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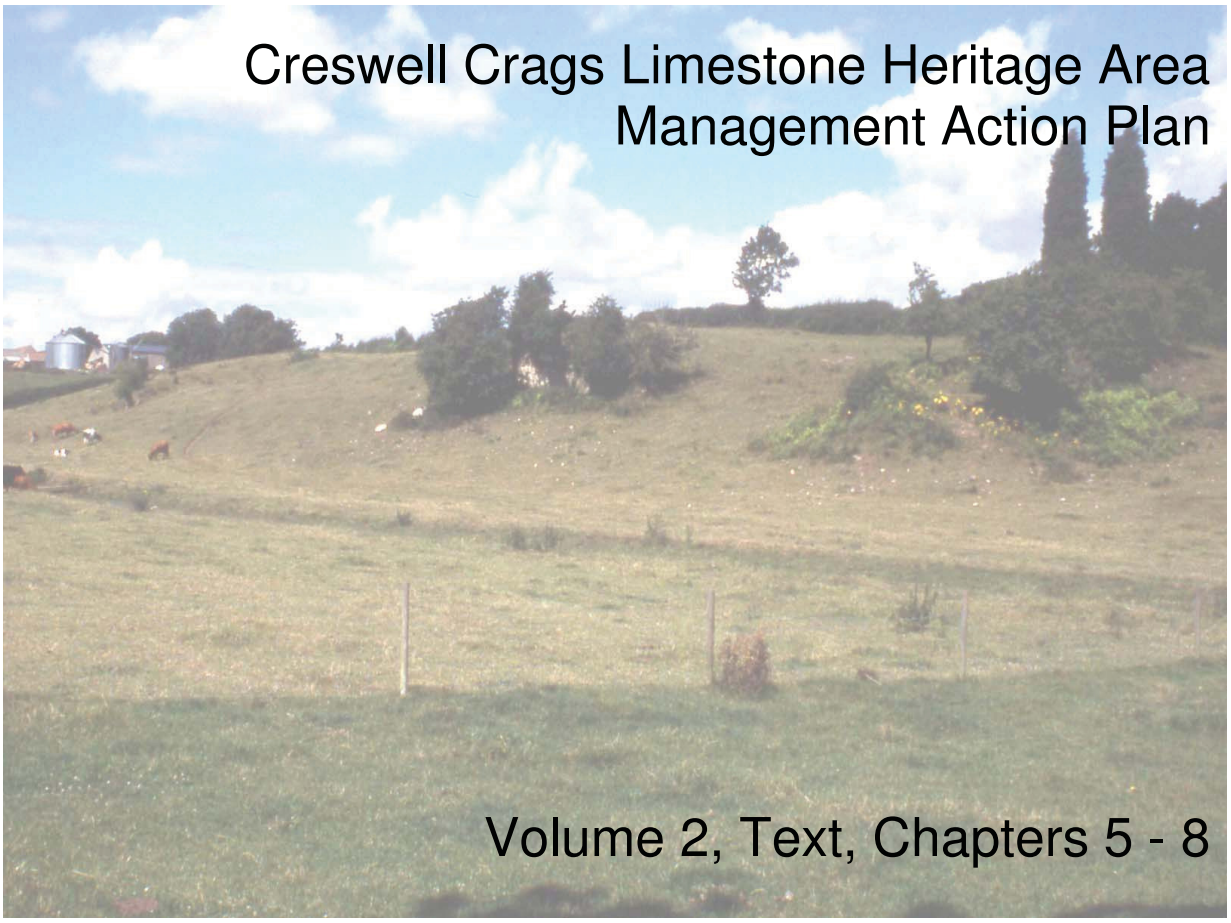

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5 THE IMPACT OF LATER HUMAN ACTIVITIES ON THE VALES AND GORGES

5.1 Introduction

This report examines the impact of human activity within the gorges, primarily from the medieval period onwards, although mention is made of human impacts from the prehistoric period. The study was undertaken through a combination of desk-based research and rapid field survey, and was designed to provide an general overview of the landscape development for the whole area, as well as a more detailed study of each gorge and vale.

5.1.1 Aims

The aim of this study was to identify the principal agencies that have shaped the development and current landscapes of the gorges and vales. The study was designed to enable a series of landscape types to be characterised for each gorge, which would set the present land use and management into its historical context, and enable the impacts of these past and present land uses upon the prehistoric landscapes and features to be assessed.

For each gorge, the main historical influences or items of historic interest are highlighted at the end of the relevant section.

5.1.2 Study area

There are eleven vales/gorges within the study area, and these contain varying numbers of rock outcrops with caves or rock shelters. The eleven vales/gorges include those listed in the Pleistocene Site Gazetteer in the Creswell Crags Conservation Plan and an additional three, namely Roche Abbey Gorge, Red Hill and Firbeck. **Table 1** below lists all the vales/gorges within this historic landscape study. The gorge at Creswell Crags was excluded from the study as this has been the subject of a previous study and report (Collcutt and Johnson 1999).

Table 1 – gorges and vales included in the historic landscape study

Vale or Gorge
Roche Abbey Gorge
Firbeck
Anston Stones
Red Hill
Thorpe Common and Lob Wells Wood
Steetley Quarry Caves
Ash Tree Gorge
Markland Grips
Elmton and Whaley Valleys
Langwith Vale
Pleasley Vale

5.2 Methodology

5.2.1 Data sources for desk-based assessment

The following sources were consulted:

South Yorkshire Sites and Monuments Record

Derbyshire Sites and Monuments Record

Nottinghamshire Sites and Monuments Record

Local studies libraries and archives (Sheffield and Rotherham)

The Creswell Crags Conservation Plan

5.2.2 Landscape characterisation

Landscape characterisation exercises have previously been undertaken by Derbyshire County Council and Nottinghamshire County Council. The desk-based assessment consisted of obtaining historic landscape character information from both County Councils, as well as undertaking similar characterisation for the South Yorkshire area. Relevant information from the Sites and Monuments Record for each county was also incorporated into the study.

The Derbyshire Historic Landscape Characterisation project used available historic maps for each parish to establish, where possible, the date and form of field enclosure and significant industrial, residential, woodland, parkland and recreational land use. The information was plotted on a series of maps of different dates: 1650, 1850 and present day. The information is held on a GIS system, which incorporates information as to the historic maps consulted, and notes on the historic processes involved in the formation of the landscape. For this assessment, only the present day map was consulted.

The Nottinghamshire Historic Landscape Characterisation project involved the compilation of a nineteenth-century map based on Sanderson's 1835 map of 20 miles around Mansfield, supplemented by the 1885 25 inch to 1 mile OS map in areas not covered by Sanderson. A present day map was also compiled on GIS, using information from the nineteenth-century map and the present day OS map. Categories included urban, woodland, parks, mineral extraction, military, leisure and the form of field enclosure. The present day map was consulted as part of this assessment.

For the characterisation of the historic landscape of the areas surrounding the South Yorkshire vales and gorges, Sanderson's 1835 map was used as a base. This map covered the entire area in which the gorges are located, and provides a high level of accurate detail. The map is drawn at 2 inches to 1 mile, comparable to the present day 1:25000 OS. It has been used as a standard source for field history in Nottinghamshire and northeast Derbyshire. In addition, available historic maps for the individual parishes were also consulted. These included enclosure, tithe, and rate valuation maps. Historic maps for the Sandbeck Estate were not consulted, as these are held in a private archive, and time constraints did not allow for gaining access to these documents. The 1901 OS 25 inch to 1 mile maps for the area were also consulted.

The form and date of field enclosure was noted in the historic landscape characterisation for the South Yorkshire area. Woodland, parkland, industry and

mineral extraction, as well as significant communication routes such as railway lines and historic roads were also considered. The SMR was consulted to establish known historic and later prehistoric sites within or close to the gorges. This information was added to the historic map data. A list of maps consulted for this study is contained in **Appendix 1**.

The Southern Magnesian Limestone has also been characterised in the Character Map of England (Countryside Commission and English Nature) as both a 'Character Area' and 'Natural Area'.

5.2.3 Field survey

The desk-based assessment was enhanced through a programme of rapid field survey. The aim of the field survey was to gain a feel for the general character of the gorges, identify and illustrate particular instances of human impact of different types, and provide a baseline against which to assess the information gathered during the desk-based assessment. Notes on various landscape characteristics were made, and the record was enhanced by digital photographs for the illustration of particular features or land use types.

5.3 General overview of the landscape development

The Creswell Crags Limestone Heritage Area is part of the Magnesian Limestone Ridge; a distinctive landscape which has been shaped by a wide variety of different land uses from the prehistoric period onwards. This general overview draws upon sections of the NCC Countryside Appraisal (1997) and the Creswell Crags Conservation Plan (2001).

The Magnesian Limestone Ridge is today a predominantly agricultural region. The area is strongly influenced by the underlying geology which has affected not only the physical characteristics of the region, but also its history of human activity, land use, development and settlement. The landform is mainly rolling, but is disected by rivers which in places have cut narrow, steep-sided gorges through the geology, exposing limestone rock faces. The steep valley sides with cliffs in association with the narrow river corridors create a strong sense of visual confinement. The caves in these rock faces have produced significant evidence for Palaeolithic activity. River meadowlands are a characteristic feature of these often narrow valley floors and provide an important wildlife resource, particularly where they are unimproved.

The area has a diverse range of natural resources that have been exploited at different periods through time. Timber and natural soils would have been amongst the first resources to be exploited by humans. Today, tree cover on the plateau is found predominantly in large woodland pockets, and is a distinctive feature of the landscape. Some woodlands are of ancient origin whilst others comprise more recent plantations with mix of deciduous and coniferous trees. The stream sides in the limestone gorges tend to be well wooded with varying densities of scrub set in the pasture.

Stone from the area was an important source of building material, and while in the medieval period it may have been used primarily for churches, large houses and other buildings of note, by the end of the eighteenth century it was widely used for buildings of all types. This contributes towards the character of the built environment. In a few places limestone extraction has occurred on a much larger scale, for building stone or aggregates. Quarrying has had a major impact in some of the gorges, and coal mining, with its attendant infrastructure, has probably had the greatest physical

and social impact upon the landscape. The remnants of the mining industry, and its associated communities, are a major focus for regeneration activity today.

Water would have been an important focus for prehistoric activity, and the harnessing of water power from the medieval period onwards played a vital role in the development and growth of milling and textile industries. Many of the watercourses that run through the vales and gorges still retain evidence for the harnessing of water power, and of adaptation for the provision of ornamental water features and fish ponds within monastic and parkland estates. Physical features relating to these activities, including coppice woodland, are still present in many areas today. The height of water-powered exploitation in the gorges is expressed in the imposing nineteenth cotton mill complex that dominates Pleasley Vale.

There is still a good variety of settlement types today, including farms, hamlets, small villages and towns (including 'model' settlements associated with collieries), as well as a number of large country houses and halls, with their associated estate lands. These latter and their estate lands were often embellished with more formal gardens and plantations in the eighteenth and nineteenth centuries. A high proportion of the remaining woodland is associated with current or former parkland estates, and includes elements of designed landscapes. With one or two exceptions, the gorges themselves tend not to be heavily settled.

5.3.1 Pleistocene deposits

The gorges, particularly Creswell Crags, are perhaps best known for their cave deposits of Palaeolithic material, which represent a significant proportion of the Scheduled Ancient Monuments for the Palaeolithic period in this country. Key influences on the known settlement patterns are likely to have been proximity to water, available shelter and the areas location between the relatively well watered coal measures to the west and the sandy heathland of Sherwood Forest to the east.

The impact of Palaeolithic activity on the landscape is not covered by this report.

5.3.2 Later prehistory

During the later prehistoric period the land within the Heritage Area would have been attractive due to fertile and freely draining soils and timber and stone resources. However Whitwell Long Cairn, a site of national significance, is the only known Neolithic structure within the Heritage Area. The presence of people is mainly indicated by numerous flint scatters and cave burials such as at Sepulchral Cave (Markland Grips), Whaley Rock Shelter (Elmton and Whaley Valleys) Ash Tree Cave, (Ash Tree Gorge), Lob Wells shelter (Thorpe Common). Early Bronze Age burial sites are known within Scarcliffe Park, including one cairn measuring 11m across.

Evidence for increased farming activity during and after the Iron Age is well represented. For example at Scratta Wood there are the remains of three hut circles and evidence to suggest a mixed farming economy in the form of cereal production and domestic breeding of oxen, sheep, pig and horse. At Markland Grips is the remains of an Iron Age defended settlement site. Pottery found during the survey suggested the use of the site began in the Iron Age with further use in the second and third centuries AD during the Romano-British period. Residues of slag and burnt clay found on site may indicate metal working.

Recent surveys of the Heritage Area have identified eight minor and two major settlement sites of the Roman period. Homesteads possibly originated in the Iron Age and continued to develop throughout the Roman-British period. Scarcliffe Park

enclosure, dated to the early 2nd century AD, has a stone built oval enclosure containing oval and rectangular huts. Associated finds include flat and beehive querns and remains of horse, ox, pig and sheep. Other sites known in this area include one Romanised farm or villa in addition to the many isolated finds collected from ploughed fields and the odd coin hoard. Also notable are the brickwork pattern field systems common to this area. Important villas have been found at Oldcoates and at Mansfield Woodhouse, the latter having a winged corridor and an aisled building. These would have been the centres of large estates. They lie outside the normal distribution of villas in Britain but it is interesting that the villas of Yorkshire show a marked attraction to the Magnesian Limestone.

5.3.3 Medieval

Local evidence for the continued use of farmsteads and the establishment of agricultural settlements in the Early Medieval or Saxon period is limited. Presumably the evidence is buried under existing towns and villages. Anglo-Saxon communities were established in the Midlands by the eighth century AD. In Northeast Derbyshire the settlements were part of the west midland kingdom of Mercia on the border with Northumbria. From the eighth century AD a growing population would have produced a need to regulate farming. In 1086 the Magensian Limestone Ridge, in Nottinghamshire at least, was one of the most thinly populated parts of the county. The number of monasteries founded on or adjacent to the Magnesian Limestone plateau in the eleventh and twelfth centuries is indicative of the relative emptiness of the area. The larger communities tended to be located on the edge of the limestone, where resources from both the neighbouring Coal Measures and the Magnesian Limestone could be exploited.

Domesday Book records considerable tracts of woodland, much of it wood pasture. The general emptiness of the area encouraged the Norman Kings to bring it under Forest Law as part of Sherwood Forest. Pressure on the limestone region grew during the Middle Ages, and much woodland will have been removed at this time to facilitate the growth of settlement. Scarcliffe, Whitwell and Pleasley woods are remnants of former royal deer parks while Elmton, Pleasley, Thorpe Salvin and Scarcliffe are fine examples of deserted or shrunken Medieval villages that were surrounded by extensive areas of common grazing. The medieval commons were enclosed through a variety of mechanisms. Ancient enclosure of open land, and the fossilising of strip fields, is still reflected in some of the modern field boundaries around the settlements of medieval origin.

The medieval period is also associated with the growth of localised industrial exploitation of the region, including quarrying, milling, lime burning and charcoal production.

5.3.4 Early post-medieval

The sixteenth and seventeenth centuries saw a reinforcement of one form of landscape characteristic of the Magnesian Limestone plateau, that of parks associated with the country houses of the nobility and gentry. The transfer of monastic sites and estates into lay hands was in part the foundation of this, as was the fashion for displaying status through building and ornamentation. This parkland contributed and still contributes to the maintenance of a wooded aspect on the Limestone Plateau, reinforced by the larger ornamental gardens and plantations of the wealthy around their houses in the eighteenth and nineteenth centuries.

5.3.5 Later post-medieval

With much of its area given over to common grazing, enclosure only became general on the Limestone Plateau during the late eighteenth and nineteenth centuries. Enclosure occurred in both piecemeal fashion and through parliamentary enclosure acts, resulting in a more regular enclosed landscape across the region.

Animal husbandry continued to dominate the agricultural economy but from the late nineteenth century there was a distinct rise in arable farming. Large scale conversion to arable during World War II was maintained thereafter by government and EEC farming policies, with significant loss of hedgerow and other boundaries and disappearance of flower rich limestone grassland. Where boundaries remain, fields are medium regular and semi-regular, mainly enclosed by hedgerows and the occasional stone wall.

Industrial developments in the later post-medieval period have created the most obvious physical and character changes to the landscape of the area. Wool processing and cloth making were important and laid the foundations for the first phase of industrial expansion in the later eighteenth and early nineteenth centuries, focused on textile production. Through the development of domestic framework and the construction of textile mills people were drawn into the region. Rivers such as the Poulter and Meden provided the power on which this industrial development was based.

Important examples of these developments are William Hollins mills and industrial village at Pleasley and the complex of mills and workers housing at Cuckney. Many of the new mills and the houses of their workers were built in local stone. This perpetuated the natural building tradition of the region, which had begun with the houses of the nobility and gentry in the sixteenth and seventeenth centuries and had continued with the middle class town houses and the houses of gentleman farmers in the eighteenth century. In a region where stone was more readily available than brick, it was natural that as humbler dwellings were improved the local stone should be used. By the end of the eighteenth century even the most humble dwelling was likely to be in stone, or depending on the locality, stone and brick. The stone built farms and houses continue to give the area a distinctive built character today.

The development of deep mining in the second half of the nineteenth century has been one of major industrial impacts in the region. Colliery workings are located on the eastern and western edges of the study area, where the coal measures can be reached through the overlying limestone. Many of the colliery workings are now disused, but they have left a distinct industrial fingerprint upon parts of this landscape. Imposing spoil tips, colliery headgear and a large number of disused railway lines are still present in places, and most of the gorges are impacted by one or both of these feature types to some extent. Mining villages (including some colliery-built Model Villages) grew up around the collieries, and these are also very characteristic of later settlement in the area. This is particularly evident in the southern part of the Heritage Area, around the Meden Valley, with the villages of Creswell, Clowne, Church Warsop, Langwith, Meden Vale, Pleasley, Shirebrook and Whitwell. The collapse of a large portion of the mining industry in the 1980s had a hugely detrimental impact on the social and physical fabric of these communities.

Today the major routeways traverse the area in a roughly east-west direction, particularly in the northern half of the study area, but a whole network of smaller roads is present across the entire zone. The pattern of early routeways is hard to establish.

Sewage treatment plants are present in a number of the vales and gorges; presumably these locations are suitable because they are often close to settlements, but provide a discrete location. The sewage works at Creswell has recently been removed to enhance the amenity value of the gorge.

5.3.6 Summary

To summarise, the gorges and vales lie within a distinctive limestone landscape, the character of which has been shaped by its underlying geology and natural formation processes, as well as human activity from the Palaeolithic period onwards. A wide range of landscape types including ancient woodland, river meadowlands, agricultural land, designed parklands, settlements, transportation networks, minerals extraction and industrial complexes are present in the area.

On a smaller scale of analysis, the gorges themselves are remarkably diverse, containing between them a representative sample of all the land use types and impacts of human activity discussed above. The human impacts upon the gorges vary greatly, from those which appear relatively unchanged (except for variations in tree cover and the use of open land) to those which have been severely impacted by quarrying and the imposition of industrial infrastructure. Considered as a group, the gorges comprise a valuable amenity resource, comprising a palimpsest of the changing landscape through time, up to the present day.

5.4 impact of human activity in the gorges

5.4.1 Roche Abbey Gorge

Roche Abbey Gorge lies at the northern end of the Creswell Crags Limestone Heritage Area just south east of Maltby. The gorge has three arms; north-west, south-west and east. These are all of approximately 1.25km each, giving a total length for the gorge of about 3.75km. At the junction of the three arms lies the site of Roche Abbey, a Cistercian abbey now under English Heritage guardianship. The eastern arm of the gorge runs from the abbey through pasture to the village of Stone.

5.4.1.1 Settlement

Later prehistoric and Roman activity in the gorge is evidenced through isolated findspots of coins and other artefacts, but no settlement from this period is known. The medieval focus of settlement in the gorge was the Cistercian abbey, founded in 1147, and made from stone quarried from the local area (see Section 4.1.5, below). The abbey lies in the bottom of the gorge, on the flood plain of the stream. The ground here is flat, and has been landscaped to accommodate the abbey buildings.

There was a mill associated with the abbey, at around the present day location of Abbey Mill Farm to the east. The mill dam was at the end of a narrow fish pond in the valley – the fish pond is not distinct today, but the stream currently runs through a channel that has wide, gently graduated sides that are likely to be a slumped relic of the former fish pond edge.

Mill buildings of probable post-medieval date are present at Mill Farm (near Maltby) and at Stone. Stone Mill is mentioned in 1319, thus the current buildings may be on earlier foundations (Addy 1932-4). Whether the mills ever operated at the same time or not is uncertain, but water management will have affected the stream and valley floor deposits to a small extent.

There is little other settlement in the gorge itself, although a small number of farms and houses lie on the valley slopes along its length. The buildings on the south side of the main road at Stone have been set into shelves within the rock outcrop, and some outbuildings are built underneath the overhangs, into the rock faces.). The rock outcrop has been impacted by these dwellings (SK 5555 8980).

Plate 1: Rock shelter at Stone being used to protect a drinking tough for horses

Temporary settlement is evidenced by brick-built fireplaces/ovens within large rock shelters at Seed Hill, near Stone (SK 55217 89732, RAT10), where quarrymen are thought to have taken shelter.

5.4.1.2 Agriculture & designed landscapes

The grounds of the Abbey became part of the Sandbeck estate following the dissolution of the monasteries in 1535. In 1787 a lake is shown to the southwest of the abbey, most of which is still present. The grounds were landscaped in *c.*1794 by Capability Brown, and the route of the stream was altered to run past the cloisters. The ruins were tidied up at this date, and some parts were probably removed, no doubt to create a more aesthetic ruin. It is possible that parts of the gorge were widened or altered at this date, which may have had an impact upon sections of the rock face. The parkland extended from Abbey Mill Farm to Colonel's Holt, southwest of the lake.

The fields in the valley to the east of Stone were enclosed under Parliamentary Enclosure acts. The former parkland between the Abbey and Stone is currently under grazing.

Plate 2: Roche Abbey. The stream shows the location of the former fish ponds.

5.4.1.3 Woodland

The main areas of woodland are located on the north-western and south-western arms of the gorge. Some parts of the Nor Wood show outgrown coppice stools, and yew trees indicate that areas of natural limestone woodland may still persist in parts. Strips of woodland bound both sides of the south-western gorge arm.

5.4.1.4 Transport & industry

The main road from Maltby to Stone runs along the top of the north edge of the gorge. This is indicated on the 1835 map. Footpaths runs along the bottom of each arm of the gorge; their antiquity is not known. Abbey Lane and Gypsy Lane cut through the southern and northern edge of the gorge respectively, and meet at a stone bridge which crosses the stream – this route may be of some antiquity, and has impacted rock outcrops on the northern side.

Much of the southern side of the north-western arm of the gorge is covered by a sewage treatment works. This will have had a major impact upon sediments in the valley bottom, and may well have impacted upon areas of rock outcrop, although the extent to which the rock face has been cut back is not known.

A railway line crosses the vale to the north of the sewage works. It crosses the gorge by means of a substantial embankment through which the stream is channelled.

5.4.1.5 Minerals extraction

The magnesian limestone at Roche/Stone is valued as building and carving material. The abbey itself was built from material from the local area, and it is possible this came from the quarries located on the northern side of the gorge (centred SK 544 902). This quarry is identified on a map of 1835. The stone was valued for its suitability for building:

> "It is one of the most beautiful and durable materials of the kind in the whole kingdom: its texture is close and when worked it is free from any grainy appearance, hence it is particularly valuable for statuaries, who generally use it for figures and ornaments where marble is not required. The quarries from which it is dug are close upon the woods on the western side of the Abbey." E. Rhodes 1826 *Yorkshire Scenery*, p 103.

As well as being used in the construction of Roche Abbey Roche Limestone was also used at Sheffield Castle and probably also Tickhill Castle and Sandbeck House.

5.4.1.6 Key historical influences & visual attractions

Rock shelters in Seed Hill Wood
Roche Abbey (*Cistercian monastery*), associated designed landscape and ghost stories
Nor Wood (*limestone woodland*)
Stone Mill and Mill farm (*possible medieval foundations*)

5.4.2 Firbeck

Firbeck valley runs for approximately 1km southwest from the village of Firbeck. There are very few rock outcrops in this valley.

5.4.2.1 Settlement

No settlement or activity from the later prehistoric period is recorded. The village of Firbeck lies in the north-eastern end of the vale, and two farmsteads are located at the southern end of the vale. Park Hill Farm lies on the site of the sixteenth century Park Hill Hall, and incorporates some of the original stable buildings and kitchen garden wall.

5.4.2.2 Designed landscapes

The whole valley was at one time parkland associated with Park Hill Hall, shown on a map of 1835. The valley may have been subject to extensive landscaping, which will have impacted upon valley floor deposits and, to a lesser extent, the rock outcrops. The river was dammed in places to form a series of ornamental ponds; these are now overgrown, but stone retaining banks and several weirs are still visible. There is also a grade II listed ice house, and a grotto cave is present at SK 5575 8788 [FBT4]. This cave is a constructed folly and could not have been utilised in prehistoric times.

5.4.2.3 Woodland

The south western end of the vale is mainly covered by woodland plantations, and scattered parkland trees are present along the bottom of the vale, following the line of the watercourse.

5.4.2.4 Transport & military

There is a track through the woods within the vale, which connects with Lamb Lane Dike to the north and south, possibly an old drainage gully. This was shown on the 1835 map as a dike.

To the north of Penny Hill is a triangular field which was Firbeck military airfield, opened in 1940. It was abandoned in 1945. The extent of earthmoving for the construction of the airfield is not known, but it is not thought to have impacted upon cave deposits.

5.4.2.5 Key historical influences & visual attractions

Part of designed parkland, including traces of water features. (*link also to St Leger family, and gallops still preserved in field boundary nearby*)
Firbeck military airfield

5.4.3 Anston Stones and Lindrick Dale

Anston Stones and Lindrick Dale form a continuous valley that runs approximately south east from Anston for a total length of about 4.25km. The northern end of Lindrick Dale is cut through by the A57. From Anston to the A57, through Anston Stones, the valley is fairly straight. The section though Lindrick Dale runs north-south; the southern end forms a T- junction with another short length of vale which runs east-west.

5.4.3.1 Settlement

Anston Stones and Lindrick Dale both have a fairly rich body of evidence for later prehistoric and medieval activity. The SMR holds over 30 records of findspots of various types of material, including stone tools, coins and other metalwork, and pottery. There is no distinct evidence for settlement, but it is clear that the valley have seen use since the early prehistoric period onwards. A moated site in North Anston is marked on current OS maps, indicating a focus of medieval settlement here.

The main areas of present day settlement are North and South Anston at the west end of Anston Stones, and a series of dwellings on the eastern side of Lindrick Dale. It is possible the South Anston has impacted upon the extreme western end of Anston Stones, but this could not be confirmed through field survey. The houses in Lindrick Dale are shown on a map of 1835, and are set close against the eastern rock face. In places it appears that the rock face has been modified in order to incorporate these dwelling and their outbuildings. In addition, the houses have associated landscaped gardens in the valley bottom and on the western slopes. The landscaping will have impacted upon valley floor deposits, rock outcrops may also have been modified, and the stream has been canalised in parts.

The mill at the base of Lindrick Dale was shown on the 1835 map, and there are still buildings on the site. A small mill dam was located to the west of the mill, and ponds are still present between the southern end of Lindrick Dale and Anston Grange.

5.4.3.2 Woodland

Much of Anston Stones is wooded, except a few areas of open grassland at the northwestern end of the valley. Anston Stones Wood covers c.83 hectares, and is a fine example of a mature limestone woodland (**Plate 3**). It is a designated SSI. It is owned and managed as an amenity resource by Anston Parish Council, and contains signposted pathways and interpretation panels. There are scattered trees within the landscaped gardens of Lindrick Dale, and pockets of woodland in the east-west vale at the southern end of Lindrick Dale.

Plate 3: Woodland in Anston Stones

5.4.3.3 Transport & industry

The major impact upon Anston Stones is the railway, probably constructed around the turn of the twentieth century. The railway enters Anstone Stones along the top of western edge of the valley, to the south-west. It gradually drops across the contours into the valley bottom, where it runs along a massive embankment in the valley floor. It re-emerges from the valley through a large cutting in the south side of the valley at the eastern end. Both the footpath and stream are taken under the embankment at two points via large tunnels and brick culverts, and the stream has been canalised at one point to run alongside the embankment (**Plate 4**). The railway has impacted upon rock outcrops on the southern side of the valley, as well as valley deposits which may have been crushed or disturbed during construction of the embankment. The origin of the material that makes up the embankment is not known.

Plate 4: Culverted stream in Anston Stones, running alongside the railway embankment

A sewage works is located on top of the north side of the valley, at the western end. It is located just above an area of rock outcrop. It is not thought to have impacted upon the outcrop face itself, although the depth of the sewage works foundations are not known.

There is a route through Lindrick Dale down to the houses and the mill. This was shown on the 1835 map. A road from South Anston to Gateford bypasses Anston Stones, and crosses Lindrick Common.

5.4.3.4 Minerals extraction

Old limekilns are shown to the west of the mill in Lindrick Dale on a map of 1902; these may have occupied an old quarry. A quarry was also shown on an 1835 map at Anston Stones close to the cutting for the railway – this may have been the location of stone for the railway embankment, and is certain to have impacted upon the southern rock outcrop of the valley.

5.4.3.5 Key historical influences & visual attractions

Rock shelters and caves in Anston Stones
Limestone woodland in Anston Stones
Railway in Anston Stones
Rock shelters and landscaped gardens in Lindrick Dale
Site of mill and ponds in Lindrick Dale

5.4.4 Red Hill

Red Hill is a small triangular section of land between Kiveton Park and Kiveton Bridge, bounded by the B6059, the Worksop to Sheffield railway and housing on the east end of Kiveton Bridge. It is 0.75km long and up to 0.25km wide at its widest point. The area of interest is formed by the northern side of a valley which runs east-west. The southern side is more gently sloping, and did not form part of the survey area.

5.4.4.1 Settlement

The SMR records the location of a possible Roman fort just north of the valley (SK 507 828). Finds recovered from excavations here are from a settlement probably a vicus outside the fort, associated with it. Modern settlement is clustered in the bottom of the valley, and also along roads that lead across the contours, east of Red Hill. Construction of buildings towards the bottom of the valley (opposite the rail station) are likely to have impacted upon natural rock outcrops on the north side of the valley.

5.4.4.2 Designed landscapes

Red Hill lies inside the southern part of a medieval deer park at Kiveton – this was shown on Saxton's map of 1610. No impact from the park was identified; it is perhaps more likely that natural features such as rock outcrops would have been utilised to enhance the boundary, although this is not proven.

5.4.4.3 Transport and industry

Packman Lane, which runs south from Redhill, is thought to be Roman in origin, and if so, presumably linked with the fort above the north side of the valley. This road was known as Ryknield St until the eighteenth century. No impacts on rock outcrops or valley deposits could be identified. The construction of the B6059 and the railway may have impacted upon rock outcrops.

5.4.4.4 Key historical influences & visual attractions

Possible Roman fort and road
Chesterfield Canal

5.4.5 Thorpe Common and Lob Wells Wood

Thorpe Common and Lob Wells Wood lie in the long and sinuous Bondhay Valley which is approximately 3.25km in length. From Lob Wells Wood the valley runs south-west for about 0.5km to the village of Top Hall, it then runs southwards for about 1.5km to Whitwell Wood. It turns westwards run along the northern side of Whitwell wood for 1.25km.

5.4.5.1 Settlement

The valley shows evidence for activity and some settlement from early prehistoric times onwards, even if it is not continuous. Mesolithic stone tools have been found in various locations, and Iron Age/Romano-British rectangular cropmark enclosure is located on the western valley slope (SK 524 795). The impact of settlement in more recent times appears to have been fairly minimal; a medieval moated site is located at the northern end of the valley, at Netherthorpe (SK 537 806). This is associated with an earth dam (now breached) and former pond on Bonday Dyke which probably controlled water supply for the moat and dwellings.

The rest of the valley is almost unsettled, with the exception of Moor Mill Farm and Top Hall, which site close together in the northern end of the valley. Moor Mill Farm may have been the location of a mill which is depicted on a map of 1835 - the date of the foundation of the mill is unknown, although existing buildings at Moor Mill Farm all appear to be nineteenth-century. The mill dam is located further south (SK 5295 7985). It supposedly had no pond, just a sluice leading off the main water course, however the body of water depicted on the 1835 map appears wider than a stream. The construction of these dwellings may have impacted upon rock outcrops.

5.4.5.2 Agriculture and woodland

Thorpe Common is a mainly agricultural landscape containing arable and pasture fields. Small pockets of woodland (including plantations) are present both in the valley bottom and on the slopes. Most of the trees present at the bottom Thorpe Common were present by at least 1835.

5.4.5.3 Transport

The two routes that cross the valley are Common Road to the north (on which Moor Mill Farm and Top Hall are located) and the junction of Packhman Lane, Hardhill Field Road and Boundhay Lane at the western end of the valley. Several trackways run from the fields down into the valley bottom, one of which runs directly north to Thorpe Salvin – the antiquity of this trackway is not known, but it was not identified as a discrete feature on early maps.

5.4.5.4 Key historical influences & visual attractions

Moor Mill Farm and remnants of water power features

5.4.6 Steetley Quarry

Steeley Quarry is located c. 1km south of Shireoaks.

5.4.6.1 Settlement

The SMR records several findspots indicating prehistoric, Roman and medieval activity; the nearest known medieval settlement was at Shireoaks.

5.4.6.2 Minerals extraction

Two caves sites were known at Steetley. These were discovered during recent quarrying, thus the site is not a gorge or vale like the other sites covered by the study. One cave is under a present road, the other has been destroyed by the quarrying. The construction of the works, quarry, lime kilns, mine and spoil tips has had a significant impact upon the immediate area, and other cave sites or original ground deposits are unlikely to survive.

5.4.7 Ash Tree Gorge

Ash Tree Gorge lies approximately 1km west of the centre of Whitwell. It is a small valley c. 300m long with rock outcropping for approximately 250m of its length. The valley is orientated east-west, and side valleys enter the gorge from north and south approximately mid way along its length.

5.4.7.1 Agriculture and woodland

The valley lies entirely within a pasture field and is mostly grass. Some trees and scrub have grown along and on the rock faces. The north east area has recently been fenced off and planted with saplings; this, and subsequent root action, could impact upon buried deposits. Cattle are currently using the field and there is evidence of cattle poaching at the base of some rock faces and in some gullies.

5.4.7.2 Transport

Highwood Lane passes by the end of the gorge, leading towards the top of Markland Grips. This is shown as Hey Wood on the 1767 map.

5.4.8 Markland Grips

Markland Grips is a large valley/gorge with three arms, the two largest of which meet at the north-east corner of the complex, at Upper Mill farm. The longest arm (Hollinhill Grips) runs east from the centre of Clowne, where it is known as Clowne Grips, for just over 2km. The second arm (Markland Grips) runs north-east from Grange Farm, and measures almost 2km in length. A smaller third arm is about 0.75km in length, and runs roughly south to north, joining Markland Grips about 400m west of Upper Mill Farm. The total length of the valleys is around 5km.

5.4.8.1 Settlement

There is a rich body of evidence relating to settlement and human activity in the valley and its immediate environs during the prehistoric period. This comprises scatters and concentrations of Neolithic and Roman stone tools, burials, some metalwork, Roman pottery, and relict field systems. An Iron Age hillfort was constructed on the plateau between Markland and Hollinhill Grips (SK 5110 7518). This appears to have continued in use into the Roman period. The site is Scheduled (SAM 23311). The hillfort uses the natural defences created by the rock faces at the junction of the two valleys. The extent to which the tops of the rock faces were modified in the Iron Age/Roman period to enhance the defensive function (or physical appearance) is not known. Since the site was scheduled in 1936, it will have been protected by its scheduled status, although ploughing may still continue.

There has been little impact from settlement in more recent times. Upper Mill Farm was originally a mill, located to the east of the hillfort. The area to the west of the farm is a heavily silted mill pond, with associated overflow channel (leat) to the south, and a large revetted dam wall on its eastern side. Mill Cottages were presumably associated with Upper Mill, or possibly with Lower Mill, further east. The cottages are located on the top of the gorge, on the north side of the Sheffield Road, but are unlikely to have impacted upon the gorge itself.

5.4.8.2 Agriculture and woodland

The impact of agriculture on this gorge is relatively low. Some areas of grazing land are present in the bottom of the gorge – these are mainly found to the east of Upper Mill Farm, and also in the location of the infilled mill pond. Most of the rest of the gorge bottom is overgrown and scrub-filled, with tree cover at varying stages of maturity. The presence of yew trees within the tree cover is indicative of natural limestone woodland. Parts of the gorge are designated as the Markland Grips Nature Reserve, managed by the Derbyshire Wildlife Trust.

5.4.8.3 Transport and industry

Modern transport routes are a fairly prominent feature of this gorge. The small road leading from Sheffield Road to Upper Mill Farm traverses the rock face on the north side of the gorge (SK 5135 7525) and may have impacted upon the rock outcrop at this point. The antiquity of this route is not known. Markland Lane crosses the gorge 300m south of Markland Farm and may have impacted upon both sides of the gorge at this point.

Two railway lines are also present. One now disused has impacted the gorge in two places; the first is in Clowne itself, where the disused sidings are now part of the Clowne Linear Park. The rail line continued south-east to where it crossed the gorge at SK 5100 7500. The disused line sits within a gap in the rock outcrop on the north side of the gorge, and the gap is likely to have been made (or at least enhanced) during construction of the line. This is also likely to have impacted upon the southern end of the hillfort rampart. The line crossed the gorge by means of a large embankment, which is still present in part. The embankment does not reach the southern side of the gorge, and the rest of the gap was spanned by a viaduct which is no longer present.

The second railway, also disused, ran along the top of Hollinhill Grips, close to Sheffield Road. It crosses the valley at the eastern end by means of a large bridge/embankment; this has impacted upon the northern side of the gorge.

There is a public footpath along Markland Grips, leading to Border Farm and then on to join with the Mansfield Road. A track runs from the west end of Markland Grips (at Border Farm) south-easterly towards Elmton and Whaley, becoming Oxpasture Lane, which is aligned along the Elmton and Whaley vales.

The erection of a pylon in the bottom of Hollinhill Grips (SK5100 7530) will have caused localised disturbance to valley floor deposits.

A sewage works is located towards the western end of Hollinhill Grips, in a zone bounded by both rail lines and Markland Lane. This is more likely to have impacted upon valley floor deposits than rock outcrops.

5.4.8.4 Key historical influences & visual attractions

Iron Age hillfort
Limestone woodland
Upper Mill Farm and water features
Railway: site of viaduct across valley, and Clowne Linear Park

5.4.9 Elmton and Whaley Valleys

The Elmton and Whaley valley is orientated north-west/south-east, and extends for 4km from Elmton at its northern end, through Whaley, and down to Nether Langwith. The valley is very shallow with only a few isolated rock outcrops.

5.4.9.1 Settlement

This valley has extensive evidence for settlement and activity from the early prehistoric period onwards. Both cave/shelter sites and open settlement sites and findspots have provided a wealth of evidence in the form of Neolithic and Bronze Age stone tools, Bronze Age pottery, Roman pottery and settlement evidence.

Medieval settlement occurs along the length of the valley. In Elmton, earthworks indicate the location of the Shrunken Medieval Village, and the present church stands

on the location of the medieval church. Medieval pottery and earthworks have also been identified along the length of the valley, at Whaley Hall, Whaley, Mill Farm and Apsley Grange, indicating that this area was relatively densely settled and farmed during this period.

A possible medieval mill pond, referred to in the early fourteenth century, is located at Apsley Grange; this was associated with the Prior of Newstead Abbey. The mill continued in use into the post-medieval period, and was shown on the 1835 map. A second mill pond is located at Mill Farm, on the southern edge of Whaley.

5.4.9.2 Agriculture

Fields to the south-west and south-east of Elmton are characterised as being 'ancient enclosures' (of unknown form) on the Derbyshire Historic Landscape Characterisation map. Other isolated fields around Whaley and Elmton, and alongside Whaley Road, are characterised as being irregular fields, with the date of enclosure unknown.

Most of the area today is a mixture of pasture and arable fields. Where ploughing takes place, valley floor deposits will be impacted, as will talus slopes associated with some of the isolated outcrops. The impact of ploughing upon buried soils is demonstrated through the relatively large numbers of artefact scatters and findspots that are recorded in the SMR.

5.4.9.3 Woodland and designed landscapes

The woodland of Scarcliffe Park covers the southern portion of the valley. This former medieval deer park still has extensive remains of the former park pale (earthworks, which would have had an associated fence) designed to keep the deer inside the woodland.

5.4.9.4 Transport and industry

Oxpasture Lane, which runs alongside the valley, leads from Nether Langwith to Elmton, and onto Border Farm at the end of Markland Grips. The date of the route is uncertain, but it runs along a prominent ridge, passing by a Romano-British settlement and linking five medieval settlement locations, thus it is likely to be of some antiquity. The proximity of the road to the known cave sites suggests that the construction of this route may have impacted upon cave deposits and structures. Lanes branch off from this route at Whaley Hall and Whaley, and these too may have had localised impacts upon caves and valley floor deposits.

The route of a dismantled railway runs north-south, across the southern end of the valley. The remains of a large embankment and bridge abutment are present to the south of Whaley Road, but this is not known to have impacted upon cave sites.

A blast furnace was located immediately west of Apsley Grange mill pond, dating to the seventeenth century. It was first mentioned in the 1650s, and was closed around 1777. The area was much altered in the nineteenth century, and there are no visible remains. The associated workers cottages have also been demolished. Fuel came from the adjacent Scarcliffe Park woodland; OS maps indicate that coppicing areas are still identifiable.

To the north of Apsley Grange is the remains of a large colliery spoil tip. This may have since been landscaped, and is shown as 'recreational use' on the Derbyshire Historic Landscape Characterisation map. The spoil tip partially covers the dismantled railway line.

5.4.9.5 Key historical influences & visual attractions

Medieval settlement/farms and earthworks
Scarcliffe Park (medieval earthworks, coppicing)
Site of blast furnace
Mill ponds

5.4.10 Langwith Vale

Langwith Vale is orientated south-west to north-east and is approximately 2.75km in length. It runs from just south of Scarcliffe to Upper Langwith. It is a narrow, well-defined valley.

5.4.10.1 Settlement

Later prehistoric activity is evidenced through various isolated findspots and artefact scatters along the length of the valley. These have mostly been located on the upper valley sides.

Medieval settlement was concentrated at either end of the valley, at the present day settlements of Upper Langwith and Scarcliffe. The possible medieval site of Bassett Hall is located adjacent to the current church, at SK 5183 6936. A few scattered dwelling are present on the north valley slope, opposite Upper Langwith; given the proximity to Langwith Bassett Cave [SK 5179769506, LBT7] it is possible that construction of these dwellings has impacted upon other rock outcrops.

A long flat area in the valley bottom (centred SK 5080 6880) may indicate the remains of a former mill pond, although no reference to a mill building has been found.

5.4.10.2 Agriculture and woodland

The north-east third of the valley contains pasture fields with a few small pockets of trees, while rest of the valley is mainly wooded, particularly on the southern side. The present enclosed fields are of mixed origin. Around Scarcliffe and Upper Langwith are fields characterised as being ‘ancient enclosures’ including some fossilised strip fields of medieval origin. The rest of the valley contains ‘regular’ enclosures which occurred post 1650.

The main body of woodland is Langwith Wood, which delineates the extent of the former medieval hunting park associated with Bassett Hall (thought to have been located adjacent to the church in Upper Langwith). The park was created after a grant of free warren in 1243.

5.4.10.3 Transport and industry

A railway, now dismantled, runs through a tunnel west of Scarcliffe, and emerges in a deep cutting immediately south of the village. The line cuts through the fields at this point (also cutting through some medieval strip lynchets at SK 4990 6835) before entering the valley. The line sits within a cutting north of Langwith Wood which is likely to have impacted upon rock outcrops and valley deposits. As it continues along the valley floor the railway line is embanked, until it emerges through the southern valley side, where again it lies in a deep cutting, which becomes shallower as the line approaches Upper Langwith. This cutting is also likely to have impacted upon rock outcrops and/or valley deposits.

5.4.10.4 Minerals extraction

A small quarry (**Plate 5**) is located on the south side of the valley, opposite Langwith Bassett Cave (LBT7). This has an associated trackway running up the side of the valley, towards the church and the possible site of Bassett Hall.

Plate 5: Small quarry (foreground) with associated trackway running across the contours (background), in Langwith Vale.

5.4.10.5 Key historical influences & visual attractions

Possible medieval site
Langwith Wood (*medieval deer park*)
Railway cutting

5.4.11 Pleasley Vale

Pleasley Vale runs roughly east-west, and is approximately 3km in length. The gorge is well defined, particularly in the deepest central section where it also has a more sinuous course.

5.4.11.1 Settlement

Evidence for later prehistoric settlement is sparse, with the exception of Mansfield Woodhouse Roman villa, which was located to the south of the gorge (SK 5244 6461). Pleasley itself is at least medieval in origin, and earthworks and findspots testify to thinly scattered medieval settlement along the vale; a possible medieval manor was located to the south of the western end of the vale, near Radmanthwaite.

A small dwelling (possibly related to the former Stuffynwood Hall) and a nearby church are located in the vale bottom, at Little Matlock; neither of these appear to have impacted upon the rock outcrops, but they may have affected valley floor deposits in a very localised manner.

A small group of dwellings centred at SK 5250 6503 are probably associated with the mills (see below). These are located close to a large rock face which bears evidence for blasting (**Plate 6**). The southern valley side at this point has been severely modified, either to facilitate construction of the dwellings, or perhaps as a later modification to improve access.

Plate 6: Drill holes for rock blasting in Pleasley Vale.

5.4.11.2 Agriculture and woodland

Small areas of rough pasture are present on the valley floor, at the eastern and western ends of the valley. These are classified as 'irregular enclosures' of unknown date. They are unlikely to have been cultivated extensively. There is relatively little land in the valley floor that has not been utilised for industrial and/or transportation purposes (see below); the remainder of the valley floor and gorge sides are wooded. Some of the woodland shows evidence for previous coppicing, although the coppice stools are somewhat outgrown. In the western end of the valley the woodland forms part of the Meden Trail, an amenity trail established by the Wildlife Trusts and English Nature.

The woodland to the north of the vale is part of Pleasley Park, originating in the medieval period. It was founded as a deer park, and later was managed as a woodland resource. In places, towards the western edge of the park, remains of the park pale survive as stone revetments inside the boundary ditch. Relict coppice stools in the park indicate the remains of woodland management, for fuel and building timber, from the medieval period onwards.

5.4.11.3 Transport and industry

The industrial use of the valley has without doubt been the largest impact on Pleasley Vale, and possibly the largest impact of later human activity in any of the gorges in the study.

Pleasley Forge, shown on Burdett's 1767 map, was working from at least 1655 into the late eighteenth century. There were two forges at the site, and the associated water leats and control gear dating to 1785 remain. Nether and Upper Forge, were run by the iron master George Sitwell. The SMR information is slightly confusing, but the forges and a corn mill are thought to have been located around SK 5160 6490. Nether Forge may have been located just inside the southern edge of Pleasley Park. In 1784 a cotton mill was built on the site - this was Upper mill, now known as Number 3 Mill. Lower Mill, Pleasley (Number 1 Mill) was built in 1798. Both mills burnt down in 1844 and were rebuilt using fireproof construction. The third mill was built in 1913 and situated between Upper and Lower mills.

The three mills formed a large industrial complex, and some housing associated with it is found on the northern side of the valley bottom, opposite Mills 3 and 2. All were water-powered, and several mill dams were constructed to serve the mills. An extensive complex of ponds, water leats and other water management features are present between the mill buildings, and for approximately 500m to the west of Mill 3.

The construction of the mills necessitated the cutting back of large areas of rock face. In addition, the mill buildings, chimneys etc. will have deep foundations which, along with the ponds and water leats, will have greatly impacted upon valley floor deposits.

A small 'works' is noted on recent OS maps on the valley floor at SK 5280 6515. This was not located during the survey, and may now be disused. It will have had a small impact upon valley floor deposits, but no impact upon the rock outcrops.

A road now runs through much of the vale to provide access to the mill complex. This road is shown on the 1767 map, and was possibly constructed to service the forges. The road exits the valley at the eastern end close to the rock face that shows evidence for blasting (see above, and **Plate 6**).

A railway formerly ran along the south side of the gorge for most of its length before crossing the gorge at its west end via an embankment. The railway then headed further west to connect to Pleasley Colliery (see below). On the south side of the gorge the disused railway, now used as a footpath, runs along the top of the gorge, via both very large embankments, and deep cuttings. The cuttings have impacted upon the rock outcrop cutting through several cave sites, including Yew Tree Cave (PLT30).

5.4.11.4 Minerals extraction

The gorge may have been used as a source of stone prior to the erection of the mill buildings. A small quarry at the eastern end of the valley (east of the extant railway line) is also marked on maps - the impact of this quarry on potential rock outcrops is not known.

The is an area of 'workings' on the southern side of the valley, centred on SK 5300 6480. This appears to have been quarried in the past, and completely re-landscaped. This may have had an impact upon rock outcrops on the southern side of the valley, particularly if deep caves/fissures were present which extended south by any distance.

One of the major industrial influences on Pleasley Vale was Pleasley Colliery. Although it is situated outside the vale itself (to the west of Pleasley village) the colliery was a significant part of the industrial landscape, and features associated with it (in particular the rail link) did impact directly upon the vale.

5.4.11.5 Key historical influences & visual attractions

Pleasley Park (*medieval deer park*)

Little Matlock
Pleasely forges (*sites of*)
Pleasley Mills (*quarrying, mill buildings, water power*)
Pleasley Colliery and railway

6 HERITAGE AREA, NATIONAL COLLECTION CONSOLIDATION

6.1 Introduction

An assessment of the extant collections from the caves and rock shelters of the Creswell Limestone Heritage Area was carried out as part of the Creswell Crags Conservation Plan (Wall and Jacobi 2000). The assessment identified 21 sites associated with Palaeolithic material, of which eight lie outside Creswell Crags. The collections and archives that developed as a result of over a century of excavation are currently stored in a mixture of 38 museums/university departments. The vast majority of this material is from sites at Creswell Crags, material from the 8 sites outside Creswell Crags being distributed in about half a dozen different locations.

The extant museum collections have an important role to play in future research objectives. Although the stratigraphic location and detailed site records are not as complete as one would like, the knowledge that a particular assemblage is attributable to a particular site will help to assess the significance of sites within the landscape. They can also point to which sites may be beneficial for answering specific research questions.

Study of these collections is imperative in order to develop baseline information on the provenance of the collections are understood and accepted. Initial assessments on this extant material are a necessary step in establishing a baseline resource which can be used in future research frameworks.

To fully appreciate and identify the research potential of this material it is necessary to catalogue the surviving material and its associated information. This can then be used to develop a database of all the dispersed material. This will remove many of the problems facing researchers of a dispersed collection and provide an integrated, comparable set of information.

6.1.1 Aims

There were two main aims for the program of national collections consolidation:

Identify and assess the nature of the national collections and consolidate the information on archaeological and palaeontological material of the Palaeolithic/Pleistocene period from the Heritage Area (excluding Creswell Crags). This drew heavily on the work of Wall and Jacobi (2000).

Accession the national collection from sites within the Heritage Area (other than Creswell Crags) onto a centralised database for access, monitoring and research.

6.2 Methodology

6.2.1 Desk-top assessment

The assessment of the Pleistocene collections undertaken by Wall and Jacobi (2000), which formed Appendix 2 of the Conservation Plan, has provided much of the background desk-top work required for the consolidation of the national collection. This has identified all the Pleistocene and early Holocene material held in British museums. To supplement and validate this information the following museums were contacted and information requested.

British Geological Survey Museum Keyworth*,
British Museum*,
Buxton Museum,
University of Cambridge, Museum of Archaeology and Anthropology*,
University of Cambridge Museum of Biological Anthropology*,
Manchester University Museum,
Natural History Museum*,
University of Nottingham, Department of Archaeology Museum*,
Oxford University Museum, Oxford University Museum of Natural History*,
Royal College of Surgeons Museum*,
Sheffield City Museum*,
Wollaton Hall Natural History Museum*,
Bassetlaw and Worksop Museum *,

Museums marked with * have provided further information on the collections.

6.2.2 Consultation

A meeting was held with Roger Jacobi to discuss the collections. Roger Jacobi has been studying the collections for many years and has detailed knowledge of their condition and potential. During the meeting all the collections he has examined were discussed and notes made on the potential value of the collections for further anaysis and interpretation.

6.2.3 Database Structure

The information held on the archaeological and palaeontological material of the Palaeolithic/Pleistocene period from the Heritage Area (excluding Creswell Crags) was accessioned onto a database in a format that will enable the maximum use to be made of the data for management and research purposes.

To maximise the value of the material within the collections database the terrain unit number for each site was included to enable information to be correlated between the two databases, enhancing their research and management potential.

The structure of the database was designed to maximise the information on it without overcomplicating it. Separate records were made in the database to record all sites, separate excavations of these sites, and separate museum collections of each excavation. This means that there can be several records for each site, but this gives an accurate record of the material and where it is held. In some cases, collections from different excavations were held together; these archives had become mixed and were recorded as one record as an unknown site.

The following fields were recorded for each record:

Collection Number – unique number assigned to the record

Site Number (terrain unit) – the site number from the terrain unit database

Site Name – the site name (if existing)

Museum Name – the museum holding this collection

Museum Address -

Museum Telephone Number -

Collection Unified – tick box to record if the collection is unified

Other Museums with material from this site – names of any other museums with material from this site

Associated Collections – list of Collection Numbers relating to the same site

Collections description -

Excavator – the name of the excavator for this collection

Date of Excavation – the dates when the excavation was undertaken

Period – tick boxes for the periods represented in the collection

Pleistocene

Palaeolithic

Mesolithic

Neolithic

Bronze Age

Iron Age

Roman

Medieval and Later

C14 dates –C14 dates with lab code and material dated.

Finds – numbers of finds in the collection by type. The types used were those used by the museums. If the number of finds is given as –1 this means that this material is present but not quantified.

Flint

Quartzite

Chert

Quartzite/Chert

Flint/Ironstone

Organic

Animal Bone

Human Bone

Coprolite

Breccia

Travertine

Ochre

Charcoal

Amber

Eggshell

Sediment

Snail

Stones

Ppottery

Metalwork

Glass

Haematite

Clinker

Archive Paperwork – tick box for the presence of a paperwork archive

Archive Paperwork description – notes on what is contained in the paper archive

Archive Photos– tick box for the presence of a photo archive

Archive Photos description - notes on what is contained in the photo archive

Archive Numbers – The accession numbers assigned to the material by the museum

Publications – publications relating to the collection

Condition of collection – notes on the condition of the collection, drawing heavily on the work of Roger Jacobi

Interpretive Potential – notes on the potential of the collection, drawing heavily on the work of Roger Jacobi

The information input into the database incorporated data from The Creswell Crags Conservation Plan, (Wall and Jacobi 2000), material from the museums and from the SMRs.

6.3 Potential of the collections

A brief description is given of the potential of the collections for each valley.

6.3.1 Roche Abbey Valley

The small excavation at Stone Mill Rock Shelter has produced a small but interesting assemblage including two late upper Palaeolithic flints and one Mesolithic flint as well as some Pleistocene horse teeth from the slope deposits in front of the shelter.

6.3.2 Firbeck

No collections or excavations are known from Firbeck valley.

6.3.3 Anston Stones Wood and Lindrick Dale.

One site, Dead Mans Cave, has been excavated in Anston Stones Wood. Much of the material from this site proved to be mixed, with material from the Palaeolithic to Roman periods recovered from the same layers. There is a late glacial faunal assemblage including mountain hare, brown bear, wild cat, wild horse and reindeer; none of this has cut marks on it but the reindeer bones show wolf gnawing (Jacobi pers. comm.) suggesting the site may have been a wolf den. There is a small, late Upper Palaeolithic assemblage which includes backed blades and debitage, but the contexts this came from usually contain Roman pottery. The deposits from near the mouth of the cave appear to be best stratified and least mixed. Due to the disturbed state of the excavated deposits there is limited potential in the currently curated assemblages. However, further work around the entrance of the cave might produce more stratified material.

6.3.4 Red Hill Valley

No collections or excavations are known from Red Hill Cave

6.3.5 Thorpe Common and Lob Wells Wood Valley

The two rock shelters excavated have both produced significant archaeological material. The material from Lob Wells Wood shelter largely consists of later prehistoric flint but one upper Palaeolithic penknife point was also recovered.

Thorpe Common Rock Shelter produced a large Mesolithic assemblage from two layers, the lower layer being similar to the Mesolithic assemblage from Mother Grundy's Parlour and the upper being associated with scalene triangles types. The C14 dates from the site are all obtained from the upper layer. This Mesolithic material is an important assemblage and is probably worth further examination.

6.3.6 Steetley Caves

Two assemblages have been recovered from the Steetley area one from Steetley Cave and one from Steetley Quarry (Wood) Cave. Steetley Cave has produced a faunal assemblage which includes some domestic animals and must therefore be Neolithic or later, in part at least. One Mesolithic flint was also recovered from Steetley Cave but the assemblage does not appear to be significant.

Steetley Quarry Cave has produced a early Devensian fauna of bison, bear, wolf, fox and reindeer dated to about 42,000 BP. The human mandible attributed to Steetley Quarry Cave is clearly from a different context based on the sediment adhering to it (Jacobi pers. comm.). This site is one of many that has been used in recent years in Current and Jacobi's study (1997 2001) of Pleistocene biostratigraphy.

6.3.7 Ash Tree

Ash Tree Cave has been excavated on at least three occasions and the assemblages from it are very important These have produced stratified Pleistocene faunas from the early and mid Devensian which can be correlated to faunas at Creswell Crags and Steetley Caves. The mid Devensian fauna was associated with a middle Palaeolithic (Mousterian) assemblage. This was overlain by thin deposits containing later upper Palaeolithic and Mesolithic remains. This material has been re-examined in recent years (Currant and Jacobi, 1997 and 2001), but the full assemblage from all the excavations has never been published.

6.3.8 Markland Grips

Although Armstrong undertook several small excavations in Markland Grips this did not recover any Palaeolothic or Mesolithic material, although he did recover later prehistoric burials from Sepulchral Cave. The collections are therefore not considered further in this study.

6.3.10 Elmton and Whaley Valley

Two sites in the Elmton and Whaley Valley have produced assemblages, Whaley 1 and Whaley 2. There is some confusion as to the integrity of the Whaley 1 artefacts as there are notes with them that suggest they may not all be from Whaley 1. In his examination of the material Jacobi (pers. com.) has noted that only one artefact can be securely provenanced to Whaley 1 and the Palaeolithic date for this assemblage is therefore difficult to substantiate. The material from Whaley 2 is split between several museums but is a very important assemblage; it includes an early or mid Devensian fauna including mammoths and reindeer, the later possibly from a calving ground. The archaeological material includes final Upper Palaeolithic, Mesolithic,

Neolithic and later prehistoric and Roman. This assemblage is highly significant and previous publications on the site do not fully exploit the potential of this material.

6.3.11 Langwith Valley

Langwith Bassett Cave has produced a very important assemblage of Palaeolithic and Mesolithic material, as well as an Iron Age burial. Analysis of material from the excavations has identified that many of the deposits in the cave have been disturbed by badgers. This has resulted in the mixing of many layers. The current assemblages have limited potential for analysis. There are some *in situ* deposits surviving inside, and possibly outside, the cave and it may be that less disturbed deposits do survive.

6.3.12 Pleasley Vale

Collections are known from two caves in Pleasley Vale, Yew Tree Cave and Pleasley Vale Cave. These both contain large palaeontological collections but no archaeological remains. Yew Tree Cave contained an important collection of early Holocene material while Pleasley Vale Cave contained Pleistocene material. Examination of the collection from Pleasley Vale Cave (Jacobi pers. comm.) has identified that the assemblage appears to contain two different components with very different appearances. Most of the material was heavily gnawed bone, possibly from a hyena den, while the other component comprised the ungnawed remains of an articulated bovid, possibly from a pit fall. It is possible that these two components originated from two different sites, with the bovid coming from a fissure into which it fell. If this was so the bovid may have originated in one of the many fissures found in the valley bottom near to Pleasley Vale Cave, several of which are in rock faces that have been cut back in the past. This is significant in that it would be the first evidence that these fissures contain palaeontologically important remains.

6.4 Conclusions

The study of the collections has shown that the curation of the assemblages has been highly variable over the years. Despite this a number of significant assemblages have been identified and several of these are worthy of further study, some of which is being currently considered by Roger Jacobi.

The palaeontological assemblages from Steetley Quarry Cave, Ash Tree Cave, Whaley 2 Rock Shelter and Pleasley Vale Cave are all important and can be used to elucidate the later Pleistocene fauna of the region.

Of the four reasonable sized Palaeolithic assemblages those from Dead Man's Cave and Langwith are disturbed and mixed and have limited potential for further analysis. However, two of the Palaeolithic assemblages from Ash Tree Cave and Whaley 2 Rock Shelter are in good condition and are very important. Ash Tree Cave includes both middle and upper Palaeolithic material while Whaley 2 Rock Shelter contains upper Palaeolithic material. These would both justify further study and this is being considered by Roger Jacobi.

There are Mesolithic assemblages from three sites that are of interest: Ash Tree Cave, Thorpe Common Rock Shelter and Whaley 2 Rock Shelter. Of these, the most significant is Thorpe Common Rock Shelter. This is the largest assemblage and contains both earlier and a later Mesolithic components. These assemblages are worth further examination.

The assemblages for all the other sites excavated are valuable in that they contribute to our general understanding of the Palaeolithic and Mesolithic periods in this area. Although they are generally too small or too disturbed to warrant further work on their

own merit, they could form a significant part of larger synthetic studies that require the analysis of multiple assemblages.

7 IDENTIFICATION OF RESEARCH PRIORITIES

7.1 Introduction

The Creswell Crags Limestone Heritage Area (Southern Magnesiam Limestone) includes some of the most important Pleistocene archaeology and palaeontology in Britain. The concentration of Ice Age archaeology in this area provides the potential to undertake research on major collections representing the northern limits of human occupation during the last Ice Age.

The history of research on the archaeology/palaeontology within the Creswell Crags area started in the nineteenth century and over the last century a number of British Palaeolithic archaeologists have worked in the area. However, research has generally been piecemeal, focused on individual caves or closely associated caves. The Bulk of this work was undertaken in the nineteenth and early twentieth centuries and much of the material may be worthy of further study, and subject to more modern analytical techniques.

7.1.1 Consultation with specialists

Consultation has taken place with a number of specialists regarding the research priorities for the area.

A meeting has been held with Roger Jacobi to discusse both Palaeolithic and Mesolithic archaeology and the research potential of the existing collections. The discussion covered the condition of the collections, the research potential, and those collections on which Roger Jacobi was intending to undertake further work.

The Palaeolithic archaeology of the area was discussed at a meeting with Paul Pettitt. The nature of the sites identified in the survey was discussed and site visits were undertaken on a number of sites identified in the survey to consider their condition and potential for further work.

A meeting was held with John Humble regarding the research priorities for the area. This identified future research priorities and those already established in the e *English Heritage Research Framework for the East Midlands*. Discussion also covered potential future funding from English Heritage and other sources. Discussions also covered the public role of archaeology and community involvement in the long term conservation and promotion of the sites.

A meeting was held with Andy Myers to discuss the Mesolithic period in general and issues relating to it. This meeting discussed the nature of the local Mesolithic Archaeology and how it can be difficult to identify when mixed in with large multi-period flint scatters. The temporal changes that occur from the late Palaeolithic, through the early Mesolithic to the late Mesolithic were considered as were the potential implications of models which consider seasonal movements and group territory.

7.1.2 Aims

The general aim of the identification of research priorities will be to:

- identify gaps in knowledge
- propose methods for filling those gaps

The research priorities outlined in this document are those identified as relevant to the aims of the Creswell Crags Management Action Plan. These are not meant to replace the Archaeological Resources Assessment and Research Agenda for the East Midlands produced by English Heritage (2003) or the Research Frameworks for the Palaeolithic and Mesolithic of Britain and Ireland (Prehistoric Society 1999) or to determine the nature and aims of PPG16 related archaeological work.

7.2 Time Periods

The research priorities identified relate to the archaeology of the Palaeolithic and Mesolithic periods within the Creswell Crags Limestone Heritage area with particular reference to cave and rock shelter sites. Prior to presenting the research priorities it is necessary to summarise the key sites within the Southern Magnesian Limestone for the main periods of interest.

7.2.1 Lower Palaeolithic – c.500,000 – 250,000 BP

No Lower Palaeolithic material has been recovered from the caves in the Creswell Crags Limestone Heritage Area or from open air sites on the Magnesian Limestone. There are several earlier and later Lower Palaeolithic sites in southern England but none known in the East Midlands (McNabb 2001). There are a number of later Lower Palaeolithic find spots in river gravels beyond the southern extent of the Magnesian Limestone in the valleys of the Rivers Trent and Dove.

7.2.2 Middle Palaeolithic – c.250,000 – 35,000 BP

Evidence for Middle Palaeolithic activity has been discovered in caves at Creswell Crags, including Church Hole, Robin Hood, Mother Grundy's Parlour and Pin Hole Cave. Outside Creswell Crags Be it has been identified in Langwith Bassett Cave and Ash Tree Cave. Most, if not all, of this material is probably from the late Middle Palaeolithic after the hiatus in the recorded human occupation of Britain between c. 160-60,000 years ago.

After the human reoccupation of Britain c 60,000 years ago human groups would have found a fluctuating climate with alternating cool and warm periods. The later Middle Palaeolithic period is characterised by Mousterian artefacts and was populated by Neanderthal groups. Sites are few and far between and it is likely that population density was low, possibly with a few mobile groups making seasonal movements across the landscape (McNabb 2001). Caves were extensively used and were probably visited repeatedly. Jenkinson (1984) argued that that the stone tool assemblage at Pin Hole cave was indicative of specialist activities possibly including hide working, but this is open to debate (McNabb 2001).

7.2.3 Upper Palaeolithic – c.35,000 – 10,000 BP

Early Upper Palaeolithic remains have been recognised from Robin Hood cave and Pin Hole cave, but most of the Upper Palaeolithic remains recorded in the caves from the southern Magnesian Limestone are from the late Upper Palaeolithic. This activity occurred after a hiatus in the recorded human occupation of Britain from c.22,000 to 13,000 years ago. Late Upper Palaeolithic material has also been recorded at several caves in Creswell Crags, including Church Hole, Robin Hood, Mother Grundy and Pin Hole, and at Yew Tree rock shelter. In the wider landscape. late Upper Palaeolithic archaeology has been identified from Stone Mill Rock Shelter (Roche), Dead Mans Cave (Anston Stones Wood), Ash Tree Cave, Langwith Bassett, Whaley 2 Rock Shelter and Lob Wells Wood Rock Shelter (Thorpe Common and Lob Wells Wood).

The Upper Palaeolithic is associated with the advent of modern human populations. The replacement of Neanderthal people by anatomically modern humans was not instant and the relationship between the two groups is still not fully understood. A C14 date on bones associated with an Upper Palaeolithic artefact from Pin Hole Cave, may provide one of the earliest dates for modern humans in Britain. However, this should be treated with caution as there was some disturbance of sediments in the area. Upper Palaeolithic groups were predictive hunters exploiting migrating animals in an open landscape.

Late Upper Palaeolithic cave art, associated with the Creswellian culture, has recently been identified in Britain for the first time (Bahn et. al. 2003).

7.2.4 Mesolithic – c.10,000 – 5,500 BP

The Mesolithic period starts at the end of the last glaciation and there are several cave sites in the Southern Magnesian Limestone with Mesolithic remains as well as several Mesolithic open air flint scatters. The Mesolithic can be subdivided into an early Mesolithic period and a late Mesolithic period with the subdivision c.8,600.BP.

During the early Mesolithic the landscape was still relatively open and there were similarities with the tool technology of the late Upper Palaeolithic. The economy was probably a continuation of the predictive hunting strategy used by late Upper Palaeolithic groups with hunters exploiting migrating herds (Myers pers. com.).

In the late Mesolithic the environment was dense woodland with hunters having to employ encounter hunting. The tool technology changed with microliths becoming much more common. Settlement pattern also change with more widespread sites exploiting a greater range of environments (Myers 2001). As the Mesolithic developed clearances were created to open up hunting areas within woodland.

7.3 Research Priorities

The advantages of the area for Palaeolithic and Mesolithic research are:

- the long history of research in the area means there is a good database of existing knowledge which can be built upon.
- we know that Palaeolithic sites are present in the area. Concentrations of Palaeolithic sites, as occur in this area, are rare in Britain.
- caves provide sediment traps that can produce continuous sequences through long periods. These deposits are less prone to the taphanomic shredder than river gravels, and therefore provide good potential for extensive *in situ* deposits.
- most of the valleys that contain the known caves sites are relatively undeveloped except for farming or woodland. There is the potential for further undiscovered sites to be present in most of the valleys .
- some of the valleys in the Magnesian Limestone contain small deposits of colluvium and alluvium that have yet to be investigated for their archaeological or palaeoenvironmental potential (Note, one Upper Palaeolithic flint found by Roger Jacobi in valley bottom of Markland Grips is evidence of a potential open air site in the valley bottom).
- the area is the only one with known Palaeolithic rock art in Britain which provides a unique opportunity to study aspects of the social archaeology of the Palaeolithic in Britain.

- the area contains long deposit sequences that can elucidate temporal changes through the Palaeolithic and into the Mesolithic periods.

7.3.1 Themes

There are several themes or areas of study that have been identified in relation to the Palaeolithic and Mesolithic archaeology and palaeontology of the Creswell Crags Heritage area and for the immediate post ice age period (Mesolithic) :

7.3.1.1 Human and animal adaptations on the on the edge of the ice during the Palaeolithic

- potential human adaptations, biological (Neanderthals) and behavioural (diet, shelter, clothing, migration and fire).
- animal adaptations, biological (body changes, fur and fat) and behavioural (diet and migration).
- what was the relationship/contacts between Creswell populations and those further south; tools (Creswellian), art (it has been argued that the identification of the animal at Church Hole as an Ibex suggests long distance movements or contacts as ibex are not known from Britain).
- can changes in human behaviour be identified adapting to the changing environmental background during interglacials (cold to warm to cold).

7.3.1.2 Reoccupation following glacial extremes

- when did reoccupation occur, was it immediately after the retreat of the ice or was there a time lag?
- where did the new populations come from, the south or the east (Doggerland)? Further information on cultural affinities and more detailed dating would help to elucidate this question.
- how did human reoccupation relate to animal reoccupation? Did humans reoccupy at the same time or was there a time lag.

7.3.1.3 Palaeolithic archaeology in the landscape

- why is the area so important for the Palaeolithic? Is this importance real or perceived? Is it related to a dissected plateau with many potential sheltered sites or is it a result of preservation or the history of research?
- what was the relationship between cave sites and open air sites? Were caves and open air sites used for different purposes (base camps, hunting camps etc.) or were they interchangeable?
- open air sites are not known from the Magnesian Limestone but rare mid Palaeolithic and more common upper Palaeolithic sites are known from the Trent. Could open air sites exist in the valleys or on the top of the Magnesian Limestone plateau?
- were the sites occupied all year round or were there differing seasonal strategies?

- were the caves sites used for other purposes than simple camps, possibly meeting areas or ritual areas (cave art)?
- were sources of stone raw materials local or was material imported into the area?
- Palaeolithic people are often portrayed as hunters of big game using predictive strategies to exploit migrating herds; how true is this?
- was population density constant or variable?

7.3.1.4 Mesolithic archaeology in the landscape

- what continuity and what change was there from the late upper Palaeolithic to the early Mesolithic? There are some similarities between the two, artefacts are similar, as hunting strategies probably were, probably using predictive hunting in open landscape
- what continuity and what change was there during the Mesolithic? The earlier and later Mesolithic are quite different, the later Mesolithic forested landscape lacked very large herds and different hunting strategies were used including encounter hunting. Forest clearance took place in the later Mesolithic to create hunting areas.
- what was the relationship of cave sites to open air sites?
- were caves and open air sites used for different purposes or were they interchangeable? What different site types existed and how did they interrelate?
- what is relationship of the valleys to the limestone plateau?
- what was the relationship of Magnesian limestone to Peak District and lower lying lands to east (Trent Valley, Lincolnshire etc)? Hypothesised seasonal strategies for Mesolithic societies suggest movement between highland and lowland area, where does the Magnesian Limestone fit in?
- where were raw materials procured from? Chert is known to come from the Pennines and flint from river gravels. Over Britain there is a trend towards use of more localised, sometimes lower grade resources over Mesolithic possibly related to the changing sizes of Mesolithic territories.
- can different assemblages be related to technological development and used to aid in refining chronologies?
- what was the population density during the Mesolithic? How intensively occupied was the landscape occupied? Were sites occupied long term or short term, can multiple occupations be identified?

7.3.1.5 Conservation

- the horse head engraving on bone from Robin Hoods Cave and the incised figures on cave walls and roof of Church Hole Cave are the only Palaeolithic art in Britain. Further art would be internationally significant and worthy of special conservation measures.
- The MAP survey has identified many potential sites but has not determined if they contain archaeological/palaeontological deposits, further fieldwork would result in a more focused conservation strategy.

- the lower Palaeolithic is very rare locally and no Lower Palaeolithic is known from Creswell, therefore any Lower Palaeolithic sites discovered would be worthy of preservation.
- Middle Palaeolithic sites are known from Creswell but are still fairly rare and also worthy of preservation. As a resource it is more common than the Lower Palaeolithic but should only be excavated to confirm specific research questions.
- the upper Palaeolithic is known from several cave sites in the vicinity. The resource should not be squandered but further field research could well increase the known resource.
- the early Mesolithic is more common than the Upper Palaeolithic, again further field research may well add to the resource.
- the later Mesolithic is most common and found over most of the area, further field research may well add to the resource.

7.3.1.6 Testing methodological issues relating to the assessment and analysis of large numbers of cave and rock shelter sites

- which techniques can be best used to asses large numbers of caves and rock shelters?
- how effective are different approaches?
- further research can test the results of the predictive modelling exercise.

7.3.2 Techniques

Various techniques are available to investigate these themes. This section contains a list of the techniques that could be applied, with notes on the themes they could be used to investigate, and comments on the potential of the technique.

7.3.2.1 Analysis of the existing collections

Further analysis of the existing collections could help to examine:

- cultural affinities and refine chronologies,
- animal adaptations and human adaptations,
- technological developments in tool production,
- the source of raw materials.

Roger Jacobi (pers. com.) has looked at all the major extant collections from previous work in the Creswell Crags Limestone Heritage Area. He has identified those assemblages which are worthy of further analysis or publication. He is currently working on some of the material and is hoping to undertake further work on some of the assemblages.

7.3.2.2 Field walking

This could:

- identify different site types, particularly in the Mesolithic,
- examine settlement density,
- provide open air assemblages to compare with cave assemblages to examine the character of different types of sites,
- indicate the presence of buried *in situ* open air sites worth further work,

Fieldwalking can identify open air sites in the right conditions. However, the lack of arable land would be a major problem in undertaking fieldwalking in and around the vales and gorges (see land-use maps in chapter 5),. Only Elmton and Whaley has arable land in the bottom and around the valley and most valleys have only a few have arable fields around them. The Elmton ands Whaley Valley has been subject to a field walking programme in the past, by the North Derbyshire Archaeological Survey, which identified the Mill Farm open air site.

The potential of the area for fieldwalking is therefore limited.

7.3.2.3 Test pitting of caves and rock shelters

This could:

- test and refine the predictive model.
- identify multi-period and single period sites.
- aid the examination of settlement density.
- identify undisturbed deposits to refine the Management Action Plan.
- identify sites worthy of further research.
- develop methodologies for testing large numbers of sites. This could involve test pitting known sites to determine the visibility of known archaeological deposits.

This techniques has the potential to examine a number of sites and to examine a range of research themes.

7.3.2.4 Cleaning exposed sections

In some sites, where there are exposed sections, test pitting would not be practical. However, sections could be cleaned to expose archaeological deposits. This could,

- test and refine the predictive model.
- identify multi period and single period sites.
- identify undisturbed deposits to refine the Management Action Plan.
- identify sites worthy of further research.
- identify deep deposit sequences with archaeological or environmental potential.

In sites with exposed section, where test pitting is not possible, cleaning the exposed sections could provide similar data to the test pitting programme. This has the potential to record long deposit sequences.

7.3.2.5 Coring in the valley bottoms

This would:

- identify depths of deposits in valley bottoms. This information could be used to asses the potential for further buried caves and open air sites.
- provide samples for examination and dating that would identify if there are *in situ* Pleistocene deposits in the valley bottoms, and the nature of those deposits.
- identify if there is there the potential for organic-rich deposits in palaeochannels that could provide palaeoenvironmental sequences.
- identify the deposits sequence which could be used to develop deposit models for the valleys and better identify the potential for open air sites.
- provide information with would enhance our understanding of the development of the valleys.

Coring in the valley bottoms will be the only possible approach to identifying the depth of deposits in the valley bottoms. The choice of potential coring locations will be dependant on the location of potential suitable deposits discussed in chapter 3.

7.3.2.6 Re-excavate old spoil heaps and trenches

Re-examination of old excavations could::

- increase assemblage size particularly of small bones and microliths etc.
- enable records to be made of sections for which some of the old records are of variable quality. These could be used to sample for palaeoenvironmental material.

This is site specific and could aid our interpretation of these sites if there were specific questions we wished to ask.

7.3.2.7 Evaluation of talus slopes below caves or rock shelters,

This could be undertaken on previously excavated sites or as part of the test pitting strategy to examine new sites. Talus slopes below caves, which were identified as terrain units in the condition survey, below caves can have significant assemblages of material in them. Evaluation of the potential of the talus slopes would be best undertaken by test pitting. An evaluation of the slopes below caves could:

- identify talus slopes with archaeological potential and relate them to caves/rock shelter sites above.
- provide information on the nature of the archaeology on the talus slopes and date their formation, so enhancing our understanding of the development of the valleys.
- aid our understanding of the role of the interior and exterior of cave sites which is key to understanding sites in the wider landscape.
- aid in identifying sites worthy of further research.

This could be undertaken in conjunction with the cave/rock shelter test pitting.

7.3.2.8 Excavation of caves or rock shelters

This would:

- provide an environmental sequence excavated using modern techniques.
- allow detailed analysis of artefact distribution and site structure.
- provide well excavated artefact assemblages to study.
- provide secure dating of local sequences.
- identify the economy and diet of past populations and relate this to the changing environment.
- test the effectiveness of test pitting for site identification.
- identify multi period and single period sites.

It is only by excavation that many of the themes identified in the research priorities can be examined. Ideally such a site would have good preservation and proven archaeological sequences extending unbroken over significant time periods. This should only be undertaken following the evaluation programme of test pitting.

7.3.2.9 Environmental reconstruction

This would be dependant on identifying suitable deposits but various techniques could be used in providing a model of the changing environment in the Southern Magnesian Limestone and within specific valleys. Analytical techniques could include the study of:

- sediments,
- pollen,
- macro and micro fauna,
- insects,
- snails,
- macroscopic plant remains.

This would be undertaken in conjunction with an excavation or if suitable environmental sequences were identified by coring the valley bottoms.

7.3.2.10 Cave art survey

Since the recent discovery of cave art at Creswell Crags it is important to determine if any of the other cave sites in the area contain any art. Any art could:

- aid in understanding cultural affinities and contacts with central and southern Europe.
- aid in our understanding of Palaeolithic ritual.
- aid in our understanding of the importance of Palaeolithic archaeology in Britain.

The team of Paul Pettitt, Paul Bahn and Sergio Ripoll who discovered the art in Church Hole Cave are planning further work in the area and this work is very

important. If any further ice age art is present it will be of international importance and should be protected.

7.4 Conclusions

The the main research themes for Pleistocene and early Holocene Archaeology within the Creswell Crags Limestone Heritage Area have been identified. The techniques that could be used to investigate these themes have been considered and the most suitable identified. **Appendices 7.1** to **7.4** provide brief project design for undertaking the proposed work with provisional timetables and costs.

8 INTELLECTUAL, PHYSICAL AND VISUAL ACCESS STUDY

The aims of the study were to:

Identify and assess opportunities for consolidating and improving intellectual, physical and visual access to the Palaeolithic/ Pleistocene and other natural and manmade resource for local people and for visitors, for recreational and formal education purposes and including the potential for involving local people in management and interpretation. The study area is identified in figure 1.

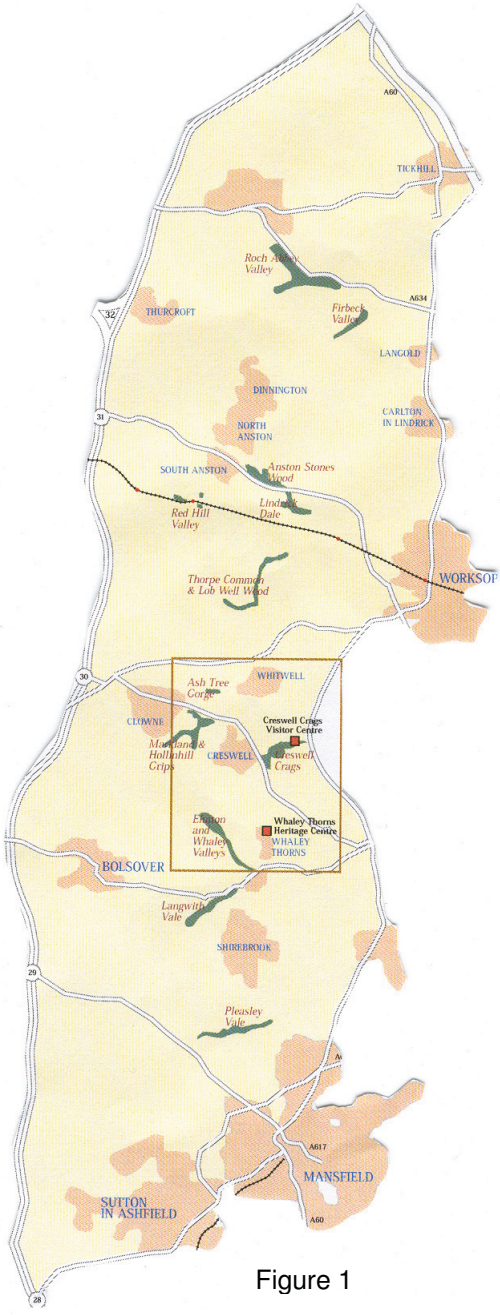

Figure 1

8.1 Rationale

Long term, high quality conservation of the natural, man-made and educational resource of the Heritage Area is dependent on those who have an impact on it understanding and appreciating its distinctive value. This applies to local people, visitors and decision makers alike. The high quality cultural and natural heritage is undervalued and this lack of appreciation can lead to neglect, vandalism and provide conditions for inappropriate development. The Heritage Area is further threatened by the continued poor economic, social and environmental conditions that much of the area faces.

Conversely there is enormous potential for the natural and cultural heritage of the area to act as a catalyst for a new vision for the future of the area, creating a high quality and sustainable environment that local people can be proud of and that visitors can enjoy and appreciate.

To maximise this potential there is a need to link management and improvement of the cultural and natural heritage with physical, visual and intellectual access opportunities. Identification of opportunities for interpretative and education use, together with the access improvements and the development of events, guides and teaching resources will enable local people and visitors to experience and value the Heritage Area.

8.2 Overview

Intellectual access involves the mind and the process of understanding, appreciating and relating to the resource. This usually implies the provision of information but crucially that information is provided in a form that is accessible to people with a wide range of education, background knowledge and reading ability etc. It involves the imagination, the sense of wonder and curiosity. It is not just formal education or written information.

Physical access means how people move about the Heritage Area and also how they experience it through their other senses such as touch and smell. It includes how they get to the Heritage Area and how they move about it. There is the need to carefully balance ease of access with site sensitivity, site management issues and the constraints of the physical landform.

Visual access means people can see the resource. It includes both distant and near views, views within the Heritage Area and views into it from outside, of individual artefacts and sweeps of landscape. The quality of the visual resource strongly influences how people perceive the Heritage Area and there may be opportunities to improve its image by enhancing the visual resource.

Experiential access is the sum of the above and the aim for equal access is to enable experiential access to all, regardless of sensory impairment, physical disability, learning difficulties, social and educational background or race. It depends on providing an integrated range of stimuli and opportunities.

Although physical and visual access are considered separately to intellectual access in terms of methodology they are interlinked and coherent management actions are needed. They are both dependent and interlinked with those for the archaeological and ecological resource.

8.3 Main Task Areas

- Through consultation, desktop study and field visits audit existing physical, visual and intellectual access provision

- Review existing provision and identify and assess opportunities for consolidation and improvement including opportunities for involving and including local people in understanding, management and interpretation.

8.4 Physical and Visual Access

Aims

The overall aim is to produce a coherent approach to provision to ensure access needs are provided for in an appropriate and sustainable way with regard to the sensitivity of sites and provide as far as possible access for all. Physical and visual access are closely interlinked and are considered together.

An assessment needs to be made of current access provision and management, gaps identified, problems and issues understood and the level of resources available to undertake ongoing management assessed to ensure proposals for improvements are appropriate and sustainable. Access provision is dependent on anticipated user numbers and user profile. A realistic approach must be taken in assessing provision of access particularly for disabled users due to the constraints of the specific landform of some sites. Safety of users must be a prime consideration.

An assessment of the existing visual resource needs to be undertaken identifying key views and main detractors for the limestone vales and gorges and an overview of the key routes to and between them in order to assess the potential for enhancement.

There is also a need to assess and improve access for local communities and this links closely to the work carried out for the intellectual access study in identifying areas for local community involvement. This includes opportunities for improving access (particularly footpath links and improving visual access) for communities adjacent to key pilot action areas.

Methodology

The study encompassed three stages of work:

- audit of existing physical and visual access;
- assessment of access requirements and opportunities for improvement;
- recommendations for physical and visual access management and improvements.

Following stage 1, it was envisaged that priority areas (Pilot Action Areas) would be identified in which to focus stages 2 and 3.

8.4.1 Audit of existing physical and visual access

This comprised desk study, consultation with stakeholders and field survey.

The following tasks were undertaken:

- Review of landscape character and ecological context to complement information on historical and archaeological issues and processes identified elsewhere in the report.

- Identification of access strategies, guidelines and initiatives by stakeholders that may impact on the proposals and provide opportunities for joint working. This process included collation of information regarding anticipated future visitor requirements

- Audit of existing access provision and access management, identification of problems and issues particularly relating to sensitivity of sites including an overview of access provision throughout the Heritage Area and potential for linkage of Pilot Action Areas. Identification of main access links from communities to key Pilot Action Areas.

- Identify appropriate 'design language' to guide improvement proposals to ensure local distinctiveness.

8.4.1.1 Landscape character assessment and ecological context

The southern magnesian limestone area has been informally designated the Creswell Heritage Landscape Area because of its distinctive cultural and natural heritage. Derbyshire County Council and the Countryside Agency have undertaken detailed Landscape character assessments. Below is a summary of these findings:

The area lies at the heart of the former rural coalfield of north Nottinghamshire, north east Derbyshire and South Yorkshire and is within easy access to major population centres. It is estimated that over 4 million people live within an hours drive. In spite of the impacts of modern development, deep coal mining and the urbanisation of many small villages, the landscape has retained a rural character.

The limestone gives the area a sense of place and particular identity which is shown by it's designation as one of English Nature's 'Natural Areas' and one of the Countryside Commission's 'Countryside Character' areas: 'southern magnesian limestone'. The key characteristics are summarised as follows:

- Elevated ridge with smoothly rolling landform, dissected by dry valleys.
- Predominantly Magnesian Limestone geology which influences soils and ecological character.

- Long views over surrounding lowland.
- Fertile intensively farmed arable land.
- Large fields bounded by low cut thorn hedges creating a generally large scale, open landscape.
- Large number of country houses and estates with parkland, estate woodlands, plantations and game coverts.
- Woodlands combining with open arable land to create a wooded farmland landscape in some parts.

- Unifying influence of creamy white magnesian limestone as a building material often combined with red clay pantile roofing.
- River valleys and gorges cutting through the ridge exposing the underlying rock.
- Industrial influences, especially in the Aire and Don Valleys and other central valleys and along the coal measures fringe, with mines, shale tips, transport routes, power lines and industrial settlements.
- Main transport corridor of the A1 which is often apparent in areas of otherwise undisturbed rural landscape.
- Archaeological remains reflecting the long-standing importance of the area for settlement and transport.

There are two distinct landscape character types within the magnesian limestone character area. These are Limestone Farmland and Limestone Gorges. The distinctive vales, and gorges, known locally as 'gripps' or 'crags', together with semi-natural ancient woodland provide the areas of most ecological interest. The inaccessibility of the river gorges, along with the steep rocky sides have minimised human disturbance and allowed many of the original habitats to survive.

The main limestone vales and gorges are:

- Roche Abbey
- Firbeck Vale
- Anston Stones and Lindrick Vale
- Red Hill Valley
- Thorpe Common and Lob Wells Wood

- Ash Tree Gorge
- Markland and Hollinhill Grips
- Creswell Crags
- Elmton and Whaley Valleys
- Langwith Vale
- Pleasley Vale

The Creswell Limestone Strategy highlights the agencies that have an interest in the nature conservation of the area and maps the eight Sites of Special Scientific Interest (SSSI's) and Regionally Important Geological and Geomorphological Sites (RIGS).

Magnesian limestone is one of the least common rock types in Britain and supports a rich wildflower population. The grassland is characterised by tor grass, fairy flax, ox eye daisy, and field garlic, whilst rarer plants like dark red helleborine and common pasque flower can be found in a few locations. The rich wildflower meadows attract a large variety of invertebrates, including glow worms and the dingy skipper moth. Scrub species like guelder rose, dogwood and hawthorn form a mosaic of habitats which support brimstone butterfly and garden warblers.

The ancient semi-natural woodlands are very important for their rich assemblage of lichens, bryophytes, invertebrates and plants like lily of the valley, bluebell and herb paris. Water courses on the magnesian limestone support white-clawed crayfish and brook lamprey, both species identified in the Habitats Directive. The Creswell Limestone Flushes, which are areas where groundwater comes to the surface, are of special interest, as are other areas of wet grassland.

The arable fields support weeds such as prickly poppy and scarlet pimpernel and some areas have corn bunting, skylark, tree sparrow and harvest mouse. There are lists of recorded species kept by local groups as well as the County Wildlife Trusts.

8.4.1.2 Strategic Context - Planning Policies and Strategies

STATUTORY PLANS AND POLICIES

National planning guidance relating to countryside access and tourism is contained in several Planning Policy Guidance notes. These include:

PPG7 The Countryside - Environmental Quality and Economic and Social Development (1997)
Aims include 'to conserve and improve the landscape and encourage opportunities for recreation' and 'to conserve the diversity of our wildlife particularly by protecting and enhancing habitats.' PPG7 gives guidance on development specifically relating to farm diversification, such as farm shops, nature trails and holiday accommodation.

PPG13 Transport (1994)
Plans may also include policies for cycle use of redundant railway lines or space alongside canals and rivers. Sometimes such routes may serve the dual purpose of providing linear parks in urban areas. Routes shared with pedestrians, and sometimes with horse riders, should be considered where space allows. Provision of cycle routes and cycle priority measure should be encouraged in new development. As with pedestrian routes, care needs to be taken to ensure that cycle routes are not isolated from all other activity.

PPG17 Sport and Recreation (1991)
PPG17 gives guidance on the assessment of opportunities and needs for sport and recreation provision and safeguarding open space with recreational value. It contains no explicit references to the principles of sustainable development although, in relation to policies for open space, it notes that these have to be set within a planning framework which takes full account of the community's need for development and conservation of all kinds.

The guidance note concentrates on sport, open space and informal recreational use of the countryside. In relation to sport and recreation, PPG17 stresses that:

- they are important components of civilised life;
- participation can improve an individuals health and sense of well-being;
- promotion of sporting excellence can help foster civic and national pride; and
- they have a valuable social and economic role

It is now eight years since the publication of PPG17 in September 1991 and it should be noted that planning guidance on sport and recreation is currently being revised.

PPG21 Tourism (1992)
PPG21 emphasises the importance of tourism to the national and local economy but stresses the need for planning policies to balance these positive effects with the need to protect the environment from negative impacts. This guidance stresses the need to comply with the Government's environmental strategy that has as its objective the achievement of sustainable development.

The guidance note states that tourism cannot be regarded as a single or distinct category of land use and is made up of *"a wide range of very different activities and operations. These include accommodation, catering, transport, tourism attractions, information provision and all other amenities and facilities designed to cater for the needs of visitors."* (paragraph 3.3). The overlap with related areas such as sport, entertainment, the arts and other recreation and leisure activities is noted.

Regional Planning Guidance
The Office of the Deputy Prime Minister now provides the regional strategies which will inform the development and implementation of other strategies and programmes. The Regional Planning Guidance (RPG) presents four strategic themes: Economic regeneration & growth; Promoting social inclusion; Urban and rural renaissance; Conserving & enhancing natural resources.

The RPG develops policies that amplify these themes and which fall within the scope of this study.

Policy S3 … "Ensuring that the needs of local communities for access to (on foot, bicycle or public transport) and experience of, nature are protected, helping the vulnerable, disadvantaged or excluded groups to gain access to nature and wild space."
Policy S4 … "Recognise the particular importance of access to urban green space and to countryside and the urban fringe."

Disability Discrimination Act 1995
The Disability Rights Commission, the organisation charged with enforcing the Disability Discrimination Act 1995, classifies public rights of way as a service under

the terms of the Act. This means that Highways Authorities are service providers. This has important implications for all work on rights of way:

"From 2004, service providers will have to take reasonable steps to remove, alter or provide reasonable means of avoiding physical features that make it impossible or unreasonably difficult for disabled people to use a service."
Disability Discrimination Act 1995; Section 21 (2) a,b,c.

Countryside and Rights of Way Act 2000
The Countryside and Rights of Way Act 2000 will pave the way to a significant expansion of public access to open countryside. It also introduces a new duty for highways authorities to prepare Rights of Way Improvement Plans (ROWIPs). These plans are intended to be a mechanism for improving the network of public rights of way and other non-motorised routes in light of the need of all types of user. The ROWIPs must assess:

- The extent to which local rights of way meet the present and future needs of the public;

- The opportunities provided by local rights of way for exercise and other forms of outdoor recreation and the enjoyment of the authority's area;

- The accessibility of local rights of way to the blind or partially sighted people and people with mobility problems

All highways authorities have until November 2007 to complete their first plans. Derbyshire County Council have just commenced theirs. Work on the plans is progressing in Nottinghamshire and Rotherham.

Derbyshire Structure Plan
Recognises the need for priority to be given to proposals which help regenerate the area and overcome, economic, social or environmental problems. It also states that leisure facilities and tourist development will be encouraged, provided they are in keeping with the character of the area. Particular protection will be given to area and features of special interest, e.g. conservation area, listed buildings, ancient monuments, protected trees and landscape.

Nottinghamshire Structure Plan
Identifies the need to conserve and enhance local landscape character. It also recognises the need for better public transport links between visitor attractions and for important recreational routes. It states that the existing network of public rights of way and other recreational routes will be maintained and wherever possible improved. In particular priority will be given to developing routes linking urban areas to the countryside and the reuse of former railway lines and other transport features such as canals.

Bolsover District Local Plan (February 2000)
One of the key transport objectives is "to ensure maximum accessibility for both residents and visitors to the area by making efficient and effective use of existing road space and by promoting the use of public transport, cycling, horse riding and walking."

Policy TRA 11 recognises that "there is considerable potential for adding new routes to the existing definitive network of footpaths and bridleways."

Policies CLT 10 and 11 propose protection and promotion of existing countryside trails.

The need to protect wildlife habitats is fully recognised in the plan. In particular the importance of the magnesian limestone area is recognised.

Mansfield District Local Plan
The plan contains a number of policies and proposals relating to the protection and improvement of local routes for pedestrians/walkers/cyclists/horse riders.

Rotherham Unitary Development Plan
The overall environmental objectives for Rotherham are to create a better environment and to maintain the integrity of the countryside and the urban heritage. The necessity for provision for people with disabilities is acknowledged.

LOCAL NON-STATUTORY PLANS AND POLICIES

The Creswell Limestone Strategy
The Creswell Limestone Strategy was developed through a partnership including Derbyshire and Nottinghamshire County Councils, Rotherham Metropolitan Borough Council, the District of Bolsover, Nottinghamshire Wildlife Trust, Derbyshire Wildlife Trust, Yorkshire Wildlife Trust, Groundwork Creswell and Creswell Heritage Trust. The strategy covers the southern third of the southern magnesian limestone natural area, as designated by English Nature. The aim is to ensure a strategic approach to the protection and enhancement of sites. The strategy recognises the potential of the limestone habitats for interpretation and education to encourage locals and visitors to appreciate and respect the area.

The strategy has been adopted by all the partners as a guide to management of the areas wildlife habitats.

The Creswell Crags Conservation Plan
The Plan is recognised by Nottinghamshire and Derbyshire County Councils and by the Districts of Bolsover and Bassetlaw as an important document informing planning issues.

The Plan identifies why Creswell Crags and the surrounding heritage is significant and how it can be protected and enhanced.

Key projects relevant to this study are the relocation of the B6042 access road to Creswell Crags, improvements to education and interpretation services and facilities and improved conservation and access. It hopes that enhancing public access will be a key factor in contributing to the regeneration of the area.

The plan recognises the need for appropriate access in order to ensure the long-term conservation of the sites (policy H.1). The need to develop an integrated approach is recognised, including public transport links (policies H.2 and H.4). The plan highlights the importance of encouraging local communities to develop an appreciation and pride in their local heritage (policy H.3).

South Yorkshire Forest Plan
The South Yorkshire Community Forest area overlaps with the north western tip of the Limestone Heritage Area and is part of the Rotherham Plain zone. Provision for recreation and access is a key part of the South Yorkshire Forest Plan (2002) –

policies R1 – R4. The Plan recognises that the existing network should be improved and extended to provide links to and between key areas and the importance of maintenance.

Greenwood Community Forest
Provision for recreation and improving access is a key part of the Greenwood Forest's strategy (proposals CAP1 – CAP10). The Strategic Plan (2000) recognises that the opportunity exists to develop and enhance a network of recreational routes to enable easy access to "gateway" sites and the wider forest area (p.48).

The Strategy states; "The overall approach to management in the limestone fringe should thus involve a combination of restoration and enhancement – to restore those features which contribute to local distinctiveness, while at the same time enhancing the overall unity of the landscape through appropriate large-scale woodland planting" (p.22).

Countryside Agency
The 2001 strategy 'Towards Tomorrow's countryside' lists amongst its priorities " ...we will establish more areas where visitors can enjoy the countryside with confidence, in particular on foot, horse or cycle, while also benefiting rural businesses" (p.7).

English Nature
English Nature is the agency responsible in England for advising central and local government on nature conservation and for monitoring, research and promotion of wildlife and natural features. It establishes, maintains and manages National Nature Reserves, notifies and protects SSSIs, and provides advice to central and local government on policies affecting nature conservation. It also has a statutory role in development plan preparation and development control.

English Nature's position statement on access and nature conservation states that its objectives for access are "to maximise the benefits of nature conservation to people and in doing so, to ensure that the resource itself is not degraded. Nature conservation and access need not conflict provided appropriate management and good practice measures are implemented to mitigate potential damaging effects. Where access is shown to have actual or potentially adverse effects on nature conservation, English Nature will take a precautionary approach in considering management for the area, and will monitor the need for continued research". The statement refers to the positive benefits that can result from encouraging understanding and awareness of nature conservation and helping people to care for and enjoy our natural heritage.

In relation to SSSI's in particular their position is to "Promote the active management of public access to areas of high nature conservation value, in order that people can enjoy and appreciate nature in ways that sustain the special interest".

Environment Agency
Established in 1996, the EA has a general duty to promote amenity and recreation on land and water in its control. Proposals for construction (such as bridges or buildings) within 8 metres of the top of the riverbank would require the consent of the EA.

East Derbyshire Greenways Strategy (1998)
The main concept behind this strategy can be seen as the need to: "...Create multi-user, traffic free routes which link areas of population to each other and provide links to the countryside."

In general, route priorities are to centres of activity and out into the countryside, with flat routes being preferred.

A Trails Strategy for Mansfield
Aims to extend the trail network and establish links to points of interest such as Pleasley Vale, Creswell Crags and Creswell Archaeological trail.

Others
There are a number of other strategies in place to which these proposals must relate. These include:

- Mansfield District Council Nature Conservation Strategy
- Mansfield District Council Tourism Strategy
- Access study for the Greenwood / Sherwood Area (North)
- Nottinghamshire County Council (1999) Milestones Statement
- Bolsover Town Tourism Appraisal, Interpretative Strategy and Plan
- National and Local Biodiversity Action Plans

LAND TENURE

Land ownership in the limestone Heritage Area is mainly shared between the major landowners of Chatsworth Estates and Welbeck Estates. The Earl of Scarborough's Sandbeck Estate own the land at Roche Abbey Gorge which is managed by English Heritage, and Welbeck Estate own the land at Creswell Crags which is leased and managed by Creswell Heritage Trust. There are various smaller private landowners.

8.4.1.3 Overview of the Existing Access Network

TRANSPORT NETWORK

The 6000-mile National Cycle Network is on the fringe of this study area, both to the east (route 6) and to the west (route 67). Route 6 extends the full length of Nottinghamshire through Sherwood Forest from Nottingham towards Worksop, from here it heads west to cross the M1 at Wales. Route 67 Follows the Chesterfield Canal towpath from Chesterfield to Rother Valley Country Park where both routes join (see map 13 Appendix 8.13). Other off road routes are included in maps 9-12 appendix 8.13.

This route aims to increase people's choice of travel and encourage people to visit the area from home by foot or by bicycle. As this is part of the National Cycle Network there are potential tourism benefits. Consideration should be given to developing links with this route.

The Robin Hood line runs through the area from Nottingham to Worksop. There are stations at Mansfield, Mansfield Woodhouse, Shirebrook, Langwith-Whaley Thorns, Creswell, Whitwell and Worksop within the study area. Although there is currently no Sunday service this line has potential to bring many leisure visitors to the area. Cycles are carried free of charge. In developing new promoted walks or rides consideration should be given to links with the Robin Hood Line to encourage sustainable tourism.
The whole district is well served by public buses and bus information and numbers should be given on any interpretative material. The Traveline on 01709 515151 can provide full details of local public transport services. Nottinghamshire's Sherwood

Forester buses run regular services from Nottingham north to Dinnington and serve many of the villages in the study area.

PUBLIC RIGHTS OF WAY NETWORK

The Countryside Commission have recognised the rights of way network as the single most important means of enabling people to enjoy the English countryside.

Maps 1-8, appendix 8.13 show the existing public rights of way network as shown on the Definitive Maps held by the highways departments of Rotherham, Derbyshire and Nottinghamshire in relation to the limestone vales and gorges.

Much of the area is in the ownership of three large estates; Chatsworth, Welbeck and Scarborough. There is a fair amount of existing access on the Scarborough Estate according to Pett (pers.comm.). Welbeck and Chatsworth, however, are bereft of public rights of way in comparison to the land outside the estates ownership.

The Countryside Agency (2001b) report shows that 61.9% of paths in Derbyshire are easy to find, 94% easy to follow and 94% easy to use. For Nottinghamshire the figures are 54% easy to find, 84.1% easy to follow and 85% easy to use. Significantly, Nottinghamshire had one of the lowest proportions of paths ‘easy to use’. The South Yorkshire figures are 69.1% easy to find, 97.2% easy to follow and 95% easy to use.

In Derbyshire, maintenance of rights of way, erection of stiles, bridle gates, signposts and way marking are the responsibility of the Rights of Way team. The County Council’s Countryside Service is also involved in improving and promoting access. In Nottinghamshire, definitive routes come under the jurisdiction of Nottinghamshire County Council’s Rights of Way section who have responsibility for maintaining the rights of way network. The Countryside Management Service organise community and voluntary groups to assist in the physical improvement of routes and promote routes.

Derbyshire County Council have advised us that for Bolsover District all signposts where a right of way meets a metalled road will be replaced as necessary during 2006/2007.

EXISTING PROMOTED ROUTES

Certain public rights of way are promoted as access routes for leisure and recreational use, for tourism and for access to work. Some of these promoted routes are strategic, identified by Local Authorities and other partners as part of national, regional or sub-regional access networks. These routes are identified in Local Plans, tend to be maintained and are likely to be promoted on a long term basis.

Other routes may be considered as 'local' promoted routes. These may be trails round particular points or sites of interest, around or between villages etc. These routes are often not maintained and the promotional literature is often not in print.

Appendix 8.1 summaries all the strategic and 'local' promoted routes identified in the desktop study.

PROPOSED STRATEGIC ROUTE NETWORK

The existing strategic promoted routes form part of a proposed strategic network. The network proposed by Rotherham Metropolitan Borough Council is largely complete for the Heritage Area. Derbyshire and Nottinghamshire County Councils and Mansfield District Council have comprehensive strategies that are being implemented gradually as funding allows.

Derbyshire
Derbyshire County Council have focused on the 'Greenways and Quiet Roads Initiative' promoted by the Countryside Agency: *'they are designed and managed for shared use by people on foot, bicycle and on horseback' (Countryside Commission, 1997).*

The County Council has identified proposals for extending the network of Greenways in the County (see map 9, appendix 8.13). A proposed east west cycle route exists linking the Trans Pennine Trail (TPT) / National Cycle Network route 67 at Staveley through Clowne and Creswell. Another proposed route north - south runs between Clowne and Bolsover. Also within the study area is a route from Bolsover to Shirebrook which runs adjacent to Langwith Vale. Anna Chapman, Derbyshire County Council's Greenway Officer, is currently writing a pre-project action brief for the Bolsover Loop. This will join the Trans Pennine Trail southern link in the north to the Pleasley Trails Network in the south. The east side of the loop runs from Pleasley along the Rowthorne Trail to/by Hardwick Hall, through the Glapwell Colliery Site, along Stockley Trail to the MEGZ site to rejoin the TPT at Poolsbrook. Various sections are dependent on reclamation schemes or landowner negotiations and therefore more difficult to define a time scale. Some parts still need a route identifying. The sections at Pleasley, Creswell and Shirebrook Collieries are already in development.

The downgrading of Crags Road to a bridleway to the Creswell Crags Museum and the road's realignment is currently at the planning stage and is scheduled for completion in 2004. The section running west from the A616 on Frithwood Lane across the former Creswell Colliery is similarly happening this year or next. The short section to join the two parts together will depend on officer time to discuss with Welbeck Estates, so could take longer.

Whitwell Quarry has applied for an extension which includes proposals to upgrade some footpaths to bridleways and access improvements to Whitwell and Creswell Crags.

Anna Chapman, (pers. comm.), advises that although it is difficult to predict a likely timescale the aspirations are that the Creswell to Nottingham route will be completed within the next two years, the Bolsover Loop within the next five years, other routes within next ten years.

These routes will become an important part of the Greenway network and are likely to increase the number of visitors to the area, as can been seen by the success of the Trans Pennine Trail southern spur to the west which is already complete, and runs from Chesterfield to Rother Valley country park.

There are discussions regarding widening schemes of the M1 in Derbyshire. If these proceed then crossing points, such as pedestrian bridges, have the potential to be replaced or improved by providing multi user crossings.

Nottinghamshire *(refer to appendix 8.13, map 10)*

Recreational routes in Nottinghamshire are linked closely to the Sustrans National Cycle Network proposals. There is a master plan in Nottinghamshire for development of a strategic cycle network. This network of routes is known as the 'Double H'. There are many schemes in the pipeline, all at different stages of development. The priority in Nottinghamshire is to prioritise routes interlinking larger communities and secondly to develop routes interlinking smaller communities.

The main priority at present is the proposed cycle route from Shirebrook station to Warsop. There is a lot of potential for developing off-road cycle routes in Nottinghamshire, including from Creswell Crags eastwards to the National Cycle Network. Map 10 appendix 8.13 shows proposed greenway links to the National Cycle Network.

Mansfield District Trails Strategy

This strategy identifies a network of strategic trails throughout the Mansfield District. The ones with most relevance to this study are as follows:

River Meden Trail forms a major strategic route from Pleasley to Meden Vale and beyond.
Meden Trail - Warsop Wood – this route links to Langwith and Creswell Crags.
Meden Trail - Minster Wood – also provides links to Langwith and Creswell Crags.
Chesterfield Road – Pleasley Vale links the urban area with open countryside.
Oxclose Lane – Meden Trail – a link from the urban area into the Meden Trail.
Kings Mill – Meden Trail – links Maun and Meden Trails and other routes.

Chesterfield Cycle Campaign have advised a series of road routes all radiating out from Mansfield Market place to link into surrounding areas of interest. The 'cycloss' has a rim and 8 spokes. The spokes go to:

- Creswell Crags (27km)
- Clumber park (25km)
- Rufford (19km)
- Southwell (28km)
- Nottingham (25km)
- Langley Mill (21km)
- South Wingfield (24km)
- Bolsover (19km)

(These routes are not yet published).

Other Access Provision

The Forestry Commission has a general policy that access on foot is welcome in all its woods. Forest Enterprise allows de facto access on forest rides and trackways on foot only in Whitwell Woods (168.8ha) and aims to increase accessibility generally.
In Nottinghamshire Forest Enterprise allows horse riding with permits.

Additional public access linking with public rights of way have recently been created through Defra's countryside stewardship scheme at the following locations:

Whinny Haugh Lane, near Tickhill, South Yorkshire	SK600 920
*Moor Hill Farm, near Thorpe Salvin, South Yorkshire	SK519 801
*Anston Stones, near North Anston, South Yorkshire	SK529 835
*Anston Grange, near Anston, South Yorkshire	SK535 823
Langold Farm, near Langold, South Yorkshire	SK568 878

* These three agreements are adjacent to identified Heritage Area sites.

N.B. There are many other guides to tourist attractions in the area, together with events guides which have not been listed as they are not directly relevant to this study.

8.4.1.4 Visual Access

Views and viewpoints form an important part of how the area is perceived and contribute to an area's local character and interest. The majority of magnesian limestone outcrops are well hidden from the road and there are very few good uninterrupted views from existing public rights of way. On site visual analysis found some sites to be totally hidden and inaccessible to the public, for example Red Hill.

For the majority of sites it was only upon entering the gorges and vales that the distinctive limestone environments became apparent. However, field visits identified key sites including Creswell Crags, Roche Abbey, Ashtree Gorge, Whitwell and Warsop where some potential roadside viewpoint and gateway opportunities exist. The results of this study are presented in a short Video CD (appendix 8.12), that shows the potential of existing car pull ins for view points and explores road side opportunities for positioning magnesian limestone gateways. The main view points were discovered from existing pull ins on the A616 Creswell Crags, Ashtree Gorge and Whitwell and opportunities for gateway features were noted at Roche Abbey A634, Warsop, Creswell Crags A616 and Anston Stones Wood A57. In addition the video explores the opportunity to link together Anston Stones Wood and Lindrick Vale and shows the potential dangers of crossing the busy A57 that divides the sites. The positives and negatives of promoting visual access are presented and recommendations are made.

Roche Abbey Distant View

Recommendations

Adopting and extending existing roadside pull ins to take advantage of site views from the A616 Creswell Crags, Whitwell and Ash Tree

Installation of interpretation panels at the above sites to explain the views

Installation of gateway features at Roche Abbey (A634), Warsop, Creswell and Anston Stones Wood/Lindrick Vale (A57) to make people aware that they are entering the Limestone Heritage Area – these could be limestone standing stones or heritage style signs

Consultation and approval from highways department is crucial to any works affecting the Highway

Consultation and approval from landowners and tenants is crucial to any works affecting existing access and alterations to their land
(Refer to appendix 8.12 for visual presentation)

8.4.1.5 Market Appraisal

The County and District Councils actively promote development of a strategic network of walking, cycling and equestrian routes for local recreational use, for access to work and for rural tourism. A recent initiative is to promote walking for health reasons,

encouraging people to discover the trail networks. Many of the communities in the Heritage Area rate poorly in health statistics.

Several tourism studies emphasise the potential to develop the rural tourism product within the area including a network of multi-user trails. However, there has been no recent market appraisal of the potential or actual user groups for the trail network. The bulk of appraisals that do exist relate to the general tourism product (sites, towns etc) and therefore have a different emphasis. The physically nearest trail user information available is from the Peak National Park for which many detailed studies have been undertaken. This information is not applicable to the Heritage Area due to the difference in scale and usage.

Using the available information it can be concluded that the various rights of way and promoted routes are actively used by local residents for short walks around the villages and towns that dot the Heritage Area. They are used primarily for recreation and exercise. The strategic routes that run through the area are used as parts of short routes but seldom as one 'A to B' activity.

There are active rambling and walking groups based in the main towns and cities (Sheffield, Nottingham, Mansfield) that organise annual programmes of longer walks using the promoted trail network. Staff at Creswell Crags report regular usage of the car park by rambling and walking groups and by cyclists as a base for exploring the Robin Hood Way and the area around Welbeck and Clumber.

There is low usage of the routes by people visiting the area and those that do, do so as VFR's (Visiting Friends and Relatives). The strategic route network would appeal to none VFR's with improvements to the area's infrastructure however this would be a long-term goal at present. The area is not, and is not likely to become, a major 'destination' for walkers from outside the area.

It is recommended that further detailed assessment and market appraisal is undertaken to provide detailed levels of information for medium and long term trail development.

WALKING

The 1986 General Household Survey (Office of Population Censuses and Surveys, 1988) cited in Curry (1994: p94) states *"Walking in the countryside is by far the most popular specific countryside recreation 'active' pursuit, being 25% more popular than all other classified activities put together. In the main, walkers tend to be frequent users of the countryside, walking over short distances and familiar territory."*

The more recent 1998 UK Day Visits Survey confirms walking as the most popular countryside activity. It estimates that there are around 891 million walking day trips each year with most walks being less than 2 miles.

Walking takes place on the rights of way network as well as in other areas with free access, which are generally open to the public. The Ramblers Association are one of many organisations within the Limestone area who run a calendar of guided walks throughout the year.

The Limestone Heritage Area contains a wealth of sites and artefacts of archaeological and natural interest which are at present isolated and in most cases hidden. Rights of way provision is generally good throughout (refer to maps 1-8

appendix 8.13), although in relation to Pleasley Vale in particular, there is a distinct lack of maintenance and this neglect detracts from the inherent attractiveness of the site. Without further investment and management Anston Stones, Pleasley Vale, and Nor Wood (Roche Abbey vale) in particular will remain places for local people to walk their dogs rather than attracting visitors from further field. Site analysis plans19-21 appendix 8.13, illustrate the problems and opportunities for improvement at key sites.

Walking, cycling and riding are three of Britain's most popular forms of recreation. Circular routes and links to other trails are of great importance to the enjoyment of these activities. The importance of improving and extending the network for informal recreation is recognised in the many strategies already in existence (2.0, 2.1 and 2.2).

CYCLING

Nottinghamshire County Council operate a programme of Rural Rides in the County. Local sections of the Cyclists Touring Club and other cycling clubs from a wide area have rides which pass through the area as part of their regular club rides. (refer to map10, appendix 8.13 showing the main proposed routes and links to existing).

HORSERIDING

There is much interest in riding around the area, especially where bridleways and trails are beginning to form a useable network. Richard Pett (RMBC) reports that there is strong interest in horse riding in the Rotherham area.

The following horse riding stables are based within the study area:

Woodside Stables, Barlborough Road, Clowne, tel: 01246 810817
Villa Mar, Langwith Road, Bolsover tel: 01246 824606
Ringer Villa equestrian centre, Ringer Lane, Clowne tel: 01246 810456

ISSUES AND CONFLICTS

Inaccessibility of the gorges has meant they are valuable ecological sites. Careful consideration has been given to the recommendations to ensure that they enhance the sites in a sensitive way.

This is a relatively small area at the margins of many different administrative units, heightening the need to ensure a co-ordinated approach to the protection and promotion of the Heritage Area sites. There has been a fragmented approach to the promotion and development of routes in this area. Very few have made mention of the significance of the magnesian limestone in their current interpretation.

Bolsover District Council are looking to create a countryside management project in the District which would be access, ecology and landscape orientated. There would be much potential for improving and promoting access in the District through such a project, as has been shown with similar schemes elsewhere. Lack of maintenance was evident at the sites visited within Bolsover District.

Neglected entrance at Meden Valley Trail

Uninviting & neglected footpath Markland

8.4.2 ASSESSMENT OF PROMOTED ACCESS PROVISION AND OPPORTUNITIES FOR IMPROVEMENT

8.4.2.1 Strategic Promoted Routes (Appendix 8.1)

Several of the strategic promoted routes provide and promote access to particular parts of the Heritage Area. The most important of these is the Creswell Archaeological Way which provides a 'spinal' route running north/south across the southern half of the Heritage Area, linking several of the vales and gorges. Other strategic routes are the Robin Hood Way, the Rotherham Ring Route, the Cuckoo Way, Meden Way, and the National Cycle Network 6. The Meden Way cuts across the southern part of the area linking Mansfield to Pleasley. The Robin Hood Way is circular route that links several key sites within the Sherwood Forest Area. It includes a detour westwards to Creswell Crags but does not link with the Archaeological Way. The Cuckoo Way cuts across the northern part of the Heritage Area following the course of the Chesterfield Canal and is part of the Trans Pennine Trail. The Rotherham Ring Route is a circular route round Rotherham linked to a network of local 'Doorstep' walks.

These strategic routes provide a skeleton through which to articulate a network of local promoted routes. (Refer to maps 9-12 appendix 8.13)

CRESWELL ARCHAEOLOGICAL WAY

The Creswell Archaeological Way was designed to provide users with a sample of some of the visible evidence of human activity within the area. A promotional leaflet is maintained in print by Derbyshire County Council. In the south the route links to the Meden Trail. At Creswell the route runs close to the Robin Hood Way although there is no formal link.

The full route of the Creswell Archaeological Way was surveyed on Wednesday 27 August 2003. The survey form used is contained in appendix 8.4. This form details the location and the problems encountered.

Overall the ground conditions were good

with only short stretches slightly overgrown, but not impassable. Much of the route passes through land owned by Chatsworth Estate and their footpaths are maintained to a good standard. A few waymark discs were missing or damaged. An additional way mark post is required at the corner of Upper Mill Farm to avoid confusion. There were a few discrepancies between the route on the leaflet and the route on the OS Explorer maps. The route shown on the Explorer maps differed slightly to that on the ground, but did not cause any real problems.

Some of the limestone crags and outcrops are not very visible due to vegetation cover and this detracts from their visual impact, in particular through Markland Grips. There are sections of the route plagued with litter and dumping.

At the time of survey many species of butterfly were in abundance along the route, including commas, speckled woods, red admirals, small tortoiseshells. Minnows were spotted in the stream at Water Lane (SK 495 665) indicating it is of good quality. There was recent evidence of badgers in Langwith Wood.

Observation of use

On 27 August two horse riders were using the route near Pleasley, five walkers were noted in the vicinity of Langwith and six other walkers at various locations on the route. Many of these appeared to be local people walking their dog on short sections of the route, rather than walking the route as a whole.

Route amendments

The current route links Elmton and Whaley Valleys with Markland and Hollinhill Grips. In doing so Creswell Crags is excluded. Map 17 (Volume 5) shows a suggested spur to Creswell Crags via Creswell Village. There is no obvious route to link all the above sites without adding a considerable distance and deviation. However, the suggested spur would also provide a link to the Robin Hood Way and could be identified as a strategic link route between the two.

There is unfortunately a significant road stretch in the section between Elmton and Markland Grips (1.5km) There is however no obvious alternative preferred route, without missing out the Grips. On initial inspection therefore no obvious route improvements can be recommended. There is also the issue of the current route as shown on new edition OS Explorer Maps, so any route change could be problematic, as many users do not update their maps every time a new edition comes out.

Public transport links to the Archaeological Way

As the Archaeological Way is on a linear route good links to public transport are essential to encourage people to walk the route without having to resort to two cars. There is a regular bus service from Chesterfield to the start at Pleasley (no.737). There are buses from Clowne to Chesterfield (77) and Clowne to Sheffield (53). Anyone living in Chesterfield could get to the start at Pleasley Vale and finish at Clowne and return to Chesterfield on public transport quite simply. People from other areas would have to change buses, which detracts from using public transport.

Alternatively, Mansfield Woodhouse and Whitwell are linked via the Robin Hood railway line so the current route could be walked in a day and return satisfactorily for anyone able to access these stations with ease.

If the route were extended further north public transport links back to the start of the second day e.g. North Anston or Roche Abbey back to Whitwell are more problematic. There are bus links however from North Anston to Worksop and

Rotherham. There is a regular service from Roche Abbey to Worksop and Rotherham and from there regular connections to Sheffield, however public transport links to the south are not direct.

In order to help people with their journey planning the Traveline phone number and web site address should be included on all promotional literature.

Analysis

Consideration should be given to renaming the route 'The Limestone Heritage Way' or 'The Limestone Heritage Trail' as its current name leads to unfulfilled expectations, as there is little archaeological evidence to be seen. A strategic link between the Archaeological Way and the Robin Hood Trail should be identified.

Extend the route north to Roche Abbey (map 14-16 appendix. 8.13), taking in the other limestone vales and gorges, and potentially south to Mansfield Woodhouse Station.

Phase1 North: Extend route to Anston Stones Wood (map 15 appendix. 8.13) *This is dependent on access being approved by Forest Enterprise and the adjacent landowner*

Phase 2 North: It is recommended that the further extension to Roche Abbey (map 16 appendix 8.13) be reassessed in the future. *This is dependent on the completion of a permissive bridleway proposed on the old Dinnington colliery site which links to quiet lanes to the north. This proposal is due to be completed during 2004 and would be the preferred option.*

The extension would take in the pleasant walk through Anston Stones Wood

Recommendations

Rename the route 'The Limestone Heritage Way' or 'The Limestone Heritage Trail'.

Identify a strategic link between the Archaeological Way and the Robin Hood Trail.

Extend the route north to Anston Stones and to Roche Abbey

Provide a link to Mansfield Woodhouse Station

Make physical improvements as required including way marking, stiles and path work

Consideration should be given to renaming the route 'The Limestone Heritage Way' or 'The Limestone Heritage Trail' as its current name leads to unfulfilled expectations, as there is little archaeological evidence to be seen. A strategic link between the Archaeological Way and the Robin Hood Trail should be identified.

OTHER STRATEGIC PROMOTED ROUTES

Several 'other' strategic promoted routes are identified below which are important within the Limestone Heritage Area. The routes take advantage of existing rights of way, highways paths or concessionary paths and were found to be generally well used and in satisfactory condition (refer appendix 8.1, and maps 1-8 appendix 8.13).

Robin Hood Way
This route is not fully multi user. In order to maintain the character of the area and its sensitivity surfacing has been resisted in parts. There is a Robin Hood's Way Association who report any problems to Nottinghamshire's rights of way team. There are no current complaints so it can be assumed that the condition is satisfactory. Staff at Creswell Crags report regular use of the Robin Hood Way by walkers and cyclists.

Rotherham Ring Route
The Ramblers Association survey of Rotherham Ring Route undertaken in Autumn 2003 shows the current condition to be very good (map 11, appendix 8.13).

Cuckoo Way
The route varies from multi-user surfaced trail to narrow muddy paths, pavements and mown grass along its 46-mile length following the Chesterfield canal. The stiles and gates are generally in good condition and the whole route is open and useable by the able-bodied. There may be diversions in place due to restoration work over the next few years at the former Kiveton Park Colliery site. The section through Killamarsh where the canal has been built over is difficult to follow at present. Etched pavement slabs are suggested along this stretch.

Greenway Strategy
Derbyshire County Council Countryside Service has a Greenway Strategy that proposes a network of multi-user trails in and around Chesterfield and Northeast Derbyshire. This network forms part of the national Trans-Pennine Trail route travelling from Southport (West Coast) to Hornsea (East Coast). This trail in turn is part of a larger international route planned entitled Euroroute 8 which begins on the west coast of Ireland and travels to Istanbul.

For the purpose of this study it is important to note that the current plans tabled by Derbyshire County Council entail the use of a former Mineral Railway line curving through the study area linking Clowne, Creswell, Whaley Thorns and Shirebrook (map 9, appendix 8.18). It should be noted that a spur would be developed linking into Creswell Crags and Nottinghamshire's path network to explore Welbeck and Clumber estates.

Derbyshire County Council sees this strategy as a long-term project that will be implemented as opportunities arise. Discussions with developers and landowners have started.

8.4.2.2 Local Promoted Routes - Pilot Action Areas

Appendix 8.1 and appendix 8.2 contains summaries of key features, issues and access opportunities for each of the Limestone Vales and Gorges. Firbeck Vale, Red Hill Valley, Thorpe Common and Ash Tree Gorge provide few access opportunities due to a combination of limited rights of way and lack of visual access to landscape features of interest.

Roche Abbey, Anston Stones/Lindrick Vale and Pleasley Vale have good access opportunities and a wide range of interesting and accessible landscape features and are therefore identified as **Pilot Action Areas.** Analysis plans 19-21, appendix 8.13 evaluates the physical and visual condition of these site.

Markland and Holinhill Gripps, the Elmton and Whaley Valleys and Creswell Crags form a close network of sites around the village of Creswell. The Elmton and Creswell Village Company proposes to develop an interpretation point in Creswell that will act as a gateway to the Creswell Heritage Area. It seems appropriate therefore to identify a fourth Pilot Action Area as the Creswell Hub, linking the three sites.

A separate note is provided on Langwith Vale. The public right of way network is not extensive, is partly covered within the Creswell Hub, and requires no physical improvements. However, the area illustrates several features of the Heritage Area landscape and is closely linked to the Poulter Country Park and to a proposed new Community Heritage Centre at Langwith/Whaley Thorns

Each of these Pilot Action Area sites is considered under the following headings:

- Suggested amendments to promoted routes
- Physical footpath works needed (stiles, gates, steps, surfaces, benches, etc.)
- Transport improvements (including car parks, anti motor-cycle barriers etc)
- Signage (way marking, footpath signs, promotional signage)

ROCHE ABBEY

The site is managed by English Heritage and includes an EH custodian managed Visitor Centre with internal interpretation facility and shop where tours of the Abbey can be booked. Outside facilities include further interpretation and informal car park including designated disabled bay. Direct public access to the Abbey is not allowed unless on a guided tour, however, excellent close views of the monument are allowed via a dogleg path from two sides.

English Heritage (York Office) has prepared a management plan for the site with proposals principally concerning realignment of earth banks and grass slopes to facilitate reasonable access under the Disability Discrimination Act that comes in to affect this year. We also understand that English Heritage has a proposal to develop a promoted walk northwards from Roche Abbey but no further details have been forwarded to date.

Amendments to promoted routes

There are five promoted walks which pass through the area. All the current walks are useful as they promote different aspects of the gorge and do not overlap too much. The key promoted route for this site is contained in the booklet “Walking in the Creswell Limestone Heritage Area.” This walk does not reflect the best the area has to offer and should be totally revised (refer to map 18 Volume 5).

Improvements to the route would be to take the route out to Stone, east of the Abbey, in a loop, and return via the lake in Kings Wood. It would be worth investigating the possibility of concessionary access through the wood east of Abbey Mill Farm as the

limestone cliffs can be seen here, but they are not visible from the right of way. The links to Maltby as well as public transport could also be shown. This walk takes in the present houses which are using the shelters as car ports or garden features/sheds.

Rotherham Metropolitan Borough Council's Doorstep Walk No 2 is a circular walk of about 5 miles. An improvement to this walk would be to shorten it slightly by going more directly through the village of Laughton, in its present form it skirts around the edge missing out the distinctive All Saints church.

If the site were to be promoted the resulting visitor pressure on the site would need to be carefully addressed, particularly regarding the existing visitor car park. The car park is specifically for Visitor Centre use, and does not have the capacity for large numbers of additional visitors or ramblers. It was noted that walkers do attempt to use the car park at present which is controlled at the discretion of English Heritage who manage the site.

Path works

The revised route referred in fig.3, appendix 8.13, takes advantage of existing paths and no physical works are necessary except the possibility of way marking. However the 'Walking in the Creswell Limestone Heritage Area' booklet would need amending. Other paths contained in the booklet are presented in map 22, appendix 8.13.

The footpath from the car park alongside the Abbey leads to a boundary fence with narrow kissing gate and uneven surface. The red shale surfaced path is very narrow, only about 300mm wide. Opportunities exist to upgrade this path to a standard suitable for wheelchair users. There is nothing to prevent vehicles entering the path to the gorge.

Other footpaths in the vicinity of the gorge are well marked and maintained by RMBC and form part of the Rotherham Ring Route map 11, appendix 8.13. They are currently in good condition. Many of the paths provide an open aspect through fields with pleasant views of surrounding area.

A new access has been constructed which includes removal of a section of wall and new kissing gate off Kingswood Lane. This access is part of the improvement program for the Rotherham Ring Route (RMBC). The original stile access still remains on Blyth Road A634.

There is no provision for seating on any of the footpaths outside the confines of the Abbey. We would recommend a bench adjacent to the interpretation panel from where there are good views of the abbey and gorge. Chain link fence around the Abbey is out of character with the area and is an eyesore and could be replaced with something more in keeping, such as timber post and wire mesh.

Northern footpaths to Maltby are very tunnel like with closed canopy woodland to either side. In this vicinity there is evidence of anti-social behaviour such as discarded alcohol cans/bottles, fires and broken glass. The sewage works creates unpleasant odours throughout the northern route which detracts from the visitor experience.

The Gypsy Lane entrance has a motorcycle prevention barrier however, there is no deterrent to motorbikes at the other entrance of the path. There is no maintenance gate at the Gypsy Lane entrance. All footpaths are generally well marked and in good condition if somewhat overgrown in places at the edges.

Transport
The access road to the car park is constructed of red shale, which is very rutted, and in poor condition. Vehicular access & parking is only possible at the Roche Abbey entrance where parking for approximately fifteen vehicles including disabled bays exists at the visitor centre. The car park is inappropriately sited very near to parts of the Abbey & cliffs adjacent to the visitor centre. Remnants of the abbey have been used to define the parking area in a haphazard way. Two disabled parking bays are provided but signage is poor. An informal car park exists adjacent to the access road about 150m away from the visitor centre, which was abandoned due to damage to visitor cars. Consideration should be given to relocating the car park away from main buildings. Bus stops exist both at the northern and southern entrance of the gorge along the A634 Blyth Rd.

Signage
Improve signage for disabled parking.

Recommendations

Create an informal limestone path 1.5m wide and install a new wheel chair access in place of the narrow kissing gate, along with a new maintenance gate and fencing at the same point.

Install a simple informal bollard combined with limestone boulders near the path entrance.

Replace steel chain link fencing around perimeter of Abbey with timber post & wire mesh (sensitive operation - consultation required with English Heritage)

A seat should be placed adjacent to the interpretation panel.

Additional motorcycle barrier at other end of Gypsy Lane path.

Reintroduce woodland management at Norwood to create more light.

Revise the walk contained in the booklet "Walking in the Creswell Limestone Heritage Area " to reflect the area to its best advantage

Way mark revised route identified in figure 7

Close consultation required with English Heritage due to site sensitivity & current management

(Refer also to site analysis plans 19-21, appendix 8.13)

ANSTON STONES AND LINDRICK VALE

Brian Davies from English Nature advises that Anston Stones Wood is well managed by Anston Parish Council with access in mind. The Parish Council are soon to have a new management plan written for the site by Bullens Consultants. It is expected that this will be completed in 2004. The Parish Council are in the process of reinstating a path shown on old maps which runs parallel to the railway line. This path is not shown on the definitive maps of Rotherham Borough Council. Michael Gazur advises that

the reason behind this is to provide more options for those wishing to take a circular route, especially if other paths should be closed temporarily for any reason. This work is being carried out by Groundwork Creswell's 'Breakthrough' Project. The suggested northern extension of the Archaeological Way would come through Anston Stones.

Amendments to promoted routes

The walk contained in the "Walking in the Limestone Heritage Area" booklet could be improved by taking the main route along the restored Chesterfield Canal with a link into Shireoaks. It is a useful walk and links the two sites together showing the best the area has to offer. If the geological trail is no longer in print then the proposed interpretative leaflet for each site would replace this, incorporating archaeology as well as ecology. Current walks are shown in map 22, appendix 8.13.

Signage of Dead Mans Cave is possible as ARCUS suggest it is extensively damaged through vandalism etc, however access to this location needs some thought.

Path works

The entrance off the B6060 is not wheelchair accessible at present. The current barrier could be replaced with a standard motorcycle barrier. There is a potential easy access route from the B6060 and onto the cleared grassland area where a picnic table and seat could be situated.

The broken stile near the railway line should be replaced with a motorcycle barrier. The footpaths are generally very good but narrow in some places. The main paths need widening and surface topping up. Benches should be provided at intervals along the main pathways and the existing rustic benches replaced as necessary. There is potential for picnic tables just north of stream and also where gorse has been cleared.

If the opportunity arose to improve safe access to Lindrick across the A57 consideration should be given to acquiring a concessionary path through land parallel to the A57. The stile at the A57 entrance could be moved closer to the road and the entrance made more prominent.

Transport

The nearest parking at present is adjacent to the Parish Hall in the recreation ground. There is the opportunity to provide a small car-parking area for people with disabilities at SK522841 which gives easy access into the woods. If road is closed off by proposed gate ensure radar key to allow access for key holders.

There are bus stops on the B6060 and regular services to Rotherham, Sheffield and Worksop.

Signage

Additional way marking required in Lindrick quarry area.

Recommendations

Improve main entrances off the B6060 and A57

Create easy access loop through site

Create picnic area and provide benches throughout the site

Resurface and widen the main paths

Create disabled access parking area

Additional way marking in Lindrick quarry area

Install motorcycle prevention barriers at strategic locations

(Refer also to site analysis plans 19-21, appendix 8.13)

CRESWELL HUB

(Creswell Village, Elmton and Whaley Valleys, Markland and Holinhill Grips, Creswell Crags) refer to 'Concept Plan' map 23, appendix 8.13

Elmton and Creswell Village Company has attracted funding from NRF and HLF sources to develop a community café and information centre located in Creswell village. Its aims would be (a) to raise awareness of regional heritage for local residents and (b) to act as an orientation point for visitors to the wider limestone region. The displays and information will present the story of the magnesian limestone landscape, pointing to sites local to the village that illustrate this story. Key themes will include geology, the Ice Age, landscape history and wildlife. As well as innovative permanent display areas, there will be a small seating area where visitors may sit and browse through printed information resources, changing temporary exhibitions, timetables and maps, or opportunities to explore further material via the computer database.

The developments at Creswell will create a convenient 'hub' from which to explore Creswell Crags, Markland and Holinhill Grips and the Elmton and Whaley Valleys. The proposals are fully supported by Creswell Heritage Trust as they complement the proposals for the proposed new Ice Age displays at Creswell Crags and will provide a mechanism to link Creswell Crags more strongly to the village, bringing added community benefit.

Amendments to promoted routes

The 'Creswell Crags' and 'Whaley and Upper Langwith Valleys' routes identified in the 'Walking in the Limestone Heritage Area' booklet provide comprehensive coverage of the sites and landscapes surrounding Creswell village. The Interpretation point in Creswell Village could serve as a central orientation point for these routes whilst retaining the options of walking these routes from Creswell Crags or Whaley Thorns and Poulter Country Park as appropriate. Some repackaging of these routes would be needed, including identification of route options.

Markland Grips is near to Clowne and is linked to the community of Creswell by the Archaeological Way that runs through the site. The opportunity exists to create a link from Markland directly to Creswell Crags and the Robin Hood Way by creating a new loop from Creswell Village see figure 2 page 18 of this report. The Crewell Hub would also serve as a central orientation point also linking in with the Elmton and Whaley Valley including Poulter Coutry Park and the Archaeological Way which passes by.

Railtrack have plans to reopen the old mineral line as a commercial service. A proposed Greenway link runs through the site. This is unlikely to be developed in the short term.

Creswell Crags is well covered by promoted walks. There are four walk leaflets covering almost the same route, although they are not all thought to be current. The route in the booklet "Walking in the Limestone Heritage area" links Creswell Crags to the surrounding villages of Creswell and Elmton and should be maintained in print. A useful addition to this booklet would be the inclusion of the 3-mile circular walk from Creswell Crags to Welbeck and the Dukeries Garden Centre. This could be used to illustrate the 'Abbeys and Country Houses' theme of the proposed new Interpretation point in Creswell. The forthcoming relocation of the B6042 (2004) provides an opportunity to develop a multi-user route along the length of the gorge, linked to the route proposed by Derbyshire County Council's Greenways Strategy across the former Creswell Colliery site.

Path works

The orientation centre is to be sited in the village and access is provided via tarmac pavements, however drop curbs and rumble strips may aid access.

Selective clearance of vegetation and trees currently obscuring outcrops in Markland Grips and other sites is recommended in conjunction with Derbyshire Wildlife Trust. The site has several nationally rare plants and active management is required to conserve these species.

Transport

The 'Robin Hood Line' rail network from Nottingham and a regular bus service from Chesterfield and Worksop serve the village. Car parking is provided approx. 400 metres down Elmton Road from the site of the proposed centre. A drop off area maybe advantageous close to the building. The car park at the back of the War Memorial is closer to the Interpretation Point and possible use and signage of this should be investigated.

The car park at Creswell Crags provides quality & adequate car parking which will be enhanced with the development of a new Museum in 2006. It has public transport provision within the neighbouring village of Creswell, taking the form of the 'Robin Hood Line' rail network for Nottingham and regular bus links to Worksop and Chesterfield

Signage

In Creswell, brown tourist signs will be required once the information centre is open as will signage from the railway station and car park signage.

All routes need improved waymarking.

Recommendations

Maintain as separate routes the 'Creswell Crags' and 'Whaley and Upper Langwith Valleys' routes identified in the 'Walking in the Limestone Heritage Area' booklet since the Elmton and Whaley Valleys can be explored either from Whaley Thorns or from Elmton

Under the title of 'Creswell Hub routes', identify four (see 'Concept Plan' map 23, appendix 8.13) trails that explore the landscape around Creswell : the 'Creswell Crags' route (as identified in the current Limestone Heritage Area walks leaflet; the Creswell village trail; a link from Markland directly to Creswell Crags and the Robin

Hood Way (a new loop from Creswell Village figure 2, a walk from Creswell to Elmton, extended to include the loop from Elmton to Whaley (the northern end of the 'Elmton and Whaley Valleys' route).

Review car parking arrangements for Creswell Interpretation Point

Manage vegetation encroaching on paths and obscuring rock outcrops in Markland Grips

Provide effective signage for Creswell Interpretation Point, including brown signs, car parking, railway station

Improve waymarking of all routes

LANGWITH VALE

Langwith Vale runs from Elmton village at its northern end down to Upper Langwith at the Southern most point. Rural minor roads and a limited footpath network link these two pretty stone villages. Another picturesque village, Whaley, marks the centre point of the valley. The aesthetics of this area of magnesian limestone have great potential over a wider vista and provide an opportunity to look at the area as a pre industrial rural setting.

The footpath network of this area is, while not extensive, in good condition with no short-term management action needed. Some way-marking is missing for some promoted routes.

PLEASLEY VALE

Pleasley Vale contains a wide diversity of historical, landscape and wildlife interest including Pleasley Pit, William Hollins Mill complex, Pleasley gorge and Little Matlock, Pleasley Park, Ice Age archaeology, a Roman villa, river corridor habitats. There are proposals to develop visitor facilities at Pleasley Pit. The District of Bolsover operate an outdoor pursuits centre based in Pleasley and has proposals to develop a small satellite centre in Pleasely Vale itself using one of the former mills buildings. The southern end of the Archaeological Way starts at the Outgang Lane car park.

Unfortunately this diversity of interest is not currently managed or promoted in an integrated way. This is especially unfortunate as the wealth of sites and landscapes provides perhaps the greatest potential within the Heritage Area to interpret its full range of interest and diversity.

In view of the large number of stakeholders, the historical phases represented, the ecological and landscape interest of the area and the pressure for development it is recommended that an integrated interpretation and development plan be created for Pleasley Vale. This should include proposals for long term management and presentation of the cultural, ecological and landscape interest and an interpretative plan to set out a strategic approach to the presentation and promotion of the site.

Amendments to promoted routes

The Pleasley area is well covered by promoted routes including the Archaeological Way and Meden Trail (refer to appendix 8.1). The walk in "Walking in the Creswell

Limestone Heritage Area" booklet is useful but could be improved by taking a route through Pleasley Park, which allows concessionary access, thus avoiding the road. An additional loop around Little Matlock would also enhance the walk.

No further amendments are currently recommended, pending preparation of an integrated development and promotional plan.

Path works
There is scope for a possible picnic area adjacent to the Archaeological Way car park on Outgang Lane near Pleasley. Remove gates and fences which are excessive and unnecessary along path in woodland adjacent to Outgang Lane. Reposition motorcycle barriers from bridge to near Archaeological car park instead.

Steps need maintenance at junction with Outgang Lane (Archaeological Way) and near path heading east from church at Little Matlock.

Vegetation clearance is needed along the stretch of footpath along the south side of the river at Little Matlock. There is no continuity in the type of stile used. At Little Matlock a large log impedes access at on point. This obstruction should be replaced with a post and rail fence and gate.

Meden Trail surfacing is in good condition but only 300mm wide. Vegetation clearance is required to widen it to the appropriate width. Provide benches on Meden Trail

Replace the few way mark discs that are damaged.

Transport
Remove glass and other litter from both car parks at Outgang Lane and Common Lane, Little Matlock to make them more welcoming.
Remove barrier from Archaeological Way car park

Signage
Brown signage to the car park at Common Lane, Little Matlock and Pleasley Vale from Mansfield Woodhouse. Signage to say that access is not suitable for lorries into Pleasley Vale from the Little Matlock end.

Recommendations

Consider providing additional promoted routes through Pleasley Park and around Little Matlock

Provide a small picnic area adjacent to the Archaeological Way car park on Outgang Lane.

Remove gates and fences which are excessive and unnecessary along the start of the Archaeological Way and maintain steps and way markers and paths.

Replace log obstruction at Little Matlock with a post and rail fence and gate.

Improve Car parks to make them more welcoming to visitors.

Improve signage to car parks

Request signage to deter lorries entering the vale from Little Matlock

8.4.2.3 Design Language

The survey revealed no locally distinctive design styles and the selection of site fencing and furniture varied in range and quality throughout the area. However, several good examples of using locally distinctive materials were noted, including magnesian limestone footpaths, limestone boulders for interpretation panels and good quality dry stone walling and fencing. It was considered that good examples should be adopted to use at other sites where appropriate, to create a 'design language' and distinctive continuity of styles throughout the area.

Interpretation panels set into Indigenous limestone at Creswell Crags is sympathetic to the environment

Local Planning Authorities are encouraged to prepare Countryside Design Summaries for their area to help shape developments to respect the local countryside character.

Village Design Statements are prepared by local communities to encourage debate about ensuring new development fits in with surrounds and local character.

Indigenous limestone footpaths at Creswell Crags

Themed use of indigenous limestone at Bolsover

Recommendations

Develop an appropriate Limestone Area 'design language' by sourcing and using appropriate local materials and in construction:

- *Magnesian limestone interpretation blocks*
- *Magnesian limestone footpaths*
- *Drystone walling using magnesian limestone*
- *Good quality timber routed way markers and finger posts*
- *Quality site furniture and interpretation*

- *Use of recycled aggregates and other materials from sustainable resources should also be considered*

8.4.3 Cost Estimates and Funding Sources

Cost estimates for the recommended improvements to physical, visual & intellectual access are provided in appendix 8.10.

There are many potential sources of funding from various funding bodies. The main ones are identified in appendix 8.9.

8.4.4 Implementation Mechanisms

PARTNERSHIPS

There is the potential for joint partnership working with the following organisations: Creswell Heritage Trust, Groundwork Creswell, Bolsover, Bassetlaw District and Rotherham Borough Councils and Derbyshire and Nottinghamshire County Councils. English Heritage, English Nature, Bolsover Countryside Partnership and local Wildlife Trusts are also important consultees in this process.

Significant opportunities exist for joint working that would contribute to Local Authority Best Value targets. Given its remit (through its charitable objectives) to cover the whole Heritage Area, the Creswell Heritage Trust seems the most appropriate organisation to co-ordinate implementation, in partnership with and supported by the complementary expertise of Groundwork Creswell. Effective implementation would require funding to support one or more staff to take on this role, reporting to a steering group of partner representatives administered by one of the Trusts.

COMMUNITY INVOLVEMENT

Community involvement is essential if local people are to participate in 'ownership' of the project, identifying with the 'ethos' of the project and helping look after the sites. Creswell Heritage Trust and Groundwork Creswell have extensive experience of working with local communities and might be the most suitable groups to co-ordinate this activity subject to any existing local partnerships or initiatives.

There are a number of specific initiatives which may be of particular interest to local communities, and potential stakeholders are listed for each site profile (see appendix 8.2).

Continuing liaison should be ensured with local access groups, other interested community organisations and individuals.

Considerable work has already been undertaken by these groups in some areas and this should be encouraged and developed. Consultation is essential throughout the process of improving access to the area.

Local Access liaison groups have been set up in Bolsover District, Chesterfield and North East Derbyshire with representatives from various groups. A new post has recently been appointed in Derbyshire to oversee this process and lead on producing the rights of way improvement plan for the county. Nottinghamshire have a rights of way liaison group, but his is not at such a local level. Rotherham has a Local Access Forum who are in favour of multi access routes.

DELIVERY

Groundwork Creswell Intermediate Labour Market Team
Groundwork Creswell's Intermediate Labour Market (ILM) teams could have an important role in the delivery of some of the objectives in this plan. Both Groundwork Creswell and Groundwork Ashfield and Mansfield have ILM workforces working in the area of this study. Groundwork Creswell are also proposing to set up an ILM team covering the Rotherham Metropolitan Borough area.

Groundwork Creswell Breakthrough Team
Another vehicle for delivery of selective elements of the project could be achieved through Groundwork Creswell's Breakthrough Team. Breakthrough was established in order to help young people aged 14-16 who are at risk of being excluded from mainstream education, achieve practical skills away from the classroom environment through conservational activities. The overall aim of the programme is to re-engage young people back in to some form of education or training programme, thus improving their prospects for the future.

Design & Project Management
Groundwork Creswell offer professional landscape design consultancy services including detailed design and contract management from implementation to completion

External Consultants & Contractors
External consultants, contractors and sub-contractors could be employed if required. In this situation the formal tender procedure would be followed in order to achieve good value, quality services and products.

Recommendations

Encourage partnership working via consultation, communication and through properly funded project staff

Set up appropriate mechanisms for working with local communities

Commission Access Bolsover to carry out a survey of each Pilot Action Area

8.5 Intellectual Access

Analysis of the interpretative and educational potential of the resource follows on from the recommendations produced for visual and physical access. They define how directly the public will be able to experience the archaeological, geological and ecological features of the Heritage Area and identify the principal vales and gorges to which access should be promoted. These locations are where much of the interpretative and educational potential of the resource will be experienced but other heritage and tourism sites may also contribute to the story of the landscape. All these locations provide opportunities to explore broader themes and stories concerning the landscape as a whole, not just those of the individual location. These broader themes and stories can also be experienced away from the promoted locations, as documentary or virtual sources at home or at school, or at heritage sites and similar visitor attractions within and around the area. Analysis identifies the potential for intellectual and experiential access including consideration of:

- **Sensory opportunities** - the landscape character of the magnesian limestone is difficult for the casual visitor to grasp. The most impressive features, the limestone gorges, tend to be hidden from view. An exception is the view of Creswell Crags off the A616 approaching Creswell from Cuckney. Here it is possible to appreciate the cleft of the limestone gorge into the escarpment. Elsewhere, the gently undulating landscape of the plateau is difficult to differentiate from its surroundings especially as the band of limestone is only a maximum of 8km wide and modern agriculture has tended to create a bland and featureless 'agriscape' of large cultivated fields. The visitor might notice the stone built cottages although in many cases these have been absorbed into the brick built terraced housing of the 19th century or the late 20th century 'designer' housing estates.

  The combined effects of brick built villages and estates and the large cultivated fields have destroyed the unity of much of the historic landscape when viewed from the main roads. It is mainly along the minor roads that it is now possible to appreciate the historic landscape character of the plateau.

  In a few locations the approaches to the plateau provide the visitor with the opportunity to appreciate a change in landscape character. Examples are the approach from the west, from the M1 corridor in the area around Bolsover and Hardwick, and the approach from the east, from Sherwood Forest along the A616 between Ollerton and Cuckney. In the Bolsover/Hardwick area, the escarpment on the west side of the Magnesian limestone belt rises sharply from the coal measures, this dramatic effect being used in the siting of Hardwick Hall and Bolsover Castle. The approach to Bolsover Castle along the A632 provides the best opportunity to experience this view, which is enhanced in Bolsover itself by the stone built houses in the town centre.

  Although much of the plateau has limited sensory interest, Hardwick Hall, Bolsover Castle and Roche Abbey are all dramatic buildings in dramatic settings, providing opportunities to tell key parts of the story of the landscape in settings that inspire sensory stimulation.

  In contrast to much of the plateau, the gorges and vales provide distinctive and sometimes powerful sensory experiences. The gorges are dramatic, highly visual and evoke emotional responses through the cliffs, the rock strata, the woodlands

and the feeling of enclosure and isolation. The vales and gorges tend to be areas in which the historic landscape character is best preserved and appreciated.

- **Geological, ecological, archaeological and historical significance** - in the context of the Management Action Plan, the key points of interest are those which best illustrate the distinctive nature of the landscape. The geology is fundamental. It is ubiquitous but is best illustrated in the older buildings of the villages and towns and especially in the cliff faces of the gorges. The areas of ecological interest are largely restricted to the vales and gorges where areas of limestone grassland and semi-natural woodland are preserved both in the gorges and adjacent to them.

  Archaeologically the area contains some interesting sites and features some of which are well preserved within the semi-natural woodland. Indeed, it is likely that further archaeological survey of these areas could be very productive. However, the outstanding interest lies in the caves and rock shelters located in the gorges that have revealed evidence of life and environment during the Ice Age.

  The historic land-use seems to have been predominantly as grazing land and as royal hunting parks but this is hard to grasp today amongst the large expanses of cultivated fields. This system of land-use can however be explained through the abbeys and the country houses with their associated parklands that are such prominent features. The recent industrial history of the textile industry and of the coalmining industry has left a prominent mark on the landscape and needs to be explained.

- **Human interest stories** - key characters and stories include Bess of Hardwick, the Smithson family of architects, the Duke of Newcastle and Bolsover Castle, Peter Fidler the explorer and surveyor from Bolsover, the sixth Duke of Portland and the Welbeck tunnels, William Hollins and the textile mills at Pleasley, Percy Houghton and the colliery villages. These human interest stories tend to be specific to particular places and are best explored and interpreted locally. Some, such as Bess of Hardwick and the Duke of Newcastle are of national interest and also inform our understanding of the processes (the great houses and their parklands) that have affected the landscape of the Heritage Area. However, their stories nonetheless remain rooted in the particular places with which they are associated. The story of the nineteenth and early twentieth century archaeologists has perhaps wider applicability as their research covered all the vales and gorges of the Heritage Area.

- **Folklore and mythology** - well dressing is the only 'traditional' custom that features strongly in the area today. However, this is in fact a recent custom, imported from the limestone villages of the Peak District over the last twenty years. Most of the villages in the Heritage Area now use the tradition in association with community festivals. This relative lack of folklore and tradition may reflect the immigrant origins of the much of the modern population who came here in the late nineteenth and early twentieth centuries on the back of the coalmining boom.

  Evidently the area possesses a plethora of stories and traditions associated with the coalmining industry. As with the human interest stories, these are best explored and interpreted locally.

- **Current usage and attitudes** - the experience of the 'Pride of Place' community heritage project is that local people have little understanding or identity with the depth of landscape heritage and the events and processes that have created it. The primary attachment of older people is to the mining heritage, which has little resonance with young people. At school, most teachers originate from and live from outside the area so do not use it as an educational resource.

  On the other hand, where communities are closely associated with one or other of the gorges, they value and respect the distinctive landscape. Anston Stones is owned by the local Parish Council who have undertaken a lot of work to manage the site with the support of outside agencies including Groundwork Creswell. Research into attitudes of local people at Creswell Crags shows that many value the site as a local amenity and appreciate its spirit and atmosphere. They resent the way the site has become more 'managed' over the years, restricting freedom of movement and the sense of wilderness. However, other locals have little appreciation of the interest and significance of the site.

  Creswell Crags is located on the Robin Hood Way and the car park is often used by rambling groups and walkers as a base for exploring the surrounding countryside. There is no information available on the extent to which visitors from outside the area visit the other vales and gorges. Visitors from outside the area come mainly to the major heritage attractions at Bolsover Castle, Hardwick Hall, Creswell Crags and Roche Abbey. Few, if any, visitors will have any sense that these sites form part of a network within a particular type of landscape.

  Economy, land-use and settlement in the area are changing in the aftermath of the pit closures and in consequence of the regeneration programme that has followed. The social networks of the coalmining era have been disrupted and the communities now lack social cohesion. The future of most of the former pit villages is as commuter bases for employment centres in surrounding towns and business estates. Modern housing development is taking place on the edges of many of the villages, usually with scant use or reference to the local building stone. Many former colliery sites are being turned into business estates or landscaped to create country parks.

  Vandalism is increasingly a problem in the vales and gorges located adjacent to settlements such as Anston Stones. At Creswell Crags the problem has been contained through employment of wardens assisted by the attentions of the gamekeeper from Welbeck Estates.

  Changes such as the inappropriate style and character of the housing developments threaten the area's distinctive identity. On the other hand, trends towards less intensive agriculture are opening up opportunities to extend areas of Magnesian limestone habitat (grassland and semi-natural woodland) on the edges of the vales and gorges.

- **Documentary resources** - there is a wealth of documentary sources and illustrated records for the great country estates and for the coalmining heritage of the area. There is no single location that stores information about the area as a whole. On the other hand there are a number of places and organisations that store useful information about specific sites or areas. These include the Langwith Whaley Thorns Heritage Centre, Creswell Crags Museum, Creswell Local History Group. Nottinghamshire Wildlife trust has prepared several education resource packs that interpret magnesian limestone habitats and could be used as generic

source material. Creswell Heritage Trust has excellent education resources for the Ice Age archaeology of Creswell Crags, but no equivalent for the natural history of the site.

- **Fragility and safety** - the contexts of the Ice Age archaeology (caves and shelters with their associated sediments, valley floor deposits) in the Pilot Action Areas are generally sufficiently robust that relatively low key unmanaged public access will not threaten conservation. However, most of the vales and gorges are located close to former mining villages and in the current economic and social climate there are threats of vandalism and anti-social use. Some of the habitats and their wildlife could be at risk from uncontrolled or over-promoted public access. All documentary interpretation should carry appropriate advice about following the country code. It may also be necessary to include advice about not damaging Scheduled Monuments. By their nature, the gorges can be dangerous places so appropriate advice may also be needed in the documentary interpretation.

The results of this part of the study give us a multi-faceted view of the area which informs the identification of themes and of interpretative media and methods.

Analysis and Recommendations:

- The best opportunities for telling the story of the landscape lie in the sometimes dramatic settings of the vales and gorges and in the areas of semi-natural woodland. However, the story that these special landscapes reveal may not be characteristic of the Heritage Area as a whole.

- The transformation of the landscape of the plateau over the last 150 years through coalmining and intensive agriculture makes it difficult to present key aspects of the landscape history over the last 6000 years. However, this can be done with careful and imaginative use of the major established attractions whose history illustrates this story.

- These established attractions at Hardwick Hall, Bolsover Castle, Creswell Crags and Roche Abbey have strong landscape settings and could also act as gateway sites to introduce visitors to the wider landscape of the Heritage Area. This would require an appropriate range of interpretative guides being made available at these 'gateway' sites.

- There are few if any, human interest stories or folklore traditions that contribute significantly to understanding the landscape history of the area. Although human interest stories help bring interpretation to life, in this case they would tend to distract and confuse the main themes.

- The identity of the landscape is under threat through lack of local awareness and through the legacy of the coal industry and intensive agriculture. Local communities are a prime target for interpretation to help raise understanding of its distinctive features and history and to contribute to its conservation and enhancement.

- The subtlety and small scale of the landscape (it is never more than eight kilometres wide) and the lack of awareness suggest the need for a focal point where the story of the landscape is told. The story is likely to be lost if it is told at one of the main heritage attractions where the focus is necessarily on their

particular site history. Integration into a community heritage centre or similar location would provide an opportunity to develop community interest in and respect for the landscape and its story.

Development of an integrated plan for maximising intellectual access involved assessment of infrastructure and audit of existing provision, identification of user groups and customers, identification of communication objectives and key messages, recommendations for improvements and development.

8.5.1 Identification of user groups/customers

Effective communication is well-targeted and knows its audience. There are two main target groups that need to be considered; the local community and visitors from further afield.

LOCAL COMMUNITY

Local community involvement is a key objective of this project and there is a range of aspirations for the impact of this project on the local community.

The study area includes several communities suffering acute social and economic deprivation. These communities are not the traditional audience for heritage / environmental attractions and if there is a genuine desire to engage with them there is a need for a long term, carefully targeted programme of community initiatives that build on the work and experience of local community, education, youth and arts workers.

For the last six years Creswell Heritage Trust has developed and managed an innovative community based heritage outreach project using the 'Pride of Place' strapline (see appendix 8.11 for summary description of this project). The project has been highly successful in engaging with local communities, developing capacity of local people to organise and implement their own programmes of heritage activity. The project clearly demonstrates the need and the benefit of using community based heritage 'animateurs' to raise interest and understanding of local heritage amongst local people and to engage them in heritage activity.

The project also revealed a lack of appreciation amongst local people of the range and depth of interest in the Heritage Area landscape. The project worked primarily with older people whose experience of life and landscape has been coloured by the coalmining industry. Initially their principal interest was in interpreting the heritage of the coalmining industry, especially the 1950s. Over time a broader awareness and interest developed through informal education and learning activity provided by the project team and by local residents.

Stories of coalmining life and times have little resonance with younger people as they offer no sense of place or identity - or at least not one with a future! Where the project was able to work with a younger audience through providing work placement opportunities for unemployed young people, the project had significant success in engaging them with their wider heritage, using this as a vehicle for skills acquisition and pathways to employment.

Each of the principal limestone vales and gorges is located in close proximity to a village or small town, usually a former mining community. There is significant scope

to raise understanding of the area's distinctive landscape heritage amongst local people and to involve them in its conservation and improvement. In some cases, as at Anston Stones, the local community is already actively engaged in this process although at present the emphasis lies in the natural rather than the cultural heritage. At Langwith Whaley Thorns an ongoing project to develop a local heritage centre provides a nucleus through which to work. Similarly the Creswell Village Company is implementing a project to create an information point and educational resource centre that will focus on the landscape of the Heritage Area. The Langwith Whaley Thorns and Creswell Village Company projects are being facilitated by the 'Pride of Place' project, demonstrating that the support of appropriately trained heritage professionals is needed to facilitate integration of the Heritage Area landscape 'concept' into local community activity.

ANALYSIS

- There is clearly a need for local communities to engage with their local heritage if the objective of protecting and enhancing the area's distinctive character is to be achieved in the long term. Local communities can also clearly benefit from this process as it contributes to creating a local sense of place and identity as well as providing educational and lifelong opportunities and opportunities for voluntary and recreational activity. The 'Pride of Place' project provides a model of how this process of community engagement can be taken forward across the Heritage Area.

LEISURE VISITORS

The needs of day visitors are different from those of local communities and are considered separately.

Little market appraisal as to outdoor activities has take place in the areas covered by the Magnesian Limestone Heritage Area. That which has been undertaken has highlighted that the area has a low '*visitors from outside the area'* market. Large scale holiday providers at 'Centre parks' (Sherwood) and Thoresby Hall have been established in such a way as to provide everything for guests 'on-site' and are seen as having minimal effect on attractions in this area.

The day market is potentially strong – however none of the individual attractions/resources in the locality currently have the market presence to pull audiences from the established routes. Developments in strategic joint marketing and product development could go some way to addressing this issue in the medium term. The landscape of the magnesian limestone, at least in the vales and gorges, is sufficiently scenic and interesting to be attractive to walkers

Demographic Trends and Visitor Constraints
The size of an audience to a particular attraction has to be judged against any visitor constraints that may be apparent to that site.

Visitor constraints can be both structural and cultural, and may include age, transport, image of site product, admission charges and historic interest.

The summary below indicates the general demographic breakdown of the populace and how visitor constraints are related to each age range:

65 years +

This sector of the population is currently on the increase and it is therefore important to note that these people often have time and income. They comprise a large proportion of special interest groups that frequent visitor sites.

45-64 years
Individuals within this age bracket have high spending power due to lack of dependants. Time however is not as available as some other age groups, but is often spent partaking in special interests. Transport is not a problem and this sector is responsible for the largest proportion of the VFR (visits with friends or relatives market).

25 – 44 years
Families often with children comprise most of this sector. These people have transport, yet small amounts of time mean that most visits are well chosen educational or recreational opportunities for the children on a strict budget.

17 – 24 years
This age bracket have notoriously limited participation in the heritage sector. Transport and disposable income make them attractive market sector. Some educational visits can come through collages and universities.

10 – 16 years
An important sector of populous as school visits provide a large proportion of heritage and environmental sites.

This breakdown provides an indication of the potential for visits into the limestone Heritage Area. Global conclusions can be extracted from these guides to inform the development of product and services for the project area. The main points being:

- Young people and children are realistically only entering the market via education providers and those that come with parents come with limited time and budgets. Educational provision is the key to mass participation.
- The older end of the market make-up is a heavy user of environmental and heritage resources and have the potential to produce further visits though VFR.

Analysis - Target Market profile for Intellectual Access

The target market is likely to be older people (25 +, but especially 45+), visitors and locals, who are:

- more knowledgeable about heritage
- likely to be visitors to major heritage attractions
- likely to want a relatively 'informed' level of interpretation
- likely to want good information with perhaps some pointers to where they can learn more
- may welcome activity sheets for children so they can visit suitable sites as family groups
- likely to enjoy guided walks so these would be good to set up and promote, to be provided by local people.

This market includes ramblers - significant usage of Creswell Crags car park as base for walking the Robin Hood Way

Many people will not wish to walk more than five minutes. These people can be catered for through the main attractions that have car parks and other visitor facilities (Creswell Crags, Roche Abbey).

To engage with this target market, and to promote the identify of the Heritage Area, a network of information points is needed as well as a 'focal' point where people can learn about the Heritage Area and that can also act as a repository of information concerning it. The network could comprise literature available to visitors at the main heritage attractions (Bolsover Castle, Hardwick Hall, Harley Gallery, Creswell Crags, Roche Abbey) and interpretation panels in key locations.

SCHOOL AND OTHER FORMAL EDUCATION GROUPS

Formal education groups have much clearer educational objectives than community or leisure groups. For school groups these almost invariably relate to the National Curriculum. As a market, education groups can be both part of the local community and a potential purchaser of educational products (site visits; educational resource packs etc).

There are obvious curriculum links to History and Geography throughout all key stages however education resources should be developed which are cross curricular and topic driven, encompassing art, drama, literacy, citizenship and ICT. At Key Stage 4 extra capacity can be developed with the introduction of alternative subjects including geology and archaeology.

Exploring archaeology at Creswell Crags, local school visit during 2002

The 'Pride of Place' project has found that as well as curriculum commitments there are extra stresses on most teaching staff in schools in the area coping with delivering the required educational standards in deprived former mining communities. Educational standards in several subjects, especially maths and English are below the national level. In these circumstances, OFSTED inspections take on particular significance and implementation of OFSTED recommendations have major

implications for staff time. In addition many teachers originate from and live outside the communities in which they work. All this combines to reduce the time, energy and, critically, local understanding of teachers to be able to participate in developing educational heritage products using local resources.

The 'Pride of Place' project developed a successful approach to working with local schools by adding value to curriculum projects schools were already engaged in, creating a heritage dimension to other school work and providing support to out-of-school activities. This produced some varied and interesting collaborations, including working with a local arts organisation to add a heritage dimension to a school playground renovation project; working with a learning support teacher to help teens with classroom problems explore the local heritage environment; adding depth to a school geography project based on 'coal' by bringing children together with minerals and heritage objects, and arranging visits into school by former mineworkers.

Provision of education resources and accessible sites could also provide a product that could be marketed to schools outside the area. This is unlikely to have much economic benefit but would help raise the profile and identify of the magnesian limestone outside within the region.

Adult education can take several forms ranging from guided walk participation to fully accredited courses. Outside the subject based formal education which can be provided, the opportunity lies to work with established groups (i.e. local history groups) to provide lateral routes into education i.e. exhibition development, IT skills developed on the back of family history research. This will also develop capacity building within local communities providing increased levels of communication and confidence.

The many organisations based and/or working within the study area provide a wealth of educational opportunities for schools and groups to engage in – these organisations include groundwork trusts who employ education and community staff to work in school or on sites looking at environmental issues.

The same is true of the Wildlife Trusts educational staff. Nottinghamshire Wildlife Trust for example has a series of reserves located within or adjoining the magnesian limestone area. Reserve fact sheets are available for these sites offering information relating to the reserve, ecology, biodiversity and in some cases the geology. School visits to the reserves are encouraged and supported by the Trusts education staff. Educational resources linking directly to magnesian limestone are currently being developed and are hoped to be available later in 2004.

The National Trust and English Heritage have local and regional education staff providing curriculum-based access to the sites in the study area. Bespoke visits can be arranged to specific sites to explore various topics, this service is (particularly by English Heritage) backed up with web based and printed generic materials looking at castles or abbeys.

Other providers of note are Creswell Crags who offer bespoke visits to parties including role play, guided tours and ‘hands on’ activities, these services are again backed by an award winning web resource.

Analysis:

- There is clearly potential to develop linkages between local schools and their local landscapes as part of an overall programme of work with local communities. Indeed, the lack of local knowledge amongst teachers identified by the 'Pride of Place' project illustrates how the concept of sense of place can lose its roots in local landscapes, stories and traditions.

- There is also clearly some potential to develop resources and delivery mechanisms for the adult education market linking up with existing education providers (colleges and universities).

VISITORS WITH DISABILITIES

This is a market sector equally as important as any other.

The key heritage attractions of Hardwick Hall, Bolsover Castle, Creswell Crags, Roche Abbey and the Harley Gallery offer good access for people with disabilities. The vales and gorges provide fewer opportunities as they are informal 'countryside sites'. However, some of the gorges offer sensory experiences that could be of particular value to people with disabilities.

The access needs of all visitors including people with physical disabilities, sensory impairments, learning difficulties and other special needs will need to be accommodated in-line with the requirements of the Disability Discrimination Act.

LANDOWNERS, PLANNERS AND DECISION MAKERS

The primary objective of the Management Action Plan is to secure the long term, sustainable management of the cultural and natural heritage resource. It is essential that all the above stakeholders engage with and support this objective and contribute to 'ownership' of it.

Landownership is largely in the hands of a few major stakeholders. Both landowners and tenants facilitated access to the vales and gorges for the purposes of the archaeological and access studies and expressed interest in the results of the study. The Heritage Area has a low take up rate for Stewardship schemes, perhaps reflecting the need to apply chemical fertilisers to maintain the current arable regime on the plateau.

One of the difficulties facing the Heritage Area is the diversity of local authorities and hence of planning, access, leisure, and conservation departments with responsibility for aspects of long term land management. Indeed, the number of administrative boundaries is remarkable for such a narrow strip of land and may well reflect its history as an ‘edge’ habitat, used predominantly for pasture by organisations and communities based in adjacent areas.

Most of these local authorities, the relevant Wildlife Trusts and the national agencies have endorsed the Creswell Crags Conservation Plan and the Creswell Limestone Area Strategy as key policy documents to be referred to with regard to planning matters. It is important that similar endorsement be given to the recommendations of the Management Action Plan and that a co-ordinating and monitoring mechanism is maintained.

At present this co-ordinating role is performed by Creswell Heritage Trust and by Groundwork Creswell, supported by the Limestone Strategy partnership.

Analysis

- Landowners, planners and decision makers constitute a priority audience if the objectives of raising interest, understanding and awareness of the special landscape quality of the Heritage Area and of securing its long term sustainable management are to be achieved.

- It is essential that these stakeholders endorse the recommendations of the Management Action Plan and that the co-ordinating and monitoring role currently played by Creswell Heritage Trust and by Groundwork Creswell is maintained and supported.

Recommendations for Key User Groups & Customers:

More market research is needed to assess current levels of usage of trails network.

Engagement with local communities is essential and can be facilitated through the 'Pride of Place' model.

A quality guide should be produced targeted at visitors to the main heritage attractions and including pointers to places to visit that will illustrate the story.

A programme of guided walks designed to present and interpret the landscape to visitors should be considered. It would be most appropriate to operate this through local people, perhaps facilitated through a 'Pride of Place' project.

Appropriate literature and information should be produced for the walking market.

At appropriate sites, interpretative literature should be made available to the family market (e.g. short walks and activity sheets)

Develop the local education market through a 'Pride of Place' style project.

Promote and co-ordinate partnership with the main heritage attractions to serve as 'gateways'; introducing visitors to the wider landscape through displays, panels, availability of interpretative guides as appropriate.

Facilitate engagement of landowners, tenants, planners and decision makers with the process and objectives of the Management Action Plan through consultation and through provision of appropriate information.

8.5.2 Identification of communication objectives and key messages

If an area as diverse and complex as the Heritage Area is to communicate coherently and comprehensibly, the objectives and the themes for communication must be clearly identified. The communication objectives will clarify the purpose of interpretation and affect selection of themes and stories and of media.

COMMUNICATION OBJECTIVES:

The communication objectives can be described under three headings:

Learning Objectives
Visitors to the area, local people and stakeholders should be made aware:

The magnesian limestone is one of Britain's least common rock types, formed over 200 million years ago, and gives rise to distinctive landforms including a plateau with scarp and dip slopes, limestone vales and dramatic gorges.

The magnesian limestone belt extends in a narrow band from the area around Mansfield northwards to County Durham. The southern part of this area is a separate natural area called the Creswell Heritage Area.

The magnesian limestone supports distinctive and rare habitats and wildlife, especially magnesian limestone grassland but also fine and characteristic examples of semi-natural woodland.

The caves and gorges were used as camps and shelters by Ice Age hunters who came to live off the great animal herds that made seasonal visits to the area. These places were amongst the most northerly in the world to be visited by humans during the Ice Age and provide the greatest concentration of Ice Age archaeological sites in Britain.

Historically, until the industrial revolution, much of the area was grassland or enclosed to form royal deer parks and great estates. This story can be traced in the great abbeys and country houses and in the woodlands and parks that are a characteristic feature of the landscape today.

The tradition of wool production helped lay the foundation for early industrial development in the Poulter Valley. At the end of the 19th century the landscape was transformed through improvements in mining technology that permitted mines to be sunk through the limestone to the coal seams below.

The limestone rock has contributed to the distinctive character of the surface landscape, supplying building stone for drystone walls, for humble farms and cottages, for the great abbeys and country houses, and even for the Houses of Parliament.

Today, local communities and regional and national agencies seek to treasure, to restore and to enhance the features that characterise this distinctive landscape.

Behavioural Objectives
We want visitors to the area and local people to:

- Keep to public rights of way and respect the landscape and wildlife (observe the country code)
- Visit the key sites and locations that illustrate the distinctive character and history of the landscape
- Be aware that these sites and locations are part of a linked network
- Use local facilities and services (pubs, shops, cafes)

Post Visit Objectives
After their visit, visitors and local residents should feel that:

- The Heritage Area landscape is distinctive and is well managed by an active and committed partnership of local people and regional and national agencies
- They would recommend the area to friends and family as an enjoyable and interesting place to visit

- Local residents are proud to live in this distinctive landscape and would like to contribute in some way to its management

INTERPRETATIVE THEMES AND STORIES

The Heritage Area has a wealth of subject matter to work with - in historical terms alone the area features heavily in many aspects. For example: the most northerly sites of human occupation during the ice age, the only known site of ice age British cave art, cutting edge Elizabethan architectural design, and famous commanders of civil war armies.

In ecology terms it rates highly too with limestone hills and vales providing homes for skylarks, rare orchids and grasses.

Underpinning all this is a striking band of magnesian limestone, 200 million years older than the Himalayas, providing the characteristically gently undulating stage on which all these events and activities are played out.

Although complicated at first sight, the Landscape History research helps identify several key stories or themes that help to understand and to appreciate the landscape we see today. Some are obvious, others need slightly fuller explanation here:

The Magnesian Limestone Geology
This is fundamental, telling the story of how the distinctive rock and the primary landforms (vales and gorges, plateau) were created. The use of this material for building stone forms part of this story.

The limestone that we see exposed in the gorges was once the sand and mud that settled on the floor of a shallow tropical ocean 250 million years ago. This was the Permian age, when Britain was part of a great continent that lay just north of the equator. The land that was to become the Creswell Limestone Heritage Area lay on the western shore of an ocean geologists now call the Zechstein sea, that stretched east as far as Poland.

The sea shoreline was fringed by tropical beaches and barrier reefs. The sands and muds on the sea bed formed great underwater dunes whose shape can still be seen in some of the rocky cliffs exposed in the gorges today. Chemical changes (dolomitisation) that took place millions of years ago destroyed any fossils that were present.

For centuries, people have used the rock as building material, for domestic buildings and field walls, and for great abbeys and country houses such as Bolsover Castle and Hardwick Hall. Magnesian limestone from Anston quarry was used to build the Houses of Parliament in the 19th century.

Today the particular chemical properties of the limestone make it suited for use in the special steel industry, refractory brick industry and agricultural soil stabilising markets with significant export value. Some 40% of processed dolomite production is exported to 25 countries. The Whitwell works is sited on one of the best quality deposits of magnesian limestone in the country and is the sole UK producer of a range of dolomitic products, estimated to bring in £6 million investment to the local economy and £10 million to the UK economy through exports.

The Ice Age

This is the most characteristic and 'original' human story. The Heritage Area contains the largest concentration of Scheduled archaeological sites for the Ice Age in Britain. These are concentrated in the vales and gorges. Surveys undertaken as part of the Management Action Plan show there is considerable potential for further discoveries.

The great ice sheets of the last Ice Age covered much of northern and western Britain. Here they stopped just north of present day Doncaster. South of the ice sheet, the grassy plateau of the magnesian limestone teemed with grazing animals including horse, bison, reindeer, mammoth and woolly rhinoceros. Many of these animals visited in the spring and summer to feed off the lush grass before heading south and east across 'Doggerland' (now under the North Sea) as winter approached.

Carved out in part by earlier ice sheets and melt water channels along fault lines in the limestone, the limestone vales and gorges provided sheltered havens for shrubs and trees and for carnivorous animals like the hyena that followed the animal herds and used the caves as dens.

Human hunters visited these same places, hunting the animals and leaving behind flint and bone tools. At Creswell Crags they left behind the most important collection of ice age artefacts and the earliest art found in Britain.

Today the limestone area contains the greatest concentration of ice age archaeological sites in the UK. Sediments found in the caves and along the rocky slopes of the gorges are important storehouses of scientific information for modern archaeologists and environmental scientists.

Abbeys, Country Houses and Parkland

For the last 6000 years at least, until the late nineteenth century coalmining bonanza, the limestone plateau has been relatively sparsely populated with very extensive

Roche Abbey

areas of common grazing land probably accessed by communities to the east and west as well as by local settlements.

The number of monasteries founded on or adjacent to the magnesian limestone plateau in the eleventh and twelfth centuries is indicative of the relative emptiness of the area, allowing the extensive grazing land to be exploited for wool production. The larger communities tended to be located on the edge of the limestone, where resources from both the neighbouring Coal Measures and the magnesian limestone could be accessed.

The general emptiness of the area encouraged the Norman Kings to bring it under Forest Law as part of Sherwood Forest. Scarcliffe, Whitwell and Pleasley woods are remnants of former royal deer parks while Elmton, Pleasley, Thorpe Salvin and Scarcliffe are fine examples of deserted or shrunken medieval villages that were surrounded by extensive areas of common grazing. Enclosure of the commons occurred quite late, and the in some cases as around Elmton the medieval field boundaries are clearly fossilised in the landscape.

With the dissolution of the monasteries the transfer of monastic sites and estates into lay hands contributed to a reinforcement of one form of landscape characteristic of the magnesian limestone plateau, that of parks associated with the country houses of the nobility and gentry. This parkland contributed and still contributes to the maintenance of a wooded aspect on the plateau. Hardwick Hall and Bolsover Castle are outstanding examples of British Renaissance architecture, sited to display the status and power of their owners on the edge of the escarpment that runs along the western side of the magnesian limestone outcrop.

Industry

Industrial developments in the later post-medieval period have created the most obvious physical and character changes to the landscape of the area. Wool processing and cloth making were important and laid the foundations for the first phase of industrial expansion in the later eighteenth and early nineteenth centuries, focused on textile production.

Through the development of domestic framework knitting and the construction of textile mills people were drawn into the region. Rivers such as the Poulter and Meden provided the power on which this industrial development was based. Important examples of these developments are William Hollins mills and industrial village at Pleasley and the complex of mills and workers housing at Cuckney.

The development of deep mining in the second half of the nineteenth century has been the major industrial impact in the region. Colliery workings are located on the eastern and western edges of the Heritage Area, where the coal measures can be reached through the overlying limestone.

Many of the colliery workings are now disused, but they have left a distinct industrial fingerprint upon parts of this landscape. Imposing spoil tips, colliery headgear and a large number of disused railway lines are still present in places, and most of the gorges are impacted by one or both of these feature types to some extent.

Mining villages (including some colliery-built Model Villages) grew up around the collieries, and these are also very characteristic of later settlement in the area. This is particularly evident in the southern part of the Heritage Area, around the Meden

Valley, with the villages of Creswell, Clowne, Church Warsop, Langwith, Meden Vale, Pleasley, Shirebrook and Whitwell.

Since the second world war, the use of fertilisers has enabled former grazing land to be converted into extensive arable fields.

Habitats and Wildlife
The magnesian limestone rock, the landforms and the history of land-use combine to create distinctive wildlife habitats. These include rare magnesian limestone grassland, semi-natural woodlands, wetlands, rock faces and caves.

In the limestone gorges and on their edges, the limestone rock is either exposed or near the surface and the valleys are quite steep sided and narrow. This land is difficult to farm so these areas have been protected from modern agriculture and from development. They create ideal locations where rare and protected plants and animals can thrive.

The limestone valleys at Creswell Crags, Pleasley Vale, Markland Grips, Anston Stones and Roche Abbey Vale preserve some of the only surviving patches of rare limestone grassland and characteristic semi-natural woodland. On the plateau, remnants of the former royal hunting parks at Pleasley, Scarcliffe and Whitwell and of the great country house estates at Hardwick and at Welbeck contribute to the wooded character of the landscape and preserve their semi-natural status.

Rare plants include large leaved lime, pasque flower, grass of parnassus, spring and march cinquefoil, common and narrow fruited cornsalad, whooley thistle, marsh arrow-grass, perfoliate pondweed, blunt-flowered rush, fingered sedge, green flowered helleborine, bird's nest and fly orchids and autumn ladies-tresses.

The caves at Creswell Crags are home to rare troglophilic invertebrates (spiders, beetles, springtails, mites) and act as hibernacula for overwintering moths, mosquitoes and parasitic wasps.

Around these five main themes local stories and subsidiary themes can be woven using locally available landscape features and resources and local human interest stories, folklore etc. For instance, the process of enclosure that has fossilised strip fields around some of the settlements; some good examples of prehistoric and Roman settlements preserved in the parkland; drystone walls and stone built farms and cottages.

8.5.3 Audit of existing provision

The existing infrastructure and interpretative provision must be viewed as a collection of resources, which belong to many agencies around the area. These resources are the initial 'jigsaw pieces' of the Limestone story. While many organisations are developing strategies for set subjects or areas within and on the outskirts of the limestone belt there is little coherent interpretative product across the area. This lack of coherence is due to two main reasons:

- The Magnesian limestone belt, although narrow and small in area, comes within the administrative areas of at least six local authorities including four unitary authorities (Rotherham MBC, Doncaster, Nottinghamshire and Derbyshire) and three District Councils (Bolsover, Bassetlaw and Mansfield). This administrative division perhaps reflects the landscape history of the area in historical times as

an 'edge' habitat between Sherwood Forest to the east and the coal measures and the pennines to the west.

- Since the late nineteenth century the 'perceived' landscape has been dominated by coal mining industry. Until the collapse of this industry in the late 20th century there was little need or incentive to consider other aspects of the cultural or natural heritage of the area, or to interpret them other than as sites or places of individual significance or merit. Over the last 20 years, interest in countryside management and recognition of the countryside of the Heritage Area as a potential tourism product has led to development of a network of walking (and to a lesser extent, cycling and horse riding) routes but these tend to be disjointed, reflecting the complex administrative boundaries.

Existing interpretative resources can therefore be classified into sites and trails:

SITE BASED INFORMATION

This area is predominately the preserve of six focal sites of which four comprise or are located in limestone gorges.

Bolsover Castle and Hardwick Hall are heritage sites of national significance located on the limestone escarpment on the western edge of the Heritage Area. They represent an important characteristic of the area's history in the 16th - 18th centuries when it was owned and managed by a small number of great aristocratic estates. They are managed respectively by English Heritage and the National Trust and the range and quality of the interpretation is what you would expect of such important and well managed sites. However, the interpretation is naturally focused on the stories specific to each site and does not extend to the wider landscape. At Bolsover, an interpretative plan has been produced for the town that places the castle in its local context. However, the story of the castle in its broader landscape setting is not told.

Roche Abbey – located within one of the limestone gorges, the English Heritage site and visitor centre focuses interpretation around the presence of a Cistercian Abbey complex. Half a dozen panels are on offer within the centre and around the site. Alongside this English Heritage run a number of events and activities throughout the summer season including re-enactments and art work. Rotherham MBC has placed an interpretative panel adjacent to the abbey site that quickly covers the history of both the abbey and gorge and touches on the natural history aspects of limestone vale. This information is not directly accessible by people visiting 'the site'.

Creswell Crags is managed by the Creswell Heritage Trust. The site has numerous panels and a small exhibition/museum, which takes the Last Ice Age and archaeological discovery as main story lines. A varied mix of media is utilised to portray these stories including printed materials, children's craft activities, guided tours and artists. The visitor centre incorporates disabled access, a room for education visits and a 'shopmobility scooter' facility for exploring the gorge. Web site images enable visitors to discover the world of the caves if they are unable to experience a cave tour. Panels interpret an area of magnesian limestone grassland within the site and point visitors to other gorges within the Heritage Area. Proposals are in hand to create a major new museum and visitor complex to interpret the story of Creswell Crags, display the museum collections and provide facilities for education parties.

Anston Stones is owned by the Parish Council and is actively managed by local volunteers because of its SSSI status. A number of interpretative panels are strategically placed throughout the gorge. These concentrate on the ecology of the area while providing basic information as to the heritage and geological aspects of the gorge.

Pleasley Vale echoes the mix at other sites where the ecological elements of the area are strongly expressed as part of the Pleasley trails network. In addition a brief resume of the history of the mill complex is presented.

These interpreted sites are managed by a broad collection of different organisations leading to a range of differing management objectives and styles. Each individual site management leads the visitor to a sense of experiencing an amenity recreational resource. The range of organisations involved with the sites all with differing interpretative focus and styles leads to a lack of cohesion over the Limestone Heritage Area.

Three small scale interpretative foci are currently planned or in a process of transformation. The Whaley Thorns Heritage Centre until recently provided local people and visitors with an insight into the local landscape and the story of its community, centred on an interesting and diverse collection of artefacts and memorabilia. The Centre is currently closed but there are plans to re-open it in a former Methodist chapel. The Creswell Village Company has obtained funding to create an education and interpretation point in Creswell village. The focus of interpretation is to be the landscape and history of the Heritage Area, focusing on the resources and features available locally. The Leisure Services Department of the District of Bolsover is proposing to create an education centre for outdoor activities in Pleasley Vale. This could provide scope for further interpretative provision here.

A significant interpretative and visitor attraction is also proposed for the former colliery at Pleasley.

LEAFLETED TRAILS

A wide range of trails criss-cross the area. The subject matter for these trails tends to lie within ecology and local history and varies from introductions to detailed accounts. The subject matter is probably due to the origin of the majority of the trails being in the hands of environmental organisations or local groups. Appendix 10.1 demonstrates the number and variety of this resource in the Limestone Heritage Area. There are however a smaller number of trails which deal closely with the archaeology and with the landscape history – the most significant of these are the ‘Archaeological Way’ and ‘Walking in the Creswell Limestone Area’.

ACCESS

In a national context the Heritage Area is centrally located between the M1 and A1 corridors and has a potential day visit market of over 4 million people living within a one hour drive. The local road network is quite poor and difficult to navigate with confusing signage.

The Robin Hood Line runs through the centre of the southern part of the area and has the potential to bring leisure visitors, particularly walkers and ramblers, from Nottingham, Mansfield and Worksop into the countryside. However, there is currently no Sunday service.

The whole area is quite well served by public transport. Nottinghamshire's Sherwood Forester buses run regular services and serve many of the villages in the area. There is potential to promote fuller use of the public transport network for countryside recreation.

ANALYSIS

It is unlikely that the Creswell Limestone Heritage Area will receive formal recognition in the short to medium term as an area of special landscape significance (e.g. AONB). This may be desirable in the long term and should certainly be considered as the area merits greater recognition than it currently receives.

In the absence of any formal designation, it would be unrealistic to recommend that the various local authorities should put resources into marketing the area as a specific destination or that interpretation should be badged in a strongly unified way.

However, there is considerable scope for the special character of the magnesian limestone landscape to be more fully identified and featured in the interpretative media and for more effective 'pointing' from one site or trail to the next. The Creswell Heritage Trust and the Creswell Limestone Strategy Partnership have an important role in 'championing' and facilitating this. However, to be successful, the various local authorities need explicitly to recognise the need and the role of the Trust s and of the partnership.

Currently the area lacks identity as an interpreted 'location'. The only guide book targeted at visitors is the booklet 'Walking in the Limestone Heritage Area' produced by Creswell Heritage Trust. A booklet is needed that sets out the story of the landscape, identifies the key locations of interest, and is made available at all 'managed' locations within the area.

There is a plethora of walks leaflets, but apart from the 'Walking in the Limestone Heritage Area' booklet and the 'Creswell Archaeological Way' trail guide, few of these clearly identify the nature and character of the Heritage Area landscape.

Recommendations

Support and encourage the roles of Creswell Heritage Trust, Groundwork Creswell and the Limestone Strategy Partnership in 'championing' the identity, conservation and enhancement of the Heritage Area.

Encourage the main heritage attractions to tell relevant parts of the story of the Heritage Area through interpretation (e.g. on-site panels) and through 'pointing' to other locations within the area (e.g. selling interpretative literature).

Support the setting up of the Interpretation Point in Creswell village as a focus for interpretation of the area to local people and to visitors.

Produce a new, quality guide book that tells the story of the Heritage Area, supported by revised editions of the 'Walking in the Limestone Heritage Area' and Creswell Archaeological Way' guides.

Produce a short guide to each of the Pilot Action Areas, identifying the key points of interest that contribute to understanding of the landscape

8.5.4 Identification of appropriate media/locations

The landscape diversity, subject areas and opportunity present within the project area mean an equally varied use of interpretative media. This can include:

- *Written – general guides, specialist texts on geology, archaeology and ecology, community led booklets dealing with particular sites and areas – arch way – limestone walks layering*
- *Interpretation panels – include welcomes, signage, car stopping points*
- *Activities – a linked events programme with local groups putting on events in their spaces; programme of guided walks or walking festivals; awareness weeks; activity weekends*
- *Information technology - provides an exciting vehicle with which to work. Seamlessly linking and layering sites and story lines providing the visitor with access to the area from home or whilst on the holiday. Can also provide a vehicle for bringing together information about the history of the area and making it accessible to a wider audience.*
- *Formal displays and exhibits –a wide variety of technologies is available. However, these require dedicated space and a dependable visitor market to sustain them.*

Landscape design language - the use of an appropriate landscape design language (especially the use of magnesian limestone references) is an important means of interpreting the landscape and reinforcing messages about its character.

Creswell Crags

The primary objective of interpretation here is educational in the broadest sense – to inform people and to raise awareness of the distinctive character and history of the magnesian limestone landscape. The target markets are local people (adults and children), visitors to existing heritage attractions and walkers/ramblers from within the region. The primary locations where interpretation will take place and/or that will be interpreted are the limestone vales and gorges identified as Pilot Action Areas and the main existing heritage attractions.

The propose Interpretation Point in Creswell will be the only place where a dedicated, formal display will focus on the landscape history of the area. The main heritage attractions have their own stories to tell and cannot be expected to dedicate

significant space to the magnesian limestone story. However, it might be possible to negotiate some space where the connections to this story can be made.

Elsewhere, interpretation will take place in the landscape itself, in the absence of formal visitor facilities

Recommendations

The primary interpretative media will be guidebooks and leaflets that set out and explain the story of the magnesian limestone, supported by interpretative panels, a programme of community based guided walks and activities, reinforced by appropriate landscape design language. A portable display system that could tour community and visitor venues would be a useful means of promoting awareness of the landscape and of the interpretative and amenity resource it offers.

Information technology provides opportunities for linking sites and resources. Appropriate web pages could be developed as part of Creswell Heritage Trust's website, linked to the 'Virtually the ice Age' museum, with pointers to other sites (English Nature – Natural Areas; the main heritage attractions etc).

8.5.5 Creswell Archaeological Way and Pilot Action Areas

CRESWELL ARCHAEOLOGICAL WAY

The Creswell Archaeological Way is an important strategic interpretative route as it tracks the magnesian limestone outcrop from south to north. However, consideration should be given to renaming the route as its current name leads to unfulfilled expectations since there is little archaeological evidence to be seen. A name such as 'Limestone Heritage Way' or the 'Limestone Heritage Trail' would be more appropriate. Appropriate discussion would be needed as the route is marked on the OS maps.

The interpretative media comprise panels (at Pleasley Vale and at Poulter Country Park) and a booklet. These need comprehensive renewal and updating. Additional panels could be considered at Mansfield Woodhouse Station and at Creswell Crags (identifying the link to the Archaeological Way). Additional panels should be considered at Anston Stones and at Roche Abbey if the route is extended northwards.

Appendix 8.5 lists suggested amendments to the leaflet. Consideration should be given to republishing the leaflet as a small booklet giving more information about the landscape and its history.

Recommendations

Rename the Archaeological Way

Update and renew interpretation panels at Pleasley Vale and Poulter Country Park

Install new interpretation panels at Mansfield Woodhouse Station, Creswell Crags, Anston Stones and Roche Abbey

Revise and re-publish the Archaeological Way leaflet as a small booklet with updated and fuller information, including a link (spur) to Creswell Crags

PILOT ACTION AREAS (PAA)

The booklet "Walking in the Limestone Heritage Area" is a key medium for the provision of introductory interpretation covering all the sites and should be updates and reprinted. The physical condition of the sites is analysed in maps 19-21, appendix 8.13. Suggestions for the key sites and improvements to the booklet are shown below and cost estimates for the improvements are included in appendix 8.10.

For each of the key sites an interpretative booklet covering the geology, archaeology and ecology features of interest (an 'ology' booklet) would be useful to complement the walk leaflets already in existence. Such a leaflet would highlight where interesting features can be seen and provide more detail for the person who would like to find out more. The existing walk leaflets do not have room to do this. These leaflets could be prepared in partnership with local communities.

Interpretation for children is an important element in attracting visitors to the area. A discovery booklet could follow the adventures of factual/semi – fictional archaeologist. The booklet will explore the process of discovery looking for clues to land use (coppicing etc) and occupation (cave sites, houses). Information could be provided and activities developed to draw out the stories for each site. A complementary booklet could explore wildlife habitats. These proposals could be developed in partnership with education providers, contributing to development of a resource for use by local schools.

Local enthusiasts could be trained to lead themed guided walks exploring the key landscape and historical features associated with each vale. There could be a small charge for these walks with the proceeds given to the walk leader. A launch event could comprise a programme of walks at each key site, associated with (for instance) publication of a revised "Walking in the Limestone Heritage Area" booklet. The suggested programme of guided walks, preparation of an 'ology' booklet, preparation of activity sheets for children, could all form a programme of linked activity facilitated by a 'Pride of Place' project officer. This programme could result in, for instance, local walking festivals and contribute to educational development, community capacity building and local ownership.

The predictive modelling has identified a major increase in the number of potential Ice Age archaeological and palaeontological sites and has recommended a programme of field testing. Such a programme would provide a major opportunity to engage with local communities through active participation in the process as well as through site visits, school activities etc. This opportunity to improve intellectual access through direct engagement in knowledge acquisition should not be missed.

Recommendations

Revise and reprint 'Walking in the Limestone Heritage Area' booklet

Produce an interpretative leaflet covering the geology, archaeology and ecology of each key site

Produce discovery booklets for children that explore the archaeological/historical and wildlife interest of each site

Train local people to lead regular walks at each site

Engage local people in the process of field testing the predictive model

Roche Abbey

The Roche Abbey area provides the best 'field' opportunity to explore the Abbeys and great estates theme of the interpretation plan and to appreciate the open uncultivated commons as well as the geology and Ice Age archaeology of the gorge. Close proximity of Maltby provides opportunities for engaging with local communities.

A more detailed information leaflet is needed to explore these themes as well as an interpretation panel.

Recommendations

Amend the route and notes in the 'Heritage Area' walks booklet as suggested under Physical and Visual Access

Provide an additional booklet exploring the landscape in greater depth, paying particular attention to the Abbeys and great estates theme of the interpretation plan, using Maltby Commons to illustrate the grassland history

Subject to agreement with English Heritage, install an interpretation panel at the Roche Abbey car park

Develop a programme of community outreach targeted at Maltby to engage local people with the landscape history of the area, to include guided walks and events as appropriate

Anston Stones

Anston Stones provides opportunities to explore limestone woodlands, magnesian limestone grassland and geology, and the Ice Age story. The Parish Council provides a mechanism for active involvement of the local community in managing and interpreting the site and there is an ongoing management partnership with English Nature, Rotherham Borough Council and Groundwork Creswell. However, the partnership focuses on the ecological interest. There is scope to expand understanding and interpretation of the geological, historical and archaeological dimension.

The predictive modelling has identified Anston Stones as an area with high potential for Ice Age archaeology and palaeontology, and as an appropriate location for field testing. This could provide an excellent opportunity for to involve and to engage with the local community through active participation as well as talks, site visits, school activities etc.

The three existing interpretation panels need revising, replacing and repositioning and there is scope for an additional interpretation panel inside the recreation ground, at the entrance to the woods. A hierarchy of interpretation is recommended, with additional, smaller 'gateway' signs at each entrance. As with the other Pilot Action

Areas, a more detailed interpretative leaflet is needed to explore the landscape history of the area, identifying key features of interest.

The existing programme of community activity provides an excellent platform to develop understanding and engagement with the historical dimension of the landscape.

Recommendations

Replace and reposition existing interpretation panels and add a further panel in the recreation ground

Provide 'gateway signs' at each entrance

Maintain and amend the route in the 'Heritage Area' walks booklet as suggested under Physical and Visual Access
Provide an additional booklet exploring the landscape in greater depth, paying particular attention to the geology, Ice Age archaeology, woodlands and grasslands theme of the interpretation plan

Develop a programme of community outreach designed to engage with and add value to existing activity by adding a historical dimension

Creswell Hub

(Creswell Village, Elmton and Whaley Valleys, Markland and Hollinhill Grips, Creswell Crags)

The Creswell Hub provides the best opportunity to present the story of the Heritage Area as a whole to visitors as well as to the local community of Creswell. For this it is important that active links are maintained with Creswell Crags, to encourage visitors to Creswell Crags to explore the local area, starting with the Creswell Education and Information Point.

The landscape around Creswell (Creswell Crags, Markland Grips, Elmton and its field system, Welbeck Abbey, Elmton Green, Crags Meadow, Creswell Model Village) provides opportunities to explore all aspects of the story set out in the Interpretation Plan.

It is recommended that this be presented through a new booklet that focuses on the area and includes the four walks identified under Physical and Visual Access (the Creswell Crags route, the Creswell Village trail, the Markland/Creswell Crags/Robin Hood Way route and the Creswell/Elmton route) as well as an additional route to Welbeck Abbey the existing Welbeck walk leaflet). A suitable title might be 'Exploring Creswell's Historic Landscape'.

In the "Walking in the Creswell Limestone Heritage Area" booklet, it is suggested that no route revisions are needed to the 'Creswell Crags' and 'Elmton and Whaley Valleys' routes, but that reference should be made to the Creswell Education and Interpretation Point and to the complementary Creswell Hub leaflet.

Information boards and way marking will be required in Creswell village to encourage use. Interpretation design and implementation should be co-ordinated with that already undertaken in the area at Creswell Crags.

Recommendations

Provide effective signage for the Creswell Interpretation Point as identified under Physical and Intellectual Access

Revise the Heritage Area walks booklet to include reference to the Interpretation Point

Produce a new booklet that explores the landscape history of the area in greater depth and includes (or refers to as a separate booklet) the five suggested routes

LANGWITH VALE

The valley contains a number of interesting historical features that illustrate the pre-industrial landscape away from the gorges. The area's links to the Ice Age past are represented by caves and rock shelters at Upper Langwith and Whaley respectively. A remnant of Royal hunting forest is preserved along with its defensive ditch and rides at Scarcliffe Park. Excellent examples of local vernacular architecture can be found at Langwith old hall and in surrounding villages. Evidence of milling, which was hugely popular in this area, can be found adjacent to Whaley village. Scarcliffe Park and Poulter Country Park provide excellent habitat for many of the area's indicator species.

The proposed redevelopment of the Whaley Thorns Heritage Centre close to Langwith Vale will provide an optional focal point from which to explore this area. Development of interpretative literature should be considered as part of an Interpretation Plan for this redevelopment.

PLEASLEY VALE

As with the Creswell Hub, the landscape around Pleasley Vale provides an opportunity to explore all aspects of the story set out in the Interpretation Plan (Pleasley gorge and caves, Little Matlock, Pleasley Park, Pleasley Mills, Pleasley Pit).

As identified under Physical and Visual Access, in view of the wealth of interest, the diversity of stakeholders and the various uncoordinated initiatives currently active, it is essential that an integrated Interpretation and Development plan be created. This should include proposals for long term management and presentation of the cultural, ecological and landscape interest. The most critical need is for an interpretation plan that sets out the story of Pleasley Vale and a strategic approach to its presentation.

As with the other Pilot Action Areas, a more detailed interpretative booklet is needed to explore the landscape history of the area, identifying key features of interest. This could be an outcome of the Interpretation Plan or could be a stepping stone towards it.

Key omissions at present are any interpretation of Pleasley Gorge in terms of its geology, Ice Age archaeology and industrial history. The proposal by the District of

Bolsover Leisure Services Department to develop a satellite outdoor activities centre in one of the old mill buildings with dedicated educational/interpretative space presents an opportunity that should not be missed. It is understood that these proposals could include provision for an officer, part of whose role could be to develop and lead a programme of guided walks. This reinforces the opportunity, and the need to ensure the officer is trained and equipped to interpret the story of the vale.

As with the other Pilot Action Areas, an excellent opportunity exists to engage the local community in the interpretative opportunity.

Pleasley Vale is also the start of the Creswell Archaeological Way for which interpretative recommendations have been made above.

Recommendations

Produce an interpretative plan for the whole site

Produce a new booklet that explores the landscape history of the area in greater depth and that identifies the key trails through which to explore it

Develop a programme of community outreach designed to engage with and add value to existing community activity

Update and replace the existing interpretation board at Outgang Lane car park and provide a new interpretation board at Mansfield Woodhouse station

Revise the walk shown in "Walking in the Creswell Limestone Heritage area" booklet

Produce a new booklet that explores the landscape history of the area in greater

ADDITIONAL INTERPREATION OPPORTUNITIES

Several specific locations offer opportunities for interpretation panels in prominent public places that would help raise the profile of the Limestone Heritage Area amongst visitors and locals. In all cases, appropriate awareness raising, consultation and partnership with local community groups and/or stakeholders is essential before any action is undertaken on the ground. Installation of numerous interpretation panels raises issues of maintenance that need to be discussed and resolved with relevant stakeholders. On the other hand, a network of interpretation panels could provide an effective way of raising the profile of the Limestone Heritage Area.

At Thorpe Common, the area managed under the Countryside Stewardship scheme at Moor Mill Farm there is the potential for installing an interpretation point showing the types of wildflowers that this rare limestone habitat supports.

Thorpe Salvin village centre has potential for an orientation/information point in the existing seating area opposite the pub, interpreting the Limestone Heritage Area and showing nearby places of interest to visit.

At Firbeck there is an opportunity opposite the public house just inside the community centre grounds or adjacent to the bridleway leading to the river.

At Scarcliffe Village and in Langwith Vale there are opportunities for siting village interpretation boards making mention of the magnesian limestone significance locally.

At North Anston there is an opportunity at the recreation ground where the Parish Council Offices are also based.

Interpretation panels were also recommended under Visual Access at several locations which afford panoramic views of the Heritage Area landscape.

***Recommendations*:**

Install interpretation panels at the recommended locations subject to local and stakeholder consultation

8.6 Community Involvement

The importance of engaging with local communities has been emphasised. The most effective way of doing this would be through a project modelled on the current 'Pride of Place' programme currently managed by Creswell Heritage Trust (see appendix 8.11).

Outreach activity should include:

Open days and surveys within communities adjacent to the Pilot Action Areas including Maltby, North Anston, Creswell, Whitwell, Langwith - Whaley Thorns and Shirebrook to ascertain current awareness and usage of Heritage Area sites and any issues arising.

Contact with community groups including Bolsover Ramblers, Anston Stones, Anston Conservation Society, Pleasley Pit Nature Study Group, Warsop Footpaths and Countryside group, youth clubs, resident associations, scouts, guides and others;

Meetings with schools and educational visits.

Opportunities should also be sought to benefit local communities by promoting use of local facilities by visitors. This could be achieved through a separate guide (to allow for flexible updating) identifying suitable refreshment stops and accommodation.

8.7 Management and Promotion

The various recommendations for providing and improving Physical, Visual and Intellectual Access need on-going co-ordination and review if they are to be effective. The charitable remit of Creswell Heritage Trust focuses on cultural heritage, specifically that of the Limestone Heritage Area. Groundwork Creswell has a complementary remit focused on the physical environment. The area specific remit of Creswell Heritage Trust makes the Trust ideally suited to deliver the overall co-ordinating role, supported by Groundwork Creswell as appropriate. These roles need

not be onerous, but require recognition and some financial support from key stakeholders including the local authorities and national agencies.

The Management role involves facilitating partnership action by the various stakeholders, especially the local authorities, to implement the recommendations of the Management Action Plan. Activities would include organising and administering meetings, seeking funding, managing projects, monitoring the situation on the ground and monitoring currency of interpretative leaflets, booklets etc.

The Promotional role overlaps with the Management role with respect to the interpretative material. At the most basic level, promotional activity would focus on ensuring that interpretative literature is current, in print, and available (for sale as appropriate) in key locations including the main heritage attractions, local libraries etc. This could be expanded slightly by (for instance) provision of a promotional flyer that could be distributed to local accommodation providers, pubs, leisure centres etc. This role could also include seeking funding for research into usage of the trails network.

Key co-ordinating and monitoring tasks include:

- Monitoring of physical works (stiles, gates, interpretation panels)
- Monitoring, amending and maintaining in print the key booklets
- Co-ordination of promotion (links to key attractions, distribution of booklets etc to key outlets within the Heritage Area including the main attractions, accommodation providers, pubs and hotels, libraries and leisure centres)
- Seeking funding and co-ordinating implementation
- Leaflets in pubs and local accommodation providers etc (perhaps a flier)
- Visitor surveys during summer months to ascertain visitor profiles and improvements people would like at each of the main sites.

Recommendations

Support the role of Creswell Heritage Trust and Groundwork Creswell in co-ordinating implementation and monitoring of the Management Action Plan