in the understorey. This community conforms to NVC W6 Alnus glutinosa-Urtica dioica woodland. Where light penetrates the stream margin the banks of the stream support Opposite-leaved Saxifrage (Chrysosplenium oppositifolium), Bugle (Ajuga reptans), Angelica (Angelica syvestris) and Soft Rush (Juncus effusus).

#### 6.2. The Pasture

#### 6.2.1. The main field to the south

This field is improved permanent pasture, which has been re-seeded in the past. It is now dominated by Rye-grass (Lolium perenne) and White Clover (Trifolium repens), Cocksfoot (Dactylis glomeratus) and Creeping Bent (Agrostis stolonifera) are occasional in occurrence. This community is listed under the National Vegetation Classification (NVC) as MG7 and is typically species poor. In areas where the drainage is impeded there are locally frequent Creeping Buttercup (Ranunculus repens) and Yorkshire Fog (Holcus lanatus). Broad-leaved Dock (Rumex obtusifolius) is occasional across this sward. This plant is indicative of disturbance or enrichment of the ground by fertilizer such as farmyard muck. There is a ruderal patch of Creeping Thistle (Cirsium arvense), Common Nettle (Urtica dioica) and dock in the north-east corner of the field perhaps indicative of the site of a previous muck midden. The field is grazed by Herefordshire Cattle. It was topped for hay in June of this year.

#### 6.2.2. The smaller field to the north

This field is also improved permanent pasture, which has been re-seeded in the past. It is dominated by Rye-grass (Lolium perenne) and White Clover (Trifolium repens) with frequent Cocksfoot (Dactylis glomeratus). This community is listed under the National Vegetation Classification as MG7. Creeping Thistle (Cirsium arvense) is scattered throughout the sward. On the lower west-facing bank to the track there is locally frequent Red Clover (Trifolium pratense), Creeping Buttercup (Ranunculus repens) Upright Hedge Parsley (Torilis japonica) is occasional in occurrence. At the lowest point parallel to track there is a relic ditch. Here Yorkshire Fog (Holcus lanatus) and Soft Rush (Juncus effusus) are locally abundant this community corresponds to NVC MG10 rush-pasture. Angelica (Angelica syvestris) and Brooklime (Veronica beccabunga) are also present. The field is at present grazed by Herefordshire Cattle.

#### 6.3. Hedges

#### 6.3.1 South-west boundary hedge

This is a tall hedge composed of a mixed range of native species of trees and shrubs. There are 3 Ash (Fraxinus excelsior) trees within the hedge. The following other species were noted: Field Maple (Acer campestre), Dogwood (Cornus sanguinea), Hazel (Corylus avellena), Hawthorn (Crataegus monoguyna), Dogrose (Rosa canina), Wych Elm (Ulmus glabra), Blackthorn (Prunus spnosa) and Crack Willow (Salix fragilis). There is adjacent damp ditch on the Parsonage Farm side. Great Willowherb (Epilobium hirsutum) is locally abundant in the ditch. This hedge has been laid in the past, is managed by flailing and is stock proof. The ground flora is typically very shaded. Dog's Mercury Mecuralis perennis is present where the hedge abuts the wood.

#### 6.3.2 The roadside hedge

This is a tall hedge composed of a mixed range of native species of trees and shrubs at the south-west end. However, two thirds of this hedge extending from entrance to the farm is hawthorn-dominant. This section of hedge may have been replanted replacing the older mixed species hedge. There are no trees within this hedge. The following other species were noted: Hawthorn (Crataegus monogyna), Hazel (Corylus avellena), Dogrose (Rosa canina), Ash (Fraxinus excelsior) and Blackthorn (Prunus spnosa . This hedge is fenced with barbed wire it is managed by flailing and is stock proof.

# 6.4. The Woodland and Pond Area

Pond Location/Name (if known)Parsonage Farm is in the parish of Kyre It is located 300 metres to the southeast of Kyre Park on the C road Hampton Charles which is off the B4214 Tenbury to Bromyard road.	<b>Grid Referen</b> S0 622633	ce
Ownership John and Nikki Bevan Parsonage Farm Kyre Worcestershire	Management ResponsibilityJohn and Nikki Bevan The Environment Agency, Paul Williams of Mercian Archaeology and Janet Lomas of FWAG have all given management advice toward the stewardship agreement.	
OS Plan Number/Local References Explorer 203	Length: 160 metres (Maximum) Width: 47 metres (maximum)	Depth: 1.5 metres Area: 5000m2
Site Description The pool was created along the line of the unnamed book in a gentle sloping wooded valley. The	Pond Type and Age (if Known)This artificial pool was around the early to mid-20th century. It was	

eastern side of the pool is relatively open 2 ash close to the water and recently coppiced alder. There is a narrow fringe of rush pasture extending along water's edge. A grass covered track way has been cut alongside this edge of the pool. The western side is partially overhung with alder, ash, hazel and willows, a steep bank leads down to the water's edge. The southern side is open with a trampled margin and patches of bare mud.	enlarged and de-silted by the previous owners in 1995 from the western bank. During the 19 <sup>th</sup> century there was a feeder pool about the same size as the current pool 100 metres upstream. This pool is marked on the 1840 Tithe Map. The approximate outline of this pool can still be seen. Its location is now covered by nettles.
Hydrology and Permanence	Current & Past
The pool is on the line of the tributary of the Kyre Brook. The water turbid from suspended sediment caused by disturbance by bottom dwelling fish. The colour is dark relatively dark giving the impression that the water is deep. The inflow channel is 30 centimetres wide and only 4 centimetres deep with a moderate flow; as measured in summer. There are incised steep banks to the channel indicating periodic seasonal flooding events have occurred. A delta of mud has formed at the northern end of the pool. The outfall is via chimney pipe with a metal grill. It is working effectively. The brook as it emerges from the pool is sluggish and the channel is 1.5 metres wide. It feeds into lakes at Kyre Park.	Management The pool was de-silted and enlarged in 1995. The current owners have undertaken coppicing of the alders on the eastern bank in the last 2 years. Alders and hazel on the western bank appears to been coppiced about 15 years ago. The surrounding woodland is open to grazing. Some poaching has occurred at the southern end of the pool. There is light grazing on the wooded banks to the west and east.
Geology and Soil	Signs of Abuse/Problems
Devonian Old Red Sandstone. Raglan Mudstone Formation.	There are large numbers of small carp in the pool. They are bottom dwelling fish and regularly disturb the bottom sediment whilst

Shade and Silt Trees surround approximately 60% of the margin of the pool. The compared these trees	feeding for bloodworms and chironamid larvae and the like. The large numbers of small fish also restrict the diversity of aquatic invertebrate life because they are very effective predators. They may due to their feeding action also be limiting the growth and spread of emergent aquatic vegetation around the edge of the pool. The brook which feeds the pool carries lot of sediment in suspension when in spate. It deposits its load to the south pool as the speed of water is slowed down forming a muddy delta. It has been measured at 1.3 metres and extends for distance. The water depth at this end is about 70 centimetres. <b>Present Use</b> The primary purpose of the pool is wildlife. It is enjoyed by the owners. There is no intention to
The canopy of these trees overhangs about 15% of the water's surface. There is some accumulation of leaf litter and small branches. There are heavy accumulations of soft brown silt in the delta at the northern end of the pool. It was measured at 1.3 metres in depth. It mostly comprises of transported sediment, rather than organic sediment (which would originate from dead plant remains). The base of the pool is solid with a thinner layer of silt layer with rotting leaves, twigs and occasional small branches. Marginal Aquatic Plants Locally Abundant Plants:	fish the pool.
Tufted Hair Grass	Plants which occur occasionally:

### Deschampsia cespitosa

### Plants which occur frequently:

- Floating sweet-grass *Glyceria fluitans*
- Creeping Bent Agrostis stolonifera
- Marsh Foxtail *Alopecurus* geniculatus
- Great Willowherb *Epilobium hirsutum*
- Watercress Rorippa nasturium-aquaticum

#### Plants which occur occasionally:

- Remote Sedge *Carex* remota
- Soft Rush Juncus effusus
- Creeping Buttercup *Ranunculus repens*
- Alder Alnus glutinosa
- Brooklime Veronica beccabunga
- Water Forget-me-not *Myosotis scorpioides*
- Opposite-leaved Goldensaxifrage Chrysosplenium oppositifolium\*
- Bugle *Ajuga reptans*\*

#### Plants which occur rarely:

- Hard Rush Juncus inflexus
- Compact Rush *Juncus* conglomerates

#### • Duckweed Lemna minor

•	Toad Rush Juncus bufonius	
•	Reed Canary-grass Phalaris arundinacea	
•	Angelica Angelica sylvestris	
•	Marsh Thistle Cirsium palustre	
•	Crack Willow Salix fragilis	
•	Goat Willow Salix caprea	
•	Grey Sallow Salix cinerea subsp. Oleifolia	
•	Hybrid willow <i>Salix sp</i> (Local)	
•	Water Figwort Scrophularia auriculata	
•	Yellow Iris Iris pseudacorus	
•	Bog Stitchwort Stellaria uliginosa	
•	Hoary Willowherb Epilobium parviflorum	
•	American Willowherb Epilobium ciliatum*	
	ts excluded from the nal Pond Survey recording	
Aqua	atic Insects	
Coleo	ptera – Beetles	
Aqua	tic Beetles:	
•	Dytiscus marginalis –	

#### Great Diving Beetle

- *Ilybius fuliginosus* a predatory diving beetle
- *Helophorus brevipalpis* a scavenger water beetle (A)
- *Laccobius minutus* a crawling water beetle\*
- *Elmis aenea* a riffle beetle\*
- *Stictotarsus duodecimpustulatus* - a water beetle (L)\*

# **Terrestrial beetles:**

- *Apion frumentarium* a weevil\*
- *Sitonia lepidus* a weevil\*
- *Elaphrus riparius* a predatory marshland beetle\*
- *Phaedon cochleariae* a shiny blue leaf beetle\*
- *Cercyon melocephalus* a black and red dung beetle\*

# **Trichoptera:**

• Limnephilus sp.

# **Hemiptera** -Bugs

- *Sigaria dorsalis* a lesser water boatman\*
- *Hesperocorixa sahlbergi* a lesser water boatman\*
- Notonecta glauca. -

backswimmer (F)	
• Hydrometra stagnorum - Water Measurer (F)	
• <i>Gerris lacustris.</i> - Pond Skater (A)	
• <i>Microvelia reticulate</i> – Minute Water Cricket (F)	
• <i>Odonata</i> - Dragonflies (N = Nymph, A = Adult)	
• <i>Coenagrion puella</i> - Azure Damselfly (A)	
• <i>Ischura elegans</i> – Blue- tailed Damselfly (F)	
• <i>Pyrrhosoma nymphula</i> – Large Red Damselfly (O)	
• Sympetrum striolatum – Common Darter (F)	
• Sympetrum sanguineum – Ruddy Darter (F)	
• Aeshna grandis – Brown Hawker	
• Aeshna cyanea – Southern Hawker	
• Aeshna sp Nymph	
Ephemeroptera - Mayflies	
• <i>Cloëon dipterum</i> - Pond Olive (A)	
Orthoptera – Grasshoppers	
• <i>Tetrix subulata</i> – Slender Ground-hopper	
Hymenoptera (Symphyta) - Sawflies	
	1

<ul> <li>Rhadinoceraea r (Klug) – Flag Iri larvae (O)</li> </ul>			
Other Aquatic Invertebrates			
Crustacea:			
• <i>Gammarus pule:</i> freshwater shrim			
• Copepoda - Cyc (species not reco			
• Daphnia - Water (species not reco			
Arachnida -Spiders			
• Pirata piraticus spider*	– a marsh		
Mollusca:			
Gastropoda - Snails			
• Lymnea peregra Wandering Snai			
• Planorbarius co Great Ram's-hor			
Anellida -Hirudinea - ]	Leeches		
• Erpobdella octor leech (O)	culata - a		
*Water beetles determir Prof. Garth Foster	ed by		
Aquatic bugs and terres beetles determined by Jo			

Meiklejohn	
Spider determined by John	
Partridge. All other species	
identified by Will Watson	
Amphibians	Amphibian Recruitment
1 Common Toad calling on 30-3-	1 immature Common Frog
04	recorded on 28-7-04.
1 Palmate Newt netted on 30-3-04	1 immature Common Frog
(see also Appendix)	recorded on 19-8-04
(see also Appendix).	
Mammals	Birds
Field Vole. Some the banks are	Birds recorded whilst on site:
undercut this is usually caused by	Moorhen, Mallard with ducklings,
Brown Rat. It is probable that bats use the pool for foraging.	Kingfisher (Schedule 1 species) recorded on 25-6-04 and 28-7-04.
Fish	Reptiles
Carp, Roach, Minnow	None recorded.
Amphibian Terrestrial Habita	at
	e good terrestrial habitat for amphibians this of the pool for several hundred metres. There
	is stages of decomposition in the wood. The
surrounding hinterland with damp lig	ghtly grazed grassland and semi-looks good for
terrestrial foraging.	

# **Present Biological Status**

The pond has 3 species of amphibians present and a Total Rarity Score of 20, which is Moderate.

The pool has 26 species of aquatic invertebrates a SRI score of 1.04, which is Moderate (National Pond Survey).

The pool has 26 wetland plants present and a SRI score of 1.04, which is High (National Pond Survey).

The pond appears to support low populations of Common Toad, Common Frog and Palmate Newt (for details on scoring system see Herpetofauna Worker's Guide Page 23). There is no firm evidence of breeding by any of these amphibians. Frogs seen around the pool may have bred at Kyre Park. It is likely that there is a small breeding population of Palmate Newt, a species of newts which occasional breed in fish pools.

The pool has a moderate invertebrate assemblage. It should be noted that some of the species recorded are not true aquatic invertebrates and were excluded from the scores. The riffle beetle and Great Ram's-horn Snail were found beneath the pool in the slack section of the brook below the outfall. This area is mostly fish-free and supports a higher invertebrate diversity that the pool itself.

There are relatively large numbers of aquatic plants around the pool in comparison with other lowland ponds; however, over half these plants are rare in occurrence which indicates that the marginal flora around the pool is not at its full potential. There are also no submerged or floating species of aquatic flora which would otherwise lead to an increase in aquatic invertebrate diversity.

# **Comments and Summary**

The pool was probably created in 20th century. In was de-silted in 1995 by the previous owners.

Parsonage Farm pool is has a very large population of small carp, which are constantly disturbing the bottom sediment, roach and minnow were also recorded. It is possible other species of fish also occur.

The high numbers of fish are restricting aquatic invertebrate, amphibian and aquatic plant diversity and should be artificially reduced in numbers to improve the biological quality of the pool.

Kingfisher was recorded on 2 occasions at this pool. It is specially protected under the Wildlife & Countryside Act. It is likely that it a regular visitor to the pool feeding on the large numbers of small fish.

A range of semi-natural habitats, including wooded areas, scrub, running water, and rough and wet grassland, are found in the vicinity of the pool. This diverse range of habitats attracts a wide selection of birds and provides good feeding and presumably roosting habitat for bats. All UK species of bats and are specially protected under the Wildlife & Countryside Act.

The pool is silting up at the southern end. The silt is being deposited directly in the pool with peak periods of deposition occurring whilst the brook is in spate. Create 2 on-line pools upstream of the pool to act as silt traps. These slack pools will provide a good refuge for aquatic invertebrates.

# 7. Restoration

Restoration of a landscape can only ever be recreation, factors such as rainfall, sunlight and management regimes cannot be faithfully reproduced and so certain factors of development will not follow an identical path as the original. Oliver Rackham argues that it takes 150 years to faithfully reproduce a meadow (Rackham 1986, 342); clearly this is not restoration but recreation. However, the programme of ecology and archaeology contained within this report will give reasonable information upon which to base restoration work. Restoring a landscape is also problematic in that the resultant scene will be a snapshot of the past and will contain elements of various landscapes at certain times. For example, before the pond was created at the southern end of the site, it is likely that the area was wooded, so do we restore the woodland or the pond? It is therefore important to correlate the correct balance between informed recreation and long-term management in order that the landscape will develop to achieve the required status and not overdevelop to become a whimsical garden.

There are specific features of the landscape at Old Parsonage Farm that are worthy of restoration and present no major, or unachievable problems. These are outlined below with observations on the potential for restoration, potential problems to take into account and the amenity value and landscape potential of the restored feature.

#### 7.1. Former Ponds

The ecological survey (section 6) has outlined the benefits of the creation of on-line ponds further upstream (south) from the existing pond. These ponds will act as silt traps. These 'slack' pools will provide a good refuge for aquatic invertebrates.

The earliest pond (as shown on the Tithe Map) cannot be faithfully recreated to its 1840 size and shape. The pond would have originally been created by damming the stream that runs down the valley (although it may also have also been excavated behind the dam). Carrying out this process again would result in a pond that follows a contour that matches the height of the outlet over the dam. As the property boundaries appear to have narrowed since 1840, it seems certain that the resultant pond would flow into the adjacent property to the west. However, an excavated and carefully levelled smaller pond could be constructed adjacent to the south of the dam, corresponding with the denuded pool as shown on the early Ordnance Survey maps. The underlying clay subsoil would hold water and no lining would be required.

There are issues to address however:

□ Valley Hydrology: It is understood that the valley hydrology would not be significantly altered by the creation of on-line ponds further upstream (Will Watson pers comm.). However, it is believed that Kyre Park, to the north, still relies on the water flow for maintenance of its own ponds and issues that may affect such water flow need to be addressed prior to commencement of any work taking place. It should also be noted that the stream *may* have to be diverted whilst work takes place. The Environment Agency should be consulted regarding these issues.

□ A track way would need to be formed at the side of the proposed ponds for maintenance purposes, this should be wide enough to take the largest machine that may be required for de-silting or, for example, tree management. The track will also need to be accessed from Old Parsonage Farm and the steep sides of the valley at this end of the site may prove to be an obstacle without modification and re-grading of the slope. The line of the public footpath also needs to be taken into consideration.

The creation of a pond (or replication of the early 20<sup>th</sup> century pond) would enhance the valley and provide a valuable amenity resource from an area of currently unmanaged woodland. Long-term management in this area will allow light to the pool, encouraging aerobic decomposition to occur, increasing the biological diversity in the pool and stream and making it a better environment for aquatic flora and fauna.

#### 7.2. The Rapids and Waterfall

The waterfall and rapids at the head of the present wooden footpath bridge can be easily restored. Much of the stonework is still in place and clearing back vegetation will reveal more detail. De-silting at the northern edge of the water feature will also enhance any small plunge / splash pool that may be obscured by foliage. Stone for the works may be collected from the site, although this presents a problem, in that the proposed earlier footpath bridge to the south may also have been constructed of stone and the quantity of collapsed stonework does not equate with the building of the two structures. It may be that stone has been taken away to be used elsewhere and so reclaimed stone will need to be used if restoration of these features is to take place. It is important to note that it is unlikely the work can be carried out with the present footpath bridge still in place and it would either need to be temporarily moved, or permanently moved in favour of reinstatement of the original route of the footpath and bridge. It should be noted here, that the evidence for the waterfall and rapids consists of visible stonework below the bridge and in the water, with a degree of conjecture. It may be that clearance work in this area will better inform the hypothesis.

The creation (or recreation) of stone rapids and waterfall would enhance the amenity value of the area, offering a visual highlight to the woodland walk, which would be visible from the public footpath.

#### 7.3. The Footpath Bridge

According to the overlay of the EDM survey data onto the  $2^{nd}$  edition Ordnance Survey map, the east-west footpath across the site is now 7 metres further to the north. This evidence is supported by the remains of a pair of clay bridge abutments either side of the watercourse at this point. The following items should be noted with regard to any rebuilding of a bridge at this point:

- □ The reinstated bridge may carry the re-routed public footpath and, therefore, health and safety considerations must be paramount in its construction. Appropriate legislation and planning conditions must be taken into account.
- □ The actual construction of the bridge is unknown; the hypothesised clay and stonefaced construction has been suggested from circumstantial evidence.

□ The EDM survey is accurate to <1 centimetre, the accuracy of the Ordnance Survey plan cannot be guaranteed and so the realignment of the footpath may not follow the original route.

Rebuilding the bridge and redirecting the footpath will allow restoration or consolidation work on the waterfall to be carried out.

#### 7.4. The Existing Stone Footbridge

The rubble stone arched bridge at the head of the existing pond is still standing. The condition of the bridge cannot be determined as it is largely obscured by vegetation, although close inspection suggests it is stable. It may be that removing vegetation will compromise the structure in the short term, but will be necessary should the condition of the bridge be important more long term.

The method of construction will also only be more fully understood when the bridge and surrounding area is clear. As the form of this bridge may yield valuable information regarding the rebuilding of the former footbridge to the south, it may be important to carry out some clearance work and record the method of construction. Limited intervention into the bridge construction should be made unless the condition is deemed to be poor.

### 7.5. The Grassland

Two areas of orchard were recognised from the historic mapping. According to documentation (outlined above) they were once used for blackcurrant production. However, this does not preclude fruit production of other varieties during different periods. It would not be difficult to survey in the areas of former orchard, should they be outlined for definite restoration. The best basis for the survey would be the 1801 map of the glebe land (Figure 9). This shows the position of detail within the garden and orchard area.

The remainder of the meadow revealed no archaeological features apart from the site of a possible former pond, the evidence for this, however, is arguable.

# 8. Recommended Restoration and Management Plan

The proposed restoration or creation of replica landscape features should be carefully planned in order that the landscape and features compliment each other aesthetically, ecologically and historically. Where the historic and archaeological evidence is limited, we can make educated assumptions of what features existed and how they were used, based on evidence from similar sites. The restoration needs to be looked at as a long-term project, with short, medium and long-term elements. Based on the limited evidence, a proposed scheme has been suggested, this is incorporated below. Note that certain proposals span timescales.

The location of each area of restoration is shown in Figure 12 and the reference is contained in brackets.

#### 8.1. Immediate Restoration and Management Considerations

- □ **Management of the woodland area:** This should include cleaning up man-made debris, and windfall (All areas of woodland within the bounds of the site).
- Planning and implementing access routes for maintenance and construction plant: This must take into account the present line of the public footpath and the proposed route of a realigned footpath. Bearing in mind the public footpath bisects the site; it is likely that a new access (for plant and machinery) will need to be created from the south. Maintenance paths from the north should take into account the potentially fragile condition of the existing stone bridge and aim to avoid it.
- Re-alignment of the public footpath (PF5): This has to take into account all relevant legislation, which should be addressed at the earliest date. This will also include construction of another bridge across the brook. It is the authors opinion that remains of the former bridge (clay abutments; (PF7) are not restorable and so either a bridge in a similar style to the existing stone bridge (PF2) should be built, or alternatively and less problematic, a standard timber public footpath bridge may be used.
- Reduce the number of fish in the existing pond (PF1): This should especially include carp. The Environment Agencies fisheries team could carry out this work, for example, by netting out the majority of fish and offering them onto to owners of other pools. In the first instance contact Mike Exeter head of the fisheries team at Hafren House, Shrewsbury on 01743 272828. This work could proceed at any time but ideally as soon as possible.
  - Rationale:

Clearing the site and creating access routes, both for plant and machinery and public access across the site, will clarify the areas of landscape to be managed and developed and will put some structure into the scheme.

As the existing pool becomes progressively more silted the pressure on the wildlife will increase. It is important to redress the balance by reducing the numbers of fish.

# 8.2. Medium-Range Restoration Targets

- □ Plans should be drawn up for areas of meadowland that may be converted to orchard: Ideally, this should correspond with areas of former orchard (see Figures 3 and 6). The planting and creation of the new orchard may be seen as either a medium or long-term aim.
- Plant plugs of typical meadow species in the small field on the bank beside the track where the soil is thin (currently where the Red Clover is in flower). The patches of bare ground created by trampling would be ideal for this purpose. Typical old meadow species found within this region should be selected such as: Knapweed, Lady's Bedstraw, Cowslip and Bird's-foot Trefoil. As it is

quite a small area only 3 or 4 plugs for each species will be needed. This work should ideally be carried out in autumn or spring avoiding dry or frosty weather conditions. The work could be spread over several seasons.

#### Rationale:

The grassland is botanically impoverished. Fairly drastic management operations would be required to increase the species diversity of the sward; for example soil stripping to reduce nitrogen and phosphorous levels. This type of work is not compatible with the archaeological interest of the site. It is therefore recommended that small-scale manageable targets are set (such as planting plugs) which will not damage any underlying archaeology.

#### • Other considerations:

It should be possible to buy these plants in pots either locally from the wildlife trust or from a specialist supplier. Occasionally such plants can be obtained from threatened sites. You should consult the local wildlife trusts.

Plant plugs of wet grassland flowers in the ditch beside the track in the small field. (currently where there is Soft Rush and Brooklime). Examples of plants that may do well in this situation are: Ragged Robin (Lychnis flos-cuculi), Meadow Sweet (Filipendula ulmaria), Tufted Vetch (Vicia cracca) and Water Mint (Mentha aquatica). Timing of work: This work should ideally be carried out in autumn or spring avoiding dry or frosty weather conditions. This work could be spread over several seasons.

#### Rationale:

This should help diversify the grassland community.

It may be possible to establish some of the typical meadow species of plant within the main sward. Robust plants such as Knapweed may survive. Planting may work best on the site of old molehill. This should be an experimental operation. It may be worth marking where these plants are and monitoring their progress.

#### **Other considerations:**

.

It should be possible to buy these plants in pots either locally from the wildlife trust or from a specialist supplier.

- □ The existing stone bridge (PF2) should be sympathetically cleared of vegetation and an assessment of condition made. The assessment results will determine the programme of works (if any) required on the bridge. A policy of minimal intervention should be adopted and the bridge should only be repaired/consolidated in a like for like manor if necessary. This should be undertaken over a timescale that reflects the condition of the bridge, i.e. if the bridge is deemed to be in a poor condition then the work should be carried out as a priority.
- □ **Create an on-line pool (PF4):** This should be c.50 metres upstream in the triangle of land shown on the map (Figure 7: location of possible former pond). It should measure 10 metes x 7.5 metres. It should be dug to a depth of 60 centimetres reaching the level of the bed of the stream. This work should be carried out between July and February (outside the bird breeding season). It is important to try and choose periods of dry weather to avoid the track to the excavation site being churned up by machinery. Ideally a caterpillar tracked excavator should be utilised as they cause less damage to ground surfaces

#### **Rationale:**

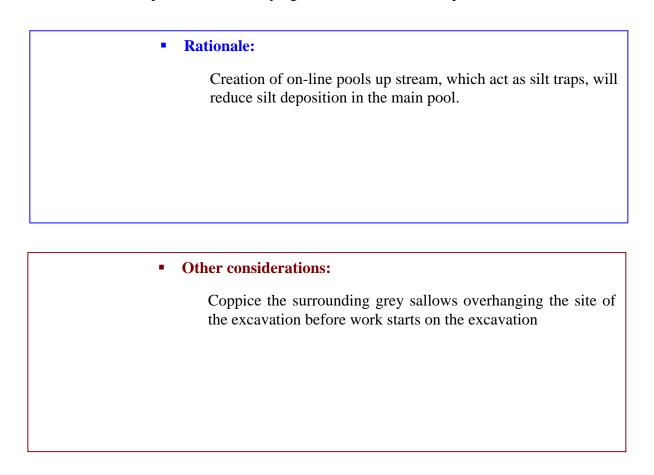
Pools on-line silt up naturally. There is a fairly steep fall to the brook 100 metres upstream of main pool resulting in periodic rapid silt deposition. The pool located above the current site is now completely lost. Creation of on-line pools up stream, which act as silt traps, will reduce silt deposition in the main pool.

#### **Other considerations:**

Rescue clumps of aquatic flora on the site of the excavation before work starts such as the soft rush, opposite-leaved saxifrage, brooklime, angelica and bugle.

Use the spoil to create an artificial otter holt (**PF3**) just downstream where the pile of logs are situated (see below).

□ Create a second on-line pool (PF 10): This should be 150 metres upstream on the bed of the old pool depicted on the early Ordnance Survey maps. It should measure 15 metres x 8 metres. It should be dug to a depth of the stream bed. This may require excavating down to a depth of 2 metres of more because the stream has incised a deep channel at this point. Spoil from the excavation should be placed in the low lying nettle dominated area upstream of the excavation.



□ **Coppice alders and sallows**, which overhang the brook and pool on a rotation. As a rule trees which have been previously coppiced (multi-stems) should be re-coppiced. Only a few trees should be felled in a calendar (the sallows, as shrubs will usually be excluded – see below).

#### Rationale:

Aim to maintain to a good balance between shade and light on the pool and brook. Some of the alder trees are reaching post maturity. It is best that they are coppiced sooner than later because otherwise they could die. Letting more light in will benefit marginal aquatic flora and their associated fauna.

#### Other considerations:

Only 20 cubic metres of wood can be felled in a year without a felling licence from the Forestry Commission. This figure includes the entire land holding.

- □ Create an artificial otter holt (PF3) about 30 metres upstream of the pool. Some of the logs from the felling should be used in its construction. They should be placed in an upright pile leaving lots of gaps and crevices. This should be capped to ease the biological diversity in the pool and stream and make it a better environment for aquatic flora and fauna.
- □ **De-silt the on-line pools on a regular basis (PF4 and PF10):** The silt could be made into compost by mixing with farmyard manure and adding small quantities of chalk or lime. This practice is traditional. A mixture of liquid manure was often added to the water carriers in water meadow systems, the mixture of rich alluvial silts and liquid manure was referred to as 'dungle' and was beneficial to rapid crop growth.
- □ **Full de-silting** of the entire area of each pool will probably be necessary every 3 to 4 years. It would be best however, to remove smaller quantities of silt each year, so as to limit the damage to aquatic flora. This work could be carried out at any time.

•	Management Objective
	To prevent these ephemeral habitats from disappearing and to help reduce the amount of silt entering the main pool.

#### **Rationale:**

Creation of on-line pools up stream, which act as silt traps, will reduce silt deposition in the main pool.

# • Other considerations:

Coppice the surrounding grey sallows overhanging the site of the excavation before work starts on the excavation

# 8.3. Long-Term Restoration Targets

□ **Reduce the level of shading by coppicing** all young trees and shrubs within 3 metres from the edge of the stream and pool. Aim to create an open canopy immediately around the pool to reduce affects of leaf deposition. The coppicing work should be repeated every 2 to 3 years to keep the margin open. This work should be carried out in the dormant season between the months of October and January; the period when least likely to affect wildlife.

### Management Objective

To allow light on the pool this should encourage aerobic decomposition to occur.

To increase the biological diversity in the pool and stream and make it a better environment for aquatic flora and fauna.

- □ **De-silt the on-line pools on a regular basis:** The silt could be made into compost by mixing with farmyard manure and adding small quantities of chalk or lime. Full de-silting will probably of the entire area of each pool will probably be necessary every 3 to 4 years. It would be best however, to remove smaller quantities of silt each year, so as to limit the damage to aquatic flora. This work could be carried out at any time.
- □ Aesthetic aspects of the pond/watercourse area should be managed and restored on a long-term basis. This may include sympathetic clearance of vegetation from the waterfall (PF9), replacement of stone where necessary, clearing the possible plunge pool at the foot of the waterfall and possible formation of stone rapids (PF8) to the south of the waterfall.

#### • Rationale:

To prevent these ephemeral habitats from disappearing and to help reduce the amount silt entering the main pool.

Improving and maintaining the site aesthetics will add to the amenity value.

# 9. Conclusion

The results of the archaeological and ecological survey at Old Parsonage Farm has determined the existence of several features, which are all likely to represent relict structures from the once larger Kyre Park landscape. The features are all worthy of restoration as they serve to compliment each other with the focus and emphasis on the watercourse that has been used to great advantage and effect in Kyre Park. Re-creation of a pond as it appears on early Ordnance Survey maps, would provide major amenity and wildlife habitat value at the southern end of a currently neglected and unmanaged valley. This and a proposed second pool further to the north would act as silt traps, reducing deposition of silt into the existing pool, especially during peak periods of deposition occurring whilst the brook is in spate. The ecological survey also determined that by lowering the level of fish stock in the existing pool, the overall ecology of the pond and water supply would be improved.

A range of semi-natural habitats, including wooded areas, scrub, running water, and rough and wet grassland, are found in the vicinity of the pool. This diverse range of habitats attracts a wide selection of birds and provides good feeding and presumably roosting habitat for bats.

Careful management of the woodland would allow light to penetrate the canopy encouraging aerobic decomposition to occur, increasing the biological diversity in the pool and stream and making it a better environment for aquatic flora and fauna. All of the waste material from the management process can be put to good use on the site, timber can be used in the creation of an otter holt and silt can be used as the basis of a natural fertiliser on the pasture, which needs little but sensitive management.

Although Old Parsonage Farm is now separated from Kyre Park by property ownership, the amenity value of the improved water features and surrounding woodland would mirror the historic leisure aspect of its undoubted relatioship to the Kyre Park pleasure gardens. Renewed interest in this area of the valley can only be beneficial to management of the surrounding parts of the holding and traditional management skills will return with that interest.

Whilst restoration poses certain problems, the current owners of Old Parsonage Farm demonstrate the enthusiasm, knowledge and forethought to make a scheme of restoration on the holding a success.

# 10. Acknowledgements

The author would like to thank the client John and Nicky Beavan of Old Parsonage Farm. Thanks are also due to John Smith for carrying out the EDM survey and to Will Watson for his invaluable ecological work. Thanks are also extended to Jez Bretherton, Countryside Officer, Worcestershire Historic Environment and Archaeology Service and Mike Glyde, Planning Archaeologist, Worcestershire Historic Environment and Archaeology Service and the staff of Worcester Records Office.

#### REFERENCES

Airs, M (1995) The Tudor and Jacobean Country House, Bramley Books

**Institute of field Archaeologists** (1999) *Standard and Guidance for an Archaeological Field Evaluation* 

**Lockett, R** (1997) A Survey of the Historic Parks and Gardens in Worcestershire, Hereford and Worcester Gardens Trust

Mee, A (1938) The King's England: Worcestershire, Hodder and Stoughton

Mercian Archaeology (2003) Mercian Archaeology Service Manual

**Mercian Archaeology** (2003) Proposal for the Production of an Historic Landscape Management Plan at Old Parsonage Farm, Kyre, Worcestershire (Revised March 2003)

**Nash, Dr T.R** (1894) Collections for a History of Worcestershire, Worcestershire Historical Society

Page, W (ed) (1971) Victoria County History: Worcestershire, Volume IV

Rackham, O (1986) The History of the Countryside, Pheonix Giant

Shirley, E.P (1867) English Deer Parks, Murray Publishing

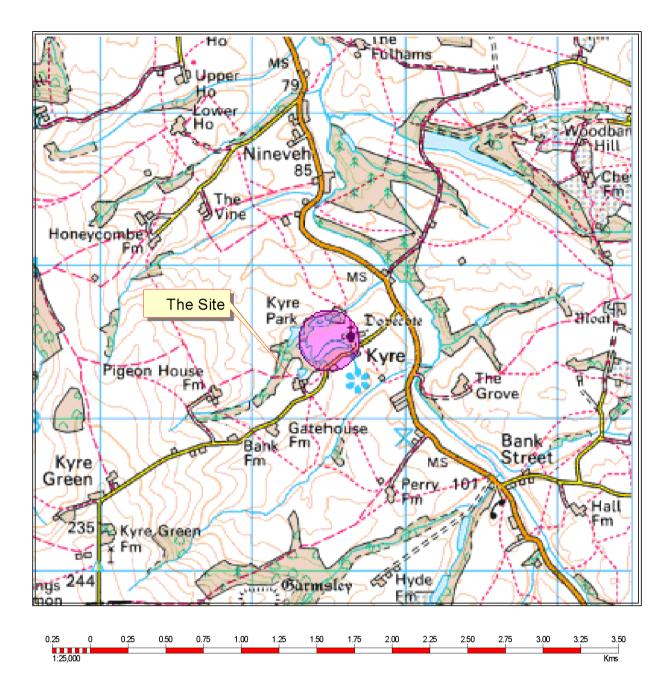
**Worcestershire Historic Environment and Archaeology Section** (WHEAS 2002) *Brief for an Historic Landscape Management Plan at Old Parsonage Farm, Kyre, Worcestershire* 

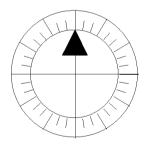
#### COPYRIGHT

This report is copyright to Mercian Archaeology. The client will be granted full licence to use the information contained within the report on full settlement of the account

© Mercian Archaeology: September 2004

# Figure 1: Location of the Site



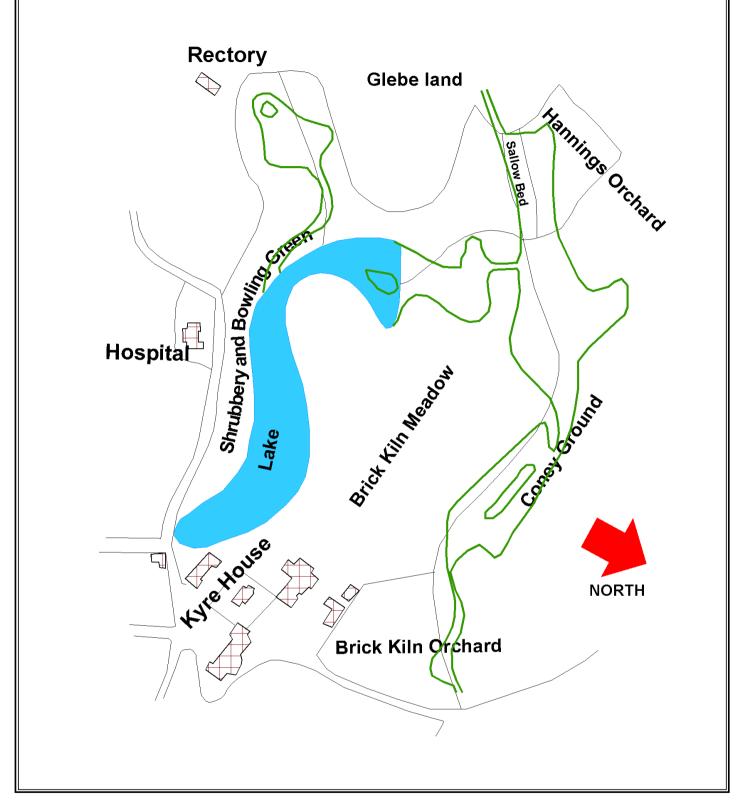


Location of Old Parsonage Farm

©Crown Copyright All Rights Reserved

Licence number 100040597

Mercian Archaeology \_71 taking the past into the future



The 1774 plan of Kyre Shrubbery shows what must be the early development of the formal park and pleasure gardens at Kyre House. The formal lake has been constructed but no other water features are depicted. The study area is, at this time, within the glebe land to the south-west. The green lines represent the outline of the park lakes by 1864

Mercian Archaeology 臣通 4 taking the past into the future

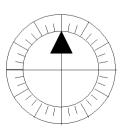
Unknown scale



Figure 3: Extract from the Plan of Glebe land of The Rectory of Great Kyre (1801)

The 1801 plan of glebe land in Great Kyre shows orchard adjacent to the north-east of The Old Parsonage and small formal gardens to the south.

Unknown scale





159  $f(x,\theta)$  $\Theta_{i}^{\mu}$ 7623.4 102  $d\bar{q}_{j}$ 127 170 NORTH 160  $\hat{x}_{ij}$ the -1.04 200 нg

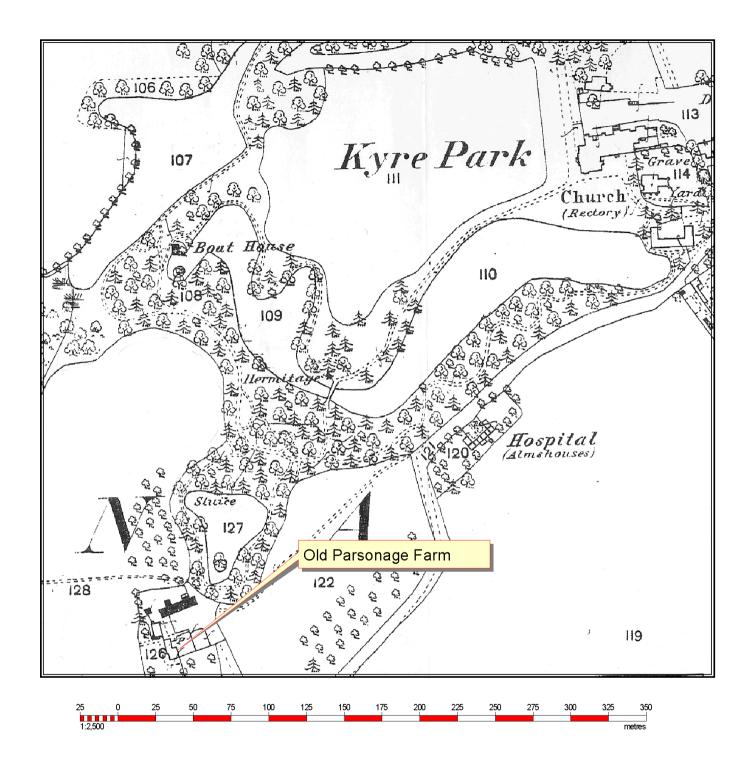
Figure 4: Extract from the Tithe Map of Kyre Magna (1840)

The tithe map of 1840 with the study area highlighted.

Unknown scale

Mercian Archaeology into the fu

# Figure 5: 1st Edition Ordnance Survey (1885)



The 1st edition Ordnance Survey map shows the extent of parkland alteration since 1774.

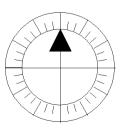
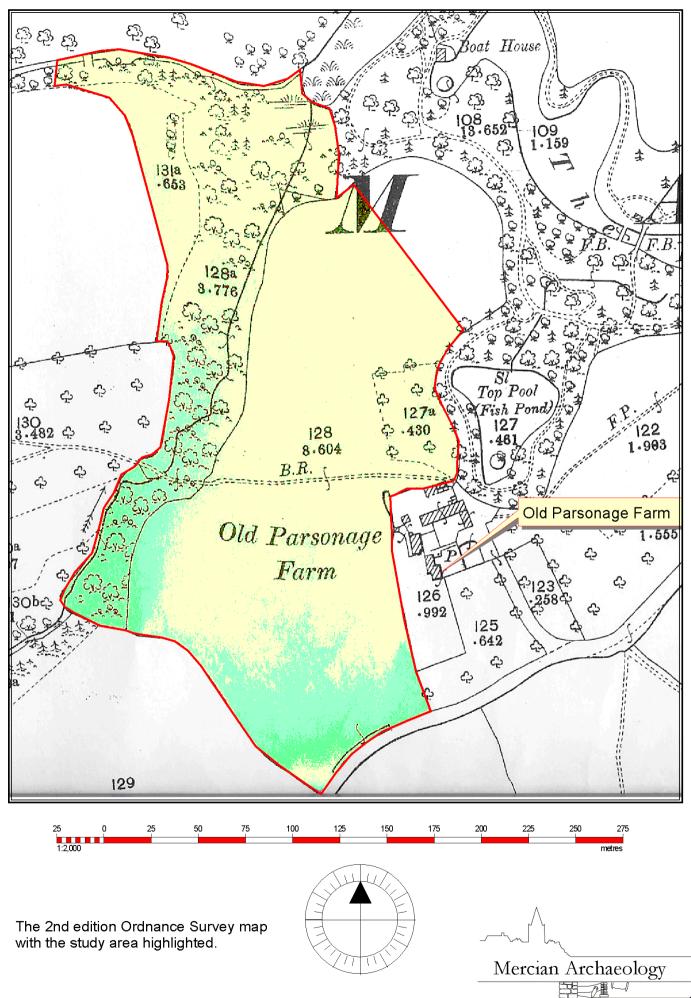




Figure 6: 2nd Edition Ordnance Survey (1904)



4 aking the past into the future

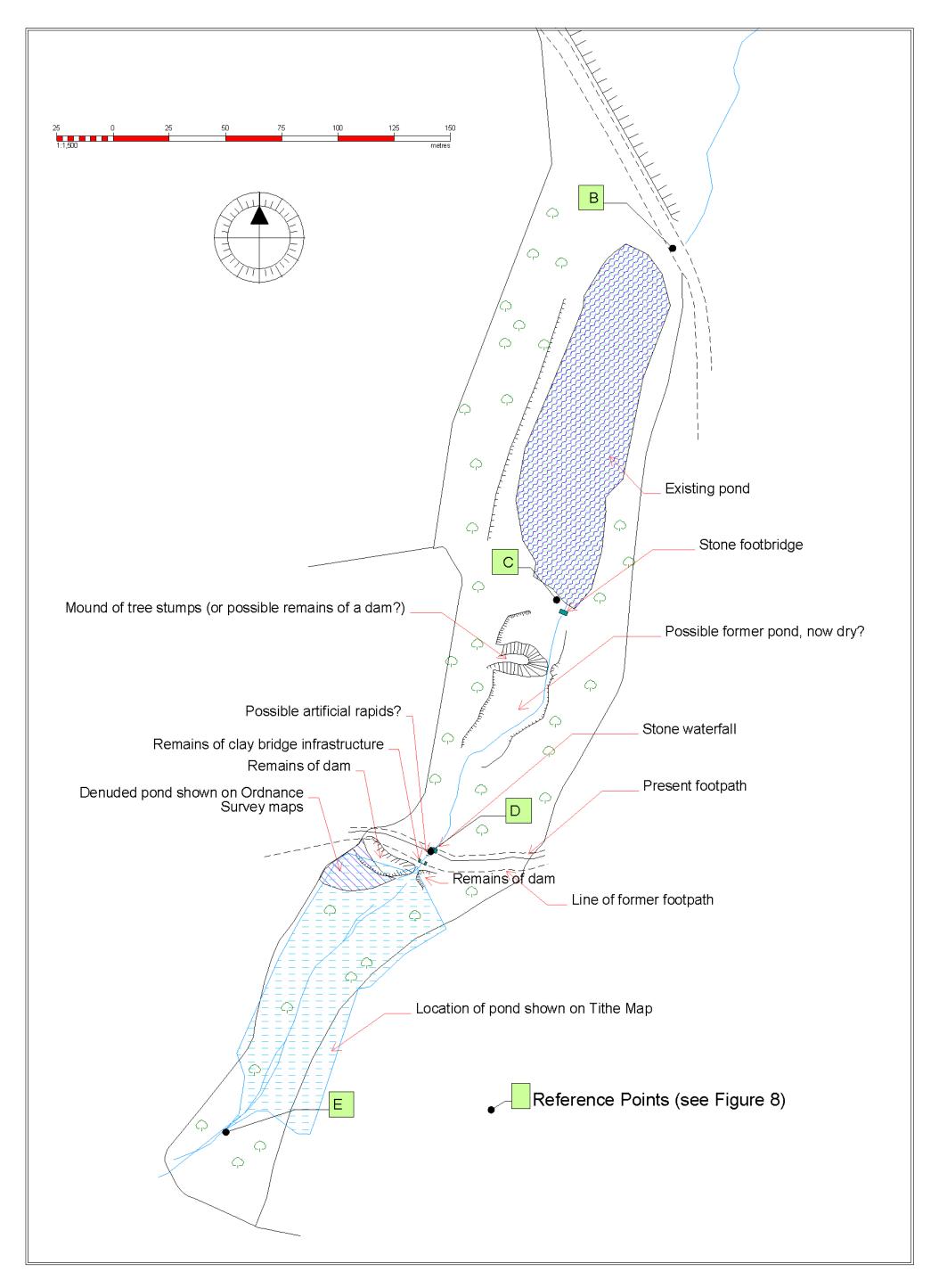


Figure 7: Features Noted in the Woodland / Pond Area and Referred to in the Text

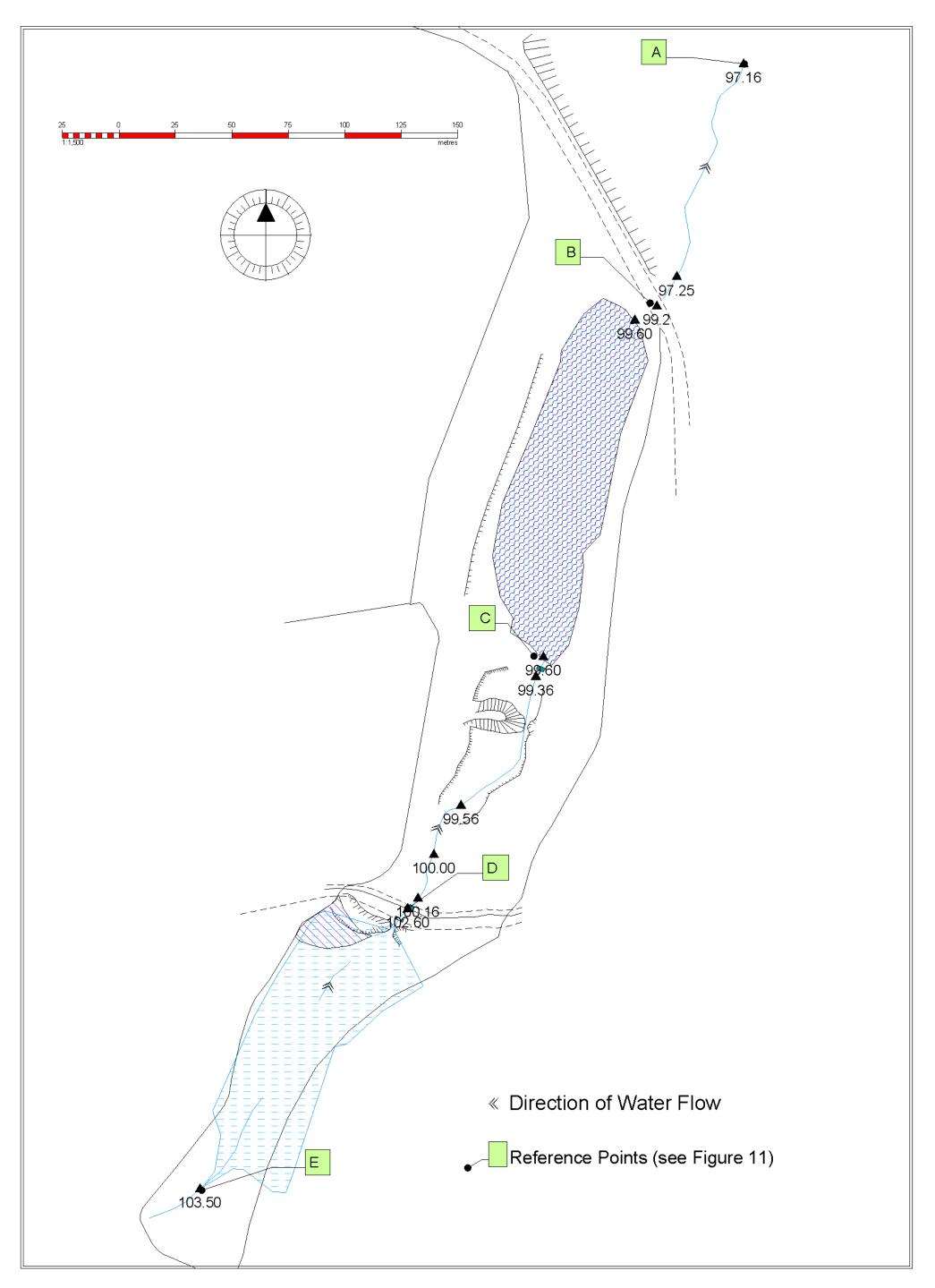
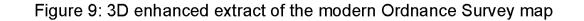
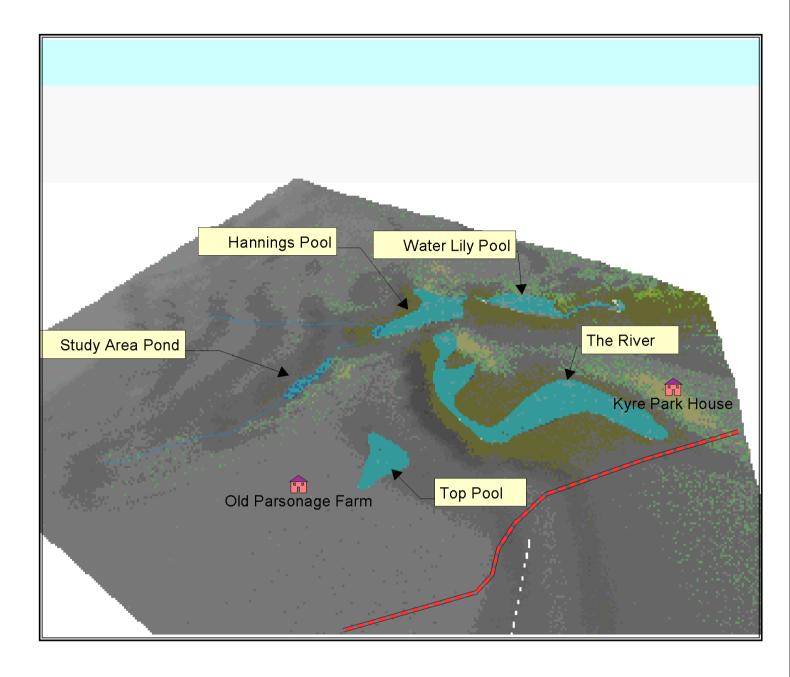


Figure 8: Spot Heights (in metres AOD) Indicating Flow Pattern

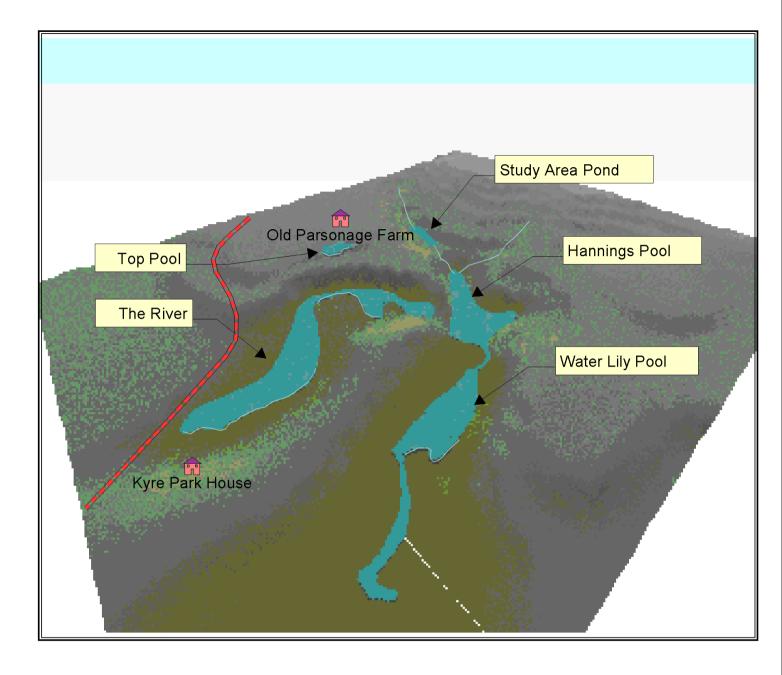




This 3D image shows the general topography of the study area. Note the steep contours to the west and the twowatercourses that supply the ponds of Kyre Park and Old Parsonage Farm runningwothrough the valleys down to the flatter level around the park. Old Parsonage Farm lies on a slight plateau to the south.

Mercian Archaeology 臣 四日 ng the past into the future

#### Figure 10: 3D enhanced extract based on Ordnance Survey contours



This 3D image shows the general topography of the study area viewed from above Kyre Park towards Old Parsonage Farm (south).

Mercian Archaeology 単通り

aking the past into the future

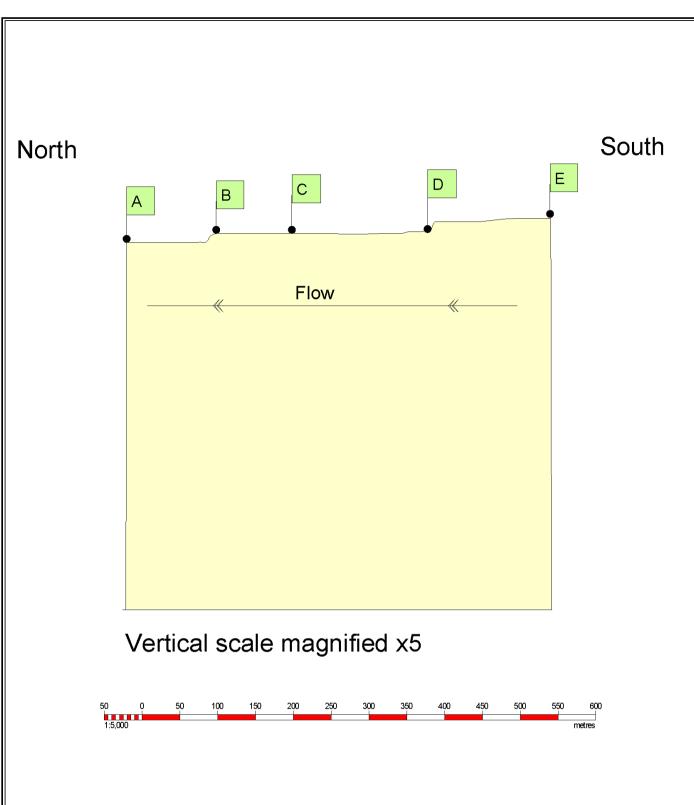


Figure 11: Profile Along Watercourse in the Woodland Area

Refer to Figure 10 for location of reference points

Mercian Archaeology 毘加い taking the past into the future

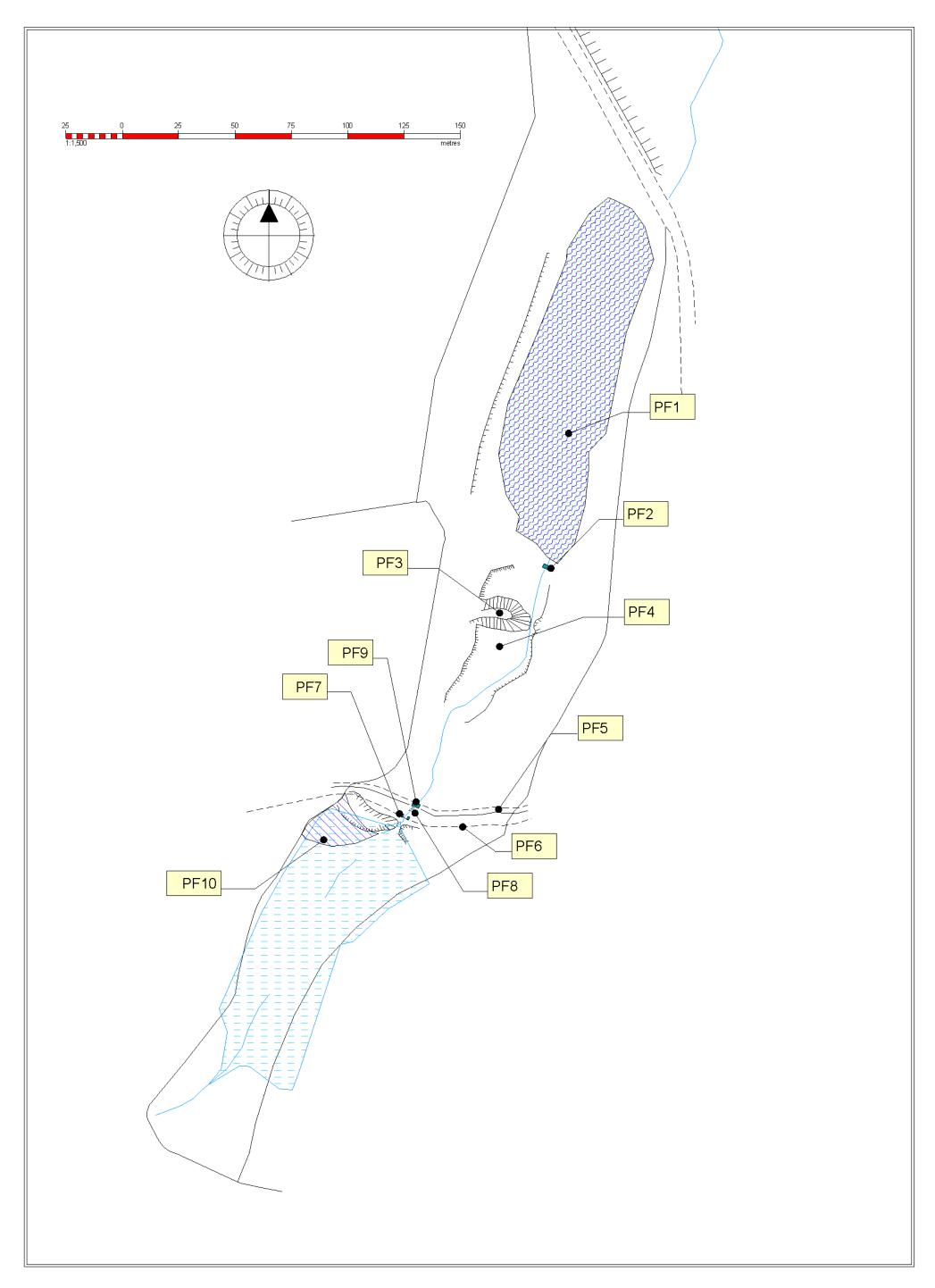


Figure 12: Location of Areas Referred to in the Management Plan (Section 8)

Plate 1



Remains of earthen dam associated with pond shown on tithe map (Looking west; Scale 1 metre)



Remains of earthen dam associated with pond shown on tithe map (Looking north; Scale 1 metre)

Plate 3



Stone built waterfall below the present footpath bridge (Looking south; Scale 1 metre)



Clay abutment of former footbridge south of the present stream crossing (Looking west; Scale 1 metre)

Plate 5



Stone slabs scattered along the stream and in the bank may be from the former footbridge or possibly artificial rapids at the head of the waterfall below the present footbridge (Looking west; Scale1 metre)



*The existing pool beyond the dry-stone arched footbridge (Looking north; Scale 1 metre)* 

Plate 7



The flat arch of the dry-stone bridge (Looking south; Scale 1 metre)



A possible former pond to the south of the existing pond. The mound in the top of the picture appears to be the stumps of recently felled trees, but these may be hiding evidence for a dam. The evidence is tentative (Looking north; Scale 1 metre)

Plate 9



The existing pool showing algal scum (Looking north)



Smooth Newt adult male, found beneath concrete 50 metres to the south of the existing pool

Plate 11



**Broad-leaved Osier** Salix x sericans

Old Parsonage Farm pool, Kyre. Collected by Will Watson 28th July 2004: Worcestershire VC 37

Plate 12



Water Forget-me not Myosotis scorpioides

Old Parsonage Farm pool, Kyre. Collected by Will Watson 28th July 2004: Worcestershire VC 37

Plate 13



**Broad-leaved Osier** Salix x sericans
(Willow Catkins)

Old Parsonage Farm pool. Collected by Will Watson 15<sup>th</sup> March 2004: Worcestershire VC 37