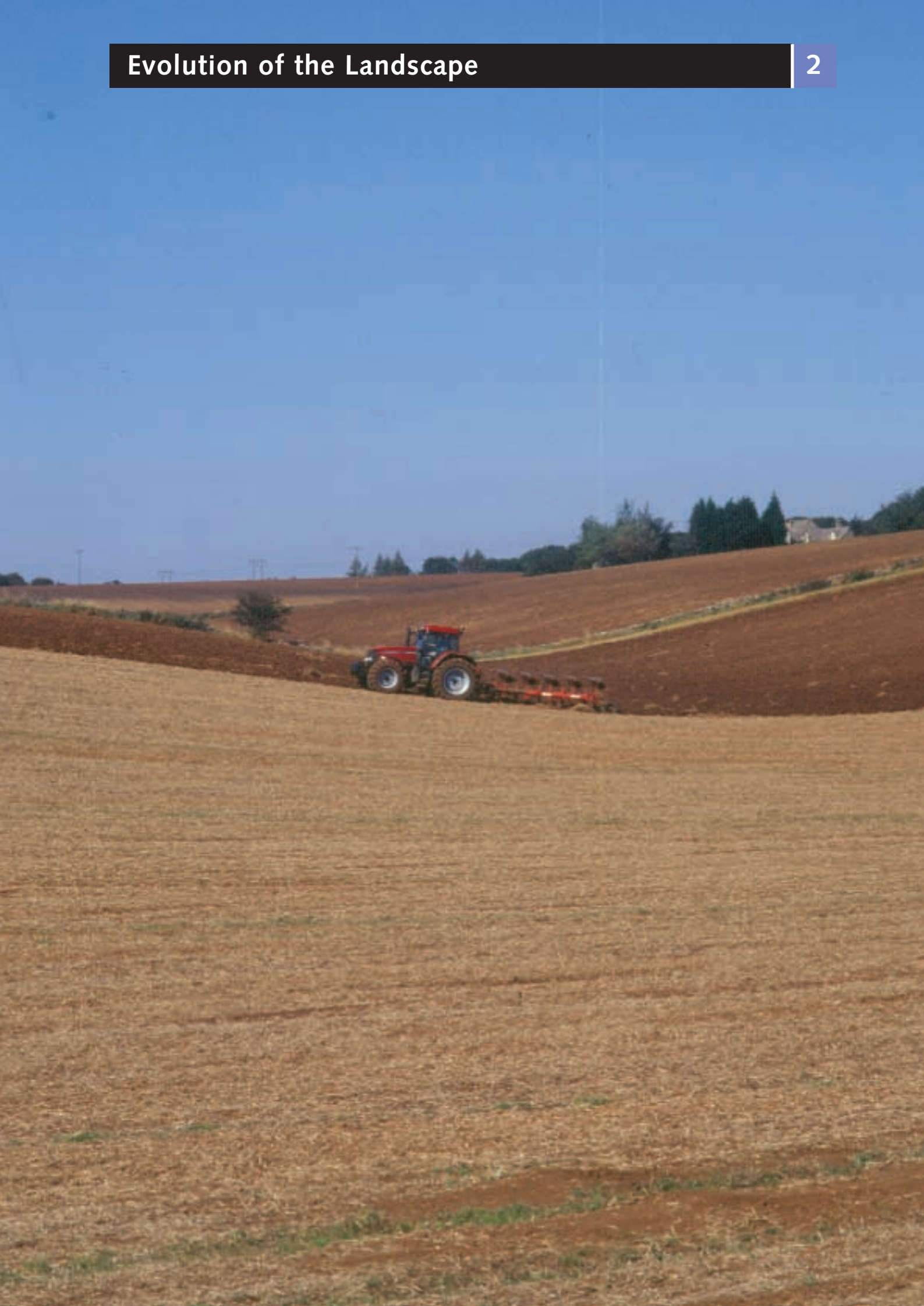
Evolution of the Landscape 2



2.1 Introduction

The intricate interplay of numerous physical and human influences has shaped the landscape as it is experienced today. An understanding of these influences is central to the assessment process and provides a sound basis on which to define and describe landscape character.

PHYSICAL INFLUENCES

2.2 Geology[4,5]

2.2.1 Introduction

The geological structure of the Cotswolds, and the juxtaposition and succession of rocks, is fundamental to the form and structure of the landscape. While the underlying solid geology is responsible for the principal pattern and elevation of the landform, it is the differential responses of the various rock strata to the effects of erosion and weathering processes that have altered the form of the landscape, influencing drainage and soils, and in turn the subsequent patterns of land cover and land use. The deposition of material during the most recent Quaternary era has also been important in moulding and modifying landform patterns.

A simplified geological map illustrating the general pattern of solid rocks and drift deposits within the AONB is shown on *Figure 6*.

The geological structure of the Cotswolds is relatively simple and consists of bands of clay, sand and limestone superimposed on one another and gently tilted in Tertiary times. Jurassic Limestones have had the most significant influence on the form of the landscape and indeed the area represents one of the best-known sections of the outcrop of Oolitic Limestone that extends across England from Lyme Bay in Dorset to the North Sea coast.

Whilst at a superficial level, the Cotswolds might be seen as a contiguous unit of broadly similar character, local variations have had a significant impact on the landscape and local landscape character. These are discussed in greater detail in Section 3 for each of the 19 landscape character type descriptions. An introduction to the geological framework within the AONB follows.

2.2.2 Jurassic Geology

Rocks deposited during the Jurassic period underlie the majority of the Cotswolds AONB. These were laid down between 135 and 180 million years ago at a time when the area that is now the centre of England was submerged beneath a vast but relatively shallow ocean. The ocean was surrounded by islands, areas of land that now comprise uplands in Cornwall, Devon and the Mendips. To the south-east stretched a landmass linking the London area and East Anglia to a large continent (Hyrcinia). The sedimentary rocks of the Cotswolds were formed in the subtropical shallows that existed on the fringes of this ocean, with mud, pebbles, broken shells and fossilised tissue laid down to form an elaborate series of clays and limestone.

Three distinct divisions within the Jurassic are represented within the Cotswolds, each resulting in contrasting landforms and landscape features. The oldest rocks comprise the Lower Jurassic Lias Group (clays, siltstones, shales and limestones), followed by the Middle Jurassic Inferior Oolite (limestones, clays and sandstones), and finally the Great Oolite (comprising mainly limestones and occasional musdstones), culminating in the Cornbrash Formation.

Lower Jurassic: Lias Group

In 1999 a re-classification of the Lower Jurassic was published in a British Geological Survey Research Report[6], and the previously familiar terms of Lower, Middle and Upper Lias have now been replaced by the Lias Group, and described in terms of lithostratigraphical formations.

4. William Dreghorn (1967) Geology Explained in the Severn Vale and Cotswolds

5. Ed. Charles and Alice Mary Hadfield (1973) The Cotswolds: A New Study

6. Cox, Sumbler and Ivimey-Cook (1999) A formational Framework for the Lower Jurassic of England and Wales (onshore area), British Geological Survey Research Report No RR/99/01

In ascending order these comprise the Blue Lias, Charmouth Mudstone, Dyrham Formation, Marlstone Rock, Whitby Mudstone and Bridport Sand formations. This new classification and rock formations within the Lias Group form the basis of the descriptions used throughout this report. Notwithstanding this change in terminology, the characteristics and surface expression of the succession of rocks represented within the Lias Group remain unchanged.

The Lias Group rocks outcrop at the base the main Cotswolds escarpment at the junction with the Triassic mudstones and form extensive exposures along the northern stretch of the escarpment, north of Stroud. These are often rich in fossilized molluscs and the bones of primitive marine creatures.

The Charmouth Mudstone, corresponding to the previous nomenclature of Lower Lias Clay, makes excellent bricks and was often used to line mill pools in the clothing districts. For these reasons the clay was mined at a number of sites in the Stour basin and at the foot of the scarp. However, soils derived from the clay are heavy, cold and frequently waterlogged. As a consequence, agriculture at the base of the scarp and in the vale is often limited to pasture.

Above these clays are lighter sandy or micacious clays, loams and sandstones of the Dyrham Formation. These are often exposed on the floor and sides of many of the valleys draining the plateau, where they create lush meadowland. Above this rock unit sits the Marlstone Rock formation, which has had an important influence on the character of the Cotswolds AONB landscape to the east of the Evenlode. It is often referred to as Ironstone as it is rich in Limonite and has historically been mined for iron ore. At outcrop it produces a brash of rust-brown ferruginous, commonly sandy ironstone.

Iron in the Marlstone Rock gives buildings in the area a distinctive warm brown colour, varied by dark olive and purple stones and an occasional frosting caused by white lichens. The distinctive local vernacular and colour of the building stone ensures that the 'Ironstone villages', located on or in the vicinity of the Marlstone Rock formation, contrast strongly with the more familiar villages built from Oolitic limestone to the south and west within the main area of the AONB.

The Marlstone Rock is harder than the Lias Group formations above and below it, and as a result can often be observed as a wooded terrace on the escarpment such as the stretches between Wotton-under-Edge and Dursley, and from Cheltenham to Chipping Campden. In the valleys the Marlstone Rock terrace can often be observed carrying the valley road. At Painswick, the town is sited immediately above a large Marlstone Rock ledge that forms a distinctive spur between two deep valleys. The Marlstone Rock formation is also responsible for forming the distinctive escarpment in the north east of the Cotswolds AONB, notably at Edge Hill.

Another feature of the Marlstone Rock is the spring-line that may be observed beneath it. The Marlstone Rock acts as a reservoir, holding water that seeps into it from the layers of rock above. Beneath the Marlstone Rock are the impermeable layers of the Whitby Mudstone clays and therefore springs are forced out at this level. The spring line is marked by numerous towns and villages such as Dodington, Horton, Wotton-under-Edge, Stinchcombe and Dursley, all of which sit on the Marlstone Rock terrace. The spring-line also determines the site of many villages within valleys on the Dip-Slope such Ebrington, Maugersbury, Upper Slaughter, and Naunton as to name but a few.

Soils derived from the Marlstone Rock are light and loamy and make excellent corn-land. As a result, farmland north-east and east of the Evenlode tends to be predominantly used for arable production.

Middle Jurassic: Inferior Oolite

The Inferior Oolite series forms the upper portion of the Cotswold escarpment plateau areas of the high wold in the north Cotswolds above the 250m contour. Here it forms the highest hills such as Ham Hill, Cleeve Cloud, Charlton King's Common, the area around Belas Knap and Broadway Hill. Promontories such as Nottingham Hill and Haresfield Beacon are also capped by Inferior Oolite. Uplifting and erosion to the east has meant that these strata have almost entirely worn away.

The creamy buff coloured Inferior Oolite has historically been quarried for building stone and can be observed in numerous villages on the high wold where it has weathered to form gold and grey buildings that are mottled with white and yellow lichens. Freestones and Peagrits provide particularly good building stone especially the Yellow Guiting Stone, which weathers to a rich golden colour. This continues to be quarried at Coscombe Quarry above Stanway, Bourton Hill and Westington.

The Lower Limestone and the Lower and Upper Freestones of the Lower Inferior Oolite have historically been extensively quarried from the escarpment. Indeed, the landscape here is pockmarked and scarred by numerous former quarry sites. Although these rocks do not split in any preferred direction, they can be readily cut into cubes and carved if desired and consequently were

formerly much in demand for building stone. Indeed most of the scarp quarries exploited the Freestones, including the large quarry at Leckhampton Hill, which supplied much of the stone used to build Cheltenham including the Royal Crescent and the Montpellier Rotunda. Perhaps the most well known feature formed from Inferior Oolite is the Devil's Chimney, located at Leckhampton Quarry. This rock pinnacle formed of Lower Freestone, was probably left by 17th and 18th century quarrymen as some form of monument. However, the structure may be lost in the future due to erosion along vertical joints.

Numerous quarries and stone mines were also worked in the vicinity of Bath. It is from these sites that the Freestone that was used to build Regency Bath was obtained. Writing in the mid 18th century E. Owen commented that *"There is no stone that differs so much in its bed, after it has been wrought and exposed to the air as the Bath freestone. While it is in the ground, it is soft, moist, yellowish, and almost crumbly and it seems very little more than congealed sand and that not well concreted together. But when it has been some time exposed to the air and is thoroughly dried, it becomes, white, hard, firm and an excellent stone."*

Once abandoned, many of the of the deep shafts and mines in the vicinity of Bath were used by the military during and after the Second World War. Box Freestone quarry which runs for approximately thirty miles, is one example. At Monkton Farleigh an old abandoned underground quarry became the site of the biggest Second World War ammunition depot in Europe.

Soils derived from Inferior Oolite are delicate, thin and light calcareous loams. They are often full of stones and indeed were often referred to as 'stone brash' by 18th century agricultural specialists.

Between the Inferior and Great Oolite is a thin layer of clay called Fuller's Earth, its name referring to its use as an agent for cleansing wool and felting cloth, with the activity undertaken at fulling mills. Soils derived from Fuller's Earth are sticky and wet and are often marked by patches of woodland.

Middle Jurassic: Great Oolite and Cornbrash

The Great Oolite Series forms much of the dip-slope and shows a relatively consistent thickness throughout the Cotswolds of approximately 60 m in depth although the individual formations within it thicken, thin and die out laterally. At one time Great Oolite rocks would have covered the whole of the Cotswolds, however, tilting led to denundation of the western flank. The Great Oolite Series still occupies extensive areas of the High Wold Dip-Slope and the Dip-Slope Lowlands below the 250 m contour.

Fewer quarries were worked on the dip-slope. Where they did exist, they were usually shallow workings which are conspicuous today as slight depressions, known locally as delves, and are often completely overgrown, or cloaked in copses. These workings generally provided fissile limestone, which when fresh is usually cream coloured but which, over time weathers to varying tints of buff to brown. In Painswick, for example, buildings have a silvery quality, whereas in Minchinhampton, a cold grey character in the stone is prevalent. These, however, contrast to the buildings of Bath where the Great Oolite building stone has matured to a warm, honey coloured appearance. Indeed, Ralph Allen, the creator of 18th century Bath, was so keen to use this particular rock type that he opened quarries on Monkton Down and constructed a tramway to bring cut rock to the town.

Building stone derived from the Great Oolite has also helped to build a great many important buildings. From 1260 Great Oolite was quarried from the vicinity of Burford by Oxford University in order to build many of its colleges, and quarries at Taynton supplied the stone that built the tower of Merton Chapel (c.1310), Blenheim Palace (1705-1722), Magdalen Bridge (1832-1833) and the Bodlian Library extension (1939). Forest Marble is also an important stone derived from the Great Oolite. This is generally found between Badminton and the Evenlode Valley and in the vicinity of Wychwood Forest, from where it derives its name. This is a very hard freestone and is suitable for sculpture. Indeed, Forest Marble has been used extensively in Oxford for Cornices and Plinths.

Stone slates are also quarried at locations on the Dip-Slope, largely from the thin fissile limestones at the base of the Great Oolite. Perhaps the most famous are the Stonesfield Slates and the Cotswolds Slates which are obtained from the fringes of the Great Oolite. Historically the stone was dug in the Autumn and spread out on the ground for winter frosts to invade the thin films of water within the stone to weaken it so that in spring a blow from a mallet would be enough to split the stone into slates. In the village of Stonesfield quarries were small enterprises and the spreading of the stone in the fields was carried out by almost the entire village. Towards the end of the 19th century the practice of mining the slates was in decline. However, sustained demand caused slates to be stripped off the roofs of barns, cottages and farmhouses. The Great Oolite in the vicinity of Stonesfield yields many

fossils, including those of primitive mammals, dinosaur and fossil plants. These were often sold to passing scientists by quarrymen.

Perhaps one of the most conspicuous features of the dip-slope, which indicate the nature of the underlying geology, is the stone walls, which enclose many of the Cotswold fields. Some of the stones would have been picked up by farmers from their fields but generally they were obtained from narrow quarries at the edge of the fields, the shallow workings of which can often be seen.

In the south-eastern section of the AONB, to the west of Malmesbury and in the vicinity of the village of Biddestone, a thin bed of coarse, crumbly shelly limestone underlies the area on the perimeter of the Upper Jurassic Oxford Clay Vale. This comprises the Cornbrash Formation the youngest rock unit in the Great Oolite. It is associated with a lower lying undulating landscape at the transition with the more extensive and flatter Thames basin. The limestone is overlain by brown marl, which is so fine for arable farming that it has been known as Cornbrash since the 18th century.

2.2.3 Quaternary Geology

After the last of the Great Oolite formations were laid down, the receding sea and the slowly rising crust of the earth began to expose them as a giant whale back shoal which at some point was also tilted in a south-east direction so that the north-western flank sloped down steeply, and a much gentler dip-slope was left on the south-eastern flank. On either side of this landmass, the building of England continued with further cycles of inundation, deposition and erosion. However, eventually the Cotswolds were uplifted clear of all future inundations resulting in numerous faults.

With the Jurassic landmass now fully exposed to rain and wind, the processes of erosion could act upon it. Surface water was absorbed by the porous rocks, issuing at spring lines to form streams and rivers, with spring sapping contributing to the progressive headward erosion of the valleys. Those flowing south-east down the dip-slope formed long spacious valleys. Rivers flowing north and west, however, followed steeper courses down the escarpment and carved deep channels cutting back into the plateau, forming deep combes. These processes were greatly reinforced by the onset of the Ice Age about one million years ago.

Successive advances and recessions of the ice spanned 0.5 million years with long intervals of milder climate. Glaciers never extended across the Cotswolds but severe climate would have led to tundra conditions and only a limited vegetation cover (sedges, lichens and perhaps a few dwarf birch). Glacial meltwaters led to violent torrents of water, which carved out deep valleys.

It is onto this basic framework of hills and valleys that deposits of the Holocene and Pleistocene periods were laid down by rivers and streams. The deposits vary in depth up to 30 metres and have created locally different landscapes to those associated with the underlying Jurassic bedrock. Glacial deposits, river terrace materials, and alluvium occur on areas of lower ground creating soft, gently undulating landscapes, whilst on the slopes there are extensive deposits of head material of periglacial origin arising from the accumulation of solifluction debris. Landslips also mask the lower slopes of many sections of the escarpment and some outliers, such as on the slopes of Doverow Hill near Stonehouse, and on Bredon Hill, and along the section of the escarpment between Saintbury Hill south-westwards to Dowdeswell Wood. These generally occur where mudstone, and to a lesser extent sandstone formations crop out on a slope, with rotational slipping of the limestone capped rocks forming multiple terrace-like features.

2.2.4 Observing Geological Features in the Landscape

Although not always apparent on the surface, the nature of the underlying geology can often be observed in the distribution and variety of materials used in the construction of vernacular buildings and by identifying diagnostic landscape features such as landslips on areas of the escarpment where softer and more easily weathered Lower Jurassic Lias Group rocks are prevalent. Even where no obvious clues are apparent, the absence of features might also provide an indication as to the nature of the underlying geology. For example, in the vale landscapes where thick deposits of drift material cloak the underlying solid geology, hedges and half-timbered houses predominate over stone houses and boundary walls.

2.2.5 Historical Links: William Smith

A review of the geology of the Cotswolds would be incomplete without the mention of William Smith, often referred to as the 'Father of English Geology'. This extraordinary man was born in modest circumstances in Churchill on the eastern perimeter of the Cotswolds. His early years led him to observe the effects of the Jurassic Limestone within his local environment. Later, as a surveyor and canal engineer, he was able to examine

and painstakingly record the stratigraphical sequence of rocks based on careful observation of the fossil record. A resident of Bath for some years, his detailed observations enabled him to prepare the first geological map of the area. He subsequently went on to draw the first Geological Map of England and Wales. The representation of the Jurassic Limestone 'stone belt' on this remarkable historic map is particularly striking. There must be many parts of the Cotswolds that Smith would have visited and made his observations, the findings of which would subsequently have contributed to a radical change in the understanding of geology, and the science of stratigraphy.

2.3 Landform

The landform within the AONB closely reflects the underlying geological structure (*Figures 5* and *6*). Three principal landform features may be identified within the AONB: the escarpment; the escarpment valleys and outliers; and the high wold and dip-slope.

2.3.1 The Escarpment

The escarpment is a dramatic landscape feature defining the outcrop of the Jurassic Limestone. It rises sharply to form a distinctive boundary with the undulating vale landscapes bordering the Severn Vale, and the Vale of Evesham to the north. South of Hawkesbury the escarpment is less than 100 m high, but at Cleeve Hill it reaches 330m AOD, the highest point in the AONB. The Inferior Oolite is the main scarp-forming rock in the north, whilst in the south this becomes thinner with Great Oolite forming the highest relief. At the base of the scarp slope Lias Group shales, sandstones and siltstones of the Lower Jurassic are exposed. These are soft and easily weathered and as a result have slumped or been eroded to form hummocky ground, stream valleys, and bays at the foot of the escarpment, blurring the transition into the undulating landscapes of the Severn Vale which are underlain by Triassic rocks. The presence of the Lias Group Marlstone Rock, however, has resulted in the formation of secondary escarpments and further localised landslips.

2.3.2 Escarpment Valleys and Outliers

The escarpment has been progressively eroded south-eastwards as a result of fluvial and periglacial processes over many thousands of years. The retreat has followed lines of weakness, which has resulted in the creation of deep, wide valleys in the vicinity of Stroud and Bath, and to a lesser extent at Winchcombe. The erosion of the escarpment and its eastern retreat has also resulted in the creation of distinct 'outliers' such as Bredon Hill and Oxenton Hill. These were once part of the escarpment that lay further to the west, but are now left isolated.

2.3.3 The High Wold and Dip-Slope

In general terms, the limestone forms a discrete unit of elevated land defined by the distinctive escarpment to the west, from which the landscape 'dips' gently to the south-east. Whilst large table-like plateau areas are evident, and indeed characteristic of much of the landscape on the high wold, the gently sloping dip-slope is prevalent, and evident as one travels from west to east. In the extreme south-east of the Cotswolds AONB in the vicinity of Bath there is a transition to a lower area of Dip-Slope lowland forming the margin to the low-lying Thames Basin. This progression from high wold to dip-slope and dip-slope lowland is therefore a continuum, rather than a distinct division with clearly evident boundaries.

Superimposed on this simplified structure the surface expression is often more complex, particularly in the west, as a result of the effect of a series of east-west fault lines and some significant folding. The effect of structural faults and folding is also evident in the north-eastern part of the AONB, resulting in a complex topography of hills and valleys, isolated hills, and distinctive escarpment features associated with the Lias Group and Marlstone Rock outcrop in particular.

2.4 Drainage

Drainage patterns are also closely linked to variations in geology. A notable feature of the escarpment slope is the high number of springs. These arise as a result of the differential permeability of the Oolites and underlying Lias, with springs occurring at the junction of these two rock series, and notably at the outcrop of the Marlstone Rock.

Rivers that form on the scarp slope flow westwards into the Severn Vale and are generally short in length, such as the Cam and the Little Avon which flows through Wotton-under-Edge. Notable exceptions are the Frome and the Bristol Avon, both of which have cut through the escarpment in a series of steep sided valleys within which the towns of Stroud and Bath are situated. The size and course alignment of these rivers is indicative of a possible earlier capture of the headwaters of a number of watercourses that at one time flowed eastwards.

A number of rivers flow south-eastwards across the strike of the dip-slope. These comprise the Churn, Coln, Leach, Windrush and Evenlode, all of which are tributaries of the Thames. Where the underlying limestone bedrock is particularly permeable, sections of the rivers and their tributary streams exist as dry valleys for many months of the year. In prolonged periods of wet weather, however, the increased surface run off and raised water table results in the lengthening of these intermittent watercourses and the re-establishment of surface flow. The dry valleys are known locally as Slads or Slades, and ephemeral watercourses are also referred to as winterbournes.

A number of features associated with river systems within the Cotswolds illustrate the effect of geomorphological processes. The landscape geometry of many of the rivers on the Cotswold dip-slope display 'underfit' characteristics demonstrated by the substantially greater wavelength of valley meanders compared to the stream meanders, and the large scale of the valley form in comparison to the size of the watercourse. The valley morphology suggests an adjustment to the much higher discharges that would have been prevalent during the late glacial period, arising from surges of glacial meltwaters, and post glacial (Holocene) arctic tundra conditions. Valley meanders in a number of sections are up to ten times greater than stream meander wavelengths, such as in the Leach Valley.

Headward erosion of rivers lying in close proximity on the escarpment and dip-slope also demonstrate the process of the formation of outliers. This is particularly evident at Langley Hill to the west of Winchcombe.

Historically, patterns of drainage have had a significant impact on the location of settlements, the obvious need for permanent water dictating where villages can feasibly be sited. Many villages in the AONB are therefore located at bridging points on rivers and streams, at spring heads, or in valleys around shallow wells.

2.5 Soils and Agricultural Capacity

The soils of the Cotswolds vary greatly in character depending on their origins. Most soils are derived from the underlying limestone bedrock and are alkaline in nature. Within the valleys, however, alluvium and scattered glacial deposits form a varied base material. Soil type and fertility are two of the principal determinants of agricultural capacity. Differences across the AONB are clearly evident and correspond closely to the nature of the underlying soils and landscape.

On the high wold and dip-slope the Jurassic limestones give rise to thin, brashy soils that are often reddish in colour and may be low in calcium carbonate due to leaching. The Agricultural Land Classification for the Cotswolds (*Figure 7*) indicates that only limited areas of the highest grade soils, classified as Grade 1 and 2, are present. These occur in the north of the AONB near Chipping Campden, together with a further isolated pocket of Grade 1 and 2 soils to the south-east of Tetbury, in the southern part of the AONB. Although not within this 'best and most versatile' category of soils, the majority of the AONB soils are nevertheless well drained, aerated soils and of a sufficient quality to warrant classification as Grade 3 status in the Agricultural Land Classification. Historically, these areas proved ideal for sheep farming. More recently their friable nature has been utilised increasingly for arable farming, with low fertility levels overcome through the application of artificial fertilisers.

By contrast, in the valley bottoms alluvium and clay deposits form deeper soils that are generally less well drained. Whilst arable farming is frequent, permanent pasture for summer grazing is the prevalent land use. These tend to be classified as Grade 4 agricultural land, the same grade as much of the escarpment where steep slopes and the shallow nature of the soils limit agriculture.

2.6 Biodiversity

The distribution of wildlife habitats and natural features throughout the AONB is determined by the nature of the underlying geology, landform, past land use patterns and the cultural history of individual areas. The following section details the origins of the nature conservation interest of the AONB and some of the main habitats that may be identified.

2.6.1 Evolution of Cotswolds Habitats – Natural Colonisation and the Impact of Humans

The Cotswolds, like the rest of Britain, acquired most of its present day species of flora and fauna by re-colonisation following wholesale exterminations during the Pleistocene ice ages, such as the last glaciation 25,000 -12,000 years ago. During this period glacial ice stretched over much of Wales to the west and the north of England. The Cotswolds was on the fringes of the ice fields and therefore permafrost covered much of the area.

At intervals in the Pleistocene, un-glaciated land connected southern England with continental Europe. These areas served as refuges for plants and animals,

which were later able to spread back into Britain as the ice and tundra conditions receded northwards. Over time the climax community formed. For the Cotswolds, this would appear to be a complex woodland mosaic with Lime and Ash as the predominant tree species although unwooded areas might also have existed in natural woodland clearings, and on unstable landscapes such as river banks and steep scarp slopes.

This 'wildwood' was formed by the time the Mesolithic hunter-gatherers - the first agents of landscape change - began to manipulate and domesticate the natural environment between 10,000 and 5,000 Before Present (BP). These communities are thought to have been nomadic and occupied seasonal hunting camps. Despite their high mobility, however, evidence suggests that areas of wild wood were burnt to create clearings for more efficient hunting. It was also in this period that land that connected Britain to the continent was submerged, leaving Britain as an island.

More rapid and pronounced change to the natural environment has occurred since settled agrarian lifestyles were adopted approximately 4000 BC. The 6000 years since the start of the Neolithic period has seen the removal of all traces of the native wild wood, the extinction of numerous native species and the introduction of non-native species of plants and animals, perhaps most significantly domesticated plants and animals. The impact of accidental introductions can also not be underestimated. For example, the 12th century saw the introduction of the black rat. This was the main reservoir for the bubonic plague, which in 1348 is thought to have killed as much as half the population. This dramatic fall in the population of the Cotswolds created a shortage of labour and resulted in a major shift from cereal growing to sheep rearing, thus providing the catalyst for the promotion of the wool trade and the subsequent rich inheritance of Cotswold churches and stone houses.

2.6.2 Semi Natural Habitats of the Cotswolds

The bulk of the Cotswolds is formed from Jurassic limestone. Similar to chalk, the Oolitic limestone contains a very high proportion of calcium carbonate, which has a significant effect on both the physical and chemical properties of soils, which tend to be light, well aerated, well drained and markedly alkaline. The result is the absence of plants that are intolerant of limy material in the soil (calcifuges). By contrast calciphile vegetation is more or less restricted to soils such as those that exist within the AONB, and as a consequence the Cotswolds represents one of the finest areas in Britain for calciphile vegetation.

The dependence of animals on limestone and chalk soils is usually more indirect, faunal species generally being attracted to specific areas by the presence or absence of specific plants and or other animals. For example the Chalk-hill blue and Small Blue butterflies depend on their larval food chiefly on the horseshoe vetch and are therefore found in the habitats of this plant.

The woodlands of the AONB fall into two main groups – the semi natural beech woods of the steep escarpment slopes, and the great variety of mixed deciduous woodlands on the Cotswold Dip-Slope. The beech woods occur almost exclusively on the Inferior Oolite and strongly resemble the beech-hangers of the chalk downs. Ground flora is typically sparse due to the dense woodland canopy cutting off a great deal of light, the deep leaf-litter and the massing of fine roots close to the surface. Animal life on these escarpment woods is also somewhat limited, chiefly on account of the sparseness of the ground vegetation. The dip-slope woods are mostly situated along the sides of the main valleys where the soil is deeper than elsewhere. Many of the woods have been radically altered by human interference and the variety of tree species greatly increased. In many instances this has resulted in a less dense canopy than beech woods and greater amount of light reaching the woodland floor, in turn leading to a rich and varied field layer and faunal assemblage.

Oolitic downland communities tend to be present in the Cotswolds wherever there is steep uncultivated ground free from woodland. They are therefore most commonly found on areas of the escarpment overlooking the Severn Vale and on the sides of the numerous dry valleys on the dip-slope where the land is too steep for cultivation and has remained for many centuries as rough grazing for sheep and cattle. The calcareous 'downland' soils, termed rendzinas, are shallow, well drained, alkaline and fertile. The typical landcover is grassland managed by grazing. In the absence of grazing, the finer grasses tend to disappear and coarser grasses begin to dominate the sward and eliminate typical downland herbs. Through the process of natural succession, scrub vegetation leading to a secondary woodland cover subsequently develops.

The influence of humans on the Cotswolds landscape and the creation of a semi-natural environment is perhaps most evident in the vast areas of agricultural land and settlements. Whilst these may be regarded as wholly artificial, marginal habitats are present.

For example, roadside verges in the open countryside often assume many of the characteristics of limestone downland. However, many verges are adjacent to farmland and may be sprayed to limit the growth

of agricultural weeds, thus reducing the variety of plant life and animals that can exist there. Hedges too offer extensive habitats and a haven for many species. Indeed these linear habitats are also important as they often form part of wide network linking woodlands and various other semi natural habitats with each other. Scattered hedgerow trees are also valuable, not least because they encourage the breeding of kestrels and little owls.

Quarries, too, offer important habitats. Many old open quarries when left to regenerate themselves acquire a number of calciphile plants, some of which prefer the stony ground and scree and loose stone, as well as the tops of ancient stone walls. A notable example is the Cotswold Penny-cress, a rare British plant restricted as a native to the northern Cotswolds. Some of the best Cotswold stone was mined from underground, especially in the area surrounding Bath, the mine at Monkton Combe being a notable example, in the vicinity of Nailsworth, and other 'edge' localities. Evidence of underground mines also occur within the heart of the Cotswolds, such as at Barnsley and Sherborne. These former mines, penetrating far underground, provide winter refuges for several species of bat including the greater and lesser horseshoe bats.

Important aquatic habitats are also present in the Cotswolds. The majority of rivers run in a south-easterly direction where they join the Thames. For most of their course they traverse Oolitic limestone. However, a number, notably the Evenlode and Windrush, have cut deep valleys into the underlying Lias. The water of all these rivers is alkaline which has a strong influence over flora and fauna. The banks of many dip-slope streams are fringed with alders; willows, especially crack willow, are also common. Marginal vegetation is often dominated by a dense growth of reed grass and yellow flag iris, with marsh marigold flowering in profusion. Lakes have been constructed in a number of dip-slope valleys. These pools often silt up at the upstream end where wet alder-willow (carr) woodland develops. An interesting example is Rendcombe Lake, which was made in the 1860s by damming the River Churn.

2.6.3 English Nature – Natural Areas

The influence of various factors has created a number of distinct semi natural habitats and features of nature conservation interest. At a very broad scale these have been identified by English Nature, which has divided England into a number of Natural Areas, each with a characteristic association of wildlife and natural features. These areas provide a way of interpreting the ecological variations in terms of natural features and illustrate the distinctions between one area and another. Each Natural Area possesses a unique identity resulting from the interaction of natural and human influences. Natural Areas provide a framework for the planning and implementation of nature conservation objectives and Biodiversity Action Plan (BAP) targets. Many Natural Areas share boundaries with the Countryside Agency's Countryside Character Areas and indeed the Cotswolds Natural Area is contiguous with the Cotswolds Countryside Character Area.

The following table identifies the main topics and associated features for the Cotswolds Natural Area.

2.6.4 Table 2.1: Natural Areas in the Cotswolds Natural Area[7]

TOPIC	KEY FEATURES
Earth Heritage	• Cotswolds scarp and clay vales • Limestone exposures in Cotswolds scarp and crest • Cotswold stone buildings and walls
Woodland	• Internationally important lowland beech and yew woodland on scarp slopes and in valleys • Well distributed, significant lowland oak and mixed deciduous woodland • Characteristic lowland wood pasture and parkland • Some large blocks of conifer plantation
Lowland Grass and Heath	• Nationally significant lowland calcareous grassland (on limestone) • Neutral grassland including species-rich meadows and pasture on lower slopes • Remnant wet grasslands along river valleys

7. English Nature (1999) Natural Areas in the South West Region

It is clear, therefore, that the Cotswolds AONB is a valuable wildlife resource. The landscape's complex and diverse geology combined with a long history of changing agricultural land use has resulted in a wide range of semi-natural and manmade habitats supporting a wealth of species: The main features include:

- Extensive woodland habitats of both native and non-native species, including a large number of ancient woodlands;
- Species rich grassland habitats of varied character supporting important plant, invertebrate and bird populations;
- Rivers, streams, artificial lakes and ponds and associated wetlands with important populations of birds, water vole, and otter; and
- Ancient hedgerow networks of vital importance for the movement of wildlife through the landscape.

The importance of the wildlife resource is reflected in the abundance of designated sites, which include sites of European (Special Area of Conservation [SAC]), and National (Site of Special Scientific Interest [SSSI] and National Nature Reserve [NNR]) importance.

HUMAN INFLUENCES

2.7 Introduction and Review

2.7.1 Many of the landscapes and landscape features found within the AONB are a direct result of the interaction between humans and their environment.

The spatial distribution of natural resources across the Cotswolds, notably water, building stone and timber, has had a profound influence on the development, distribution and visual characteristics of agriculture, settlement and infrastructure, all of which are key elements in defining landscape character. Certain events and activities have left more visible traces than others. For example, the effects of hundreds of years of Bronze Age settlement and agriculture are largely invisible in the landscape, whereas remnants of funerary and ritual monuments, each probably constructed over a very short period, present perhaps some of the most potent and visible historic landscape monuments in the AONB.

In many instances modern development and landscape management have eradicated all evidence of what has gone before. Nevertheless, despite the scarcity of finds and sites which provide an insight into the every day lives of our ancestors, a great deal can be understood about the evolution of the Cotswolds landscape by observing those elements of the past that survive as above ground features today.

The concept of 'time depth' indicates the successive trends of landscape change and acknowledges that the modern landscape is a palimpsest of the historic events and processes of the past. A typical example might include the remnants of small irregular fields around some ancient villages (perhaps prehistoric in origin) surviving alongside large rectilinear fields from the parliamentary enclosure movement of the 18th and 19th centuries, or ridge and furrow surviving in the manicured areas of turf within a parkland or beneath areas of pasture that have not been ploughed in recent times.

The *Cotswolds Historic Landscape Characterisation (HLC)*, completed in 1999 has been a significant reference point in understanding the evolution of the Cotswolds landscape, and patterns of landscape character. The HLC identifies a number of Historic Landscape Types that represent surviving fragments of past activity in the modern landscape.

Whilst the HLC was an important overlay in the process of identifying landscape character types, an understanding of the evolution of the Cotswolds landscape was significantly enhanced by background research into the processes, events and socio-political history of the study area. A general introduction to the evolution of the Cotswolds landscape follows. Processes, events and features that are specific to a particular landscape are discussed in greater detail, where applicable, in the descriptive text associated with the relevant landscape character types and areas.

2.8 The Evolution of the Cotswolds Landscape up to 1945

2.8.1 Palaeolithic (c.500,000 – 8,000 BC)

Palaeolithic culture flourished during the Pleistocene when glaciations were interspersed with long periods of more hospitable climate. Britain was still joined to the continent at this stage enabling populations to move south during periods of intense cold such as the last glaciation 25,000 – 12,000 years ago and return northwards to follow the herds as conditions became more hospitable. It is known that Palaeolithic communities made forays into the

Thames and Severn Valleys during the last interglacial interlude, and hand-axes have been found near Lechlade and Hanborough.

There is little evidence that communities penetrated the Cotswolds uplands. However, it is not unreasonable to assume that Palaeolithic hunters extended their search for food across the entire AONB.

2.8.2 Mesolithic (c.8,000 – 4,000 BC)

At the end of the last Ice Age around 8,500 BC the climate improved, resulting in a retreat of the glacial ice sheets that stretched over much of Wales to the west, and the permafrost that had covered the Cotswolds. Sea level rise at this time resulted in the separation of Britain from the Continent, and at a more local level the widening of the Severn estuary. Gradually a cover of woodland would have established across the landscape. At first this would have been dominated by birch although gradually the 'wildwood' of climax species would have developed. This would have comprised of a complex mosaic dominated by ash and lime on the upland areas with alder bordering wet and riverine landscapes. Unwooded areas would have been restricted to particularly steep slopes, rock outcrops or unstable landscapes such as river banks[8]. The presence of grazing animals would also have had an effect on the extent and density of the woodland cover, with more open areas and glades also occurring.

It was in the woodlands of the Cotswolds that Mesolithic communities would have established seasonal hunting camps and exploited migrating herds of large herbivores. These nomadic communities moved through the hills and valleys in search of food and suitable places to establish temporary settlements. These were probably seasonal camps comprising simple shelters made from wood, thatch or skins. Interestingly Mesolithic hunters possessed a more complex tool kit to their Palaeolithic ancestors that included skin boats, fish hooks and much improved flint tools and microliths. It is thanks to this that Mesolithic culture flourished and communities were able to spread out across the landscape and begin to alter the natural environment to suit their particular needs. Indeed, it is believed that areas of the wildwood were burnt to create clearings or glades to encourage and attract grazing animals such as wild cattle and red deer[9], which they could hunt using bows and arrows and spears. There is also evidence that by this time dogs had been domesticated, probably to assist with herding animals during the hunt.

Due to the ephemeral nature of their temporary dwellings, little evidence for Mesolithic occupation survives in the archaeological record. Often the only clue to the presence of Mesolithic communities in the AONB has been in the form of flint and chert implements, used as tools and weapons, discovered in plough soil on the High Wold. Other tools of wood, bone and antler were also used. However, these only survive under certain waterlogged conditions such as in peat layers and as such are not known in the Cotswolds. The finds of flint, whilst providing a clue as to the pattern of Mesolithic movement and settlement in the landscape, also represent a clear indication of well-established trade and exchange networks. High quality and easily worked flint is found many kilometres to the east of the Cotswolds and so implements that were discovered on the plateau indicate that trade or bartering over great distances was taking place.

2.8.3 Neolithic (c.4,000 – 2,500 BC)

The Mesolithic – Neolithic transition saw the gradual change from hunting and gathering towards settled agrarian lifestyles, the shift being likely to represent the adoption of agricultural practices as a result of trade with the continent rather than colonisation of Britain by farming communities. In the archaeological record the Neolithic transition is often identified by the occurrence of new artefact types such as querns, sickles, pottery and polished stone axes. Environmental remains also mirror the change in food procurement practices, large-scale woodland clearance and the introduction of domesticated sheep, cattle and cereals being identified in the archaeological record.

As is the case for the Mesolithic, settlement sites are difficult to identify. However, the activity of Neolithic communities is more readily identified in the landscape as a result of their beliefs and burial traditions, with megalithic and landscape monuments a clear indication of Neolithic activity in the AONB.

The styles of Neolithic tombs vary from region to region[10], which may indicate the presence of distinct tribal groupings or cultures across Britain. The chalk-lands and lowlands of southern and eastern Britain are generally characterised by long mounds, which were often piled up over simple timber structures. Chambered Tombs in the

8. Martin Bell and Micheal J C Walker (1992) Late Quarternary Environmental Change

9. Martin Bell and Micheal J C Walker (1992) Late Quarternary Environmental Change

10. Micheal Parker Pearson (1993) Bronze Age Britain

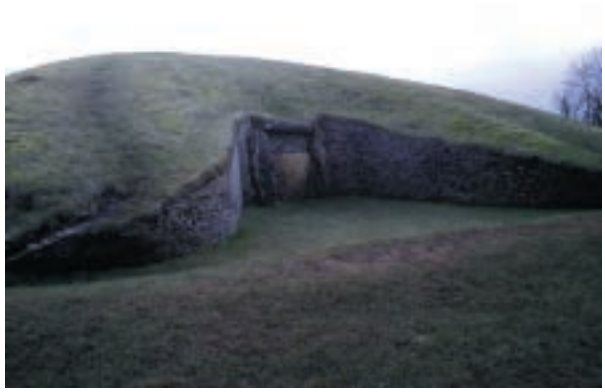
NOTGROVE LONG BARROW

Cotswolds are often faced with dry stone masonry using the local limestone and sometimes contain internal stone built chambers, which may have remained in use for centuries. Tribal affiliations, or at least some form of perceived sense of sameness, may be reflected in the fact that Cotswold stone was incorporated in the famous long mound at West Kennet although it is not clear whether the tombs builders transported the stone here or whether it was carried to the area by earlier glacial episodes. The re-constructed chambered tomb at Belas Knap, above Winchcombe provides a good example of the original appearance of these features.

Archaeologists consider that the concern shown by Neolithic people for their dead can be interpreted as a belief in the power of ancestors and the use of this power to support territorial claims on the landscape by sedentary, farming communities. The location of Neolithic tombs in the landscape may help to support this belief; for example, the string of long barrows and chambered tombs such as Hetty Peglar's Tump and Belas Knap occupy prominent and dramatic locations overlooking the Severn and Evesham Vales respectively. It is not unreasonable to see these as markers demarcating a particular territory for the communities that were probably living in the valleys of the dip-slope to the east.

It is likely that during the Neolithic increasingly large areas of woodland were cleared for cultivation and it is within open landscapes that these impressive landscape monuments would gain visual prominence. However, evidence for this is patchy. Charcoal taken from beneath the Nympsfield Long Barrow has been dated to around 2200 BC and indicates that a wooded landscape of hawthorn, hazel beech, ash, horse chestnut, cherry, oak, yew, elder and alder was present prior to its construction. One can infer from the site of such a monument that part of its drama and power came from its wide visibility and to achieve this much of the local woodland would have needed to be felled, and potentially kept from regenerating by extensive grazing of sheep or cattle. Excavations of the long barrow at Ascott-under-Wychwood in the Evenlode Valley, dated to approximately 2800 BC, confirm this. Analysis of the findings also revealed that prior to its construction, the site had been subject to a pattern of settlement and abandonment from the Mesolithic period and that in between occupation phases, forest and scrub was allowed to regenerate.

The absence of Neolithic settlement sites in the archaeological record for the Cotswolds partly relates to their ephemeral nature, but also probably points to the importance of water in establishing a suitable place to set up a permanent settlement. Most villages were likely to have been sited in valleys, in view of the monuments located on the hills above, and also located close to permanent springs. The concern for a reliable source of water has to a great extent governed the site of existing villages and towns. It is likely, therefore, that Neolithic villages are simply buried beneath the valley villages that exist throughout the Cotswolds today. Contrary to this picture, however, is the discovery of a causewayed camp on Crickley Hill. This encampment was encircled by two interrupted ditches, the stone outcast from which was piled into embankments on the outer sides. Although no occupation evidence such as post-holes or storage-pits have been discovered which can be attributed to this period, the discovery of hundreds of flint arrowheads embedded in the ramparts proves that the site was at least used as a place of refuge. Traces of a burned palisade atop the defences are co-incident with the termination of this first occupation period, which is thought to have lasted between 3,500 and 2,500 BC.



BELAS KNAP

2.8.4
Bronze Age (c.2,500 – 750 BC)

Metal working technology, along with new types of flint-tool and pottery design, was introduced from Europe at the start of this period. Cereal crops and stock rearing remained the mainstays of the economy, although changes in social organisation were reflected in the increased number of ceremonial and burial sites which many archaeologists now see in the context of ritual landscapes. Burial practices also evolved, the use of cremations and round barrows replacing the chambered tombs and long barrows of the Neolithic.

TREE COVERED BARROW IN THE DIKLER VALLEY

A fine example of a Bronze Age round barrow has been discovered at Nympsfield. Termed the Soldiers Grave, the barrow contains a single chamber and contained fifteen burials. Perhaps the most important burial site in the Cotswolds, however, is the a group or cemetery of five barrows close to a Neolithic long barrow near Snowshill.

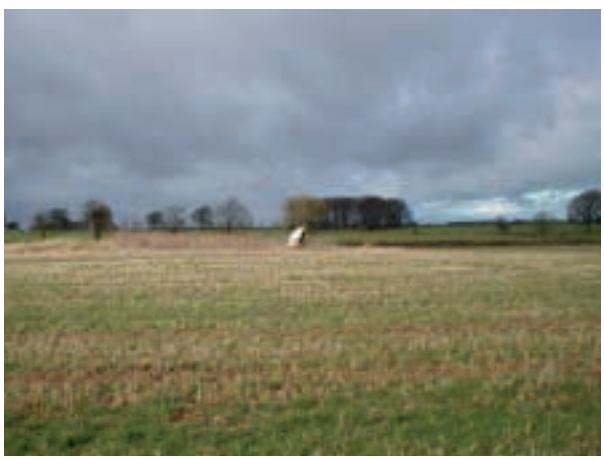
Stone circles are also a feature of the Bronze Age ritual landscape. Two are known in the Cotswolds[11], the most impressive being that of the Rollright Stones. The second is nearby at Cornwell where four complete rings and a single stone have been found.

Isolated Bronze Age stone monuments are also important landscape features. These are scattered across the landscape and may mark territorial boundaries or meeting

ROLLRIGHT STONES

places or may simply be the upstanding remains of other monument types that have long since been lost such as the Hoar Stone near Enstone which represents the remnants of a chambered tomb. Examples of Bronze Age monoliths include the Kiftsgate Stone above Chipping Campden, traditionally recognised as the meeting point for the Kiftsgate Hundred; the Longstone on Minchinhampton Common; the Tinglestone in Gatcombe Park; the Gricklestone in Old Sodbury Parish; and the Hangman's Stone, which marks the point where two parishes meet[12].

These ritual monuments are obviously the most dramatic features of the period in the landscape. However, perhaps of equal importance and drama are the Bronze Age field systems that can be traced across parts of the Cotswolds in crop marks from the air. These, such as the systems of West Littleton Down north east of Bath, and the seventy acres of systems between Eastleach and Aldsworth, indicate that local will and labour was being organised on a massive scale in order to divide up the landscape into distinct holdings.



HOAR STONE

11. Josceline Finberg (1977) The Cotswolds

12. Josceline Finberg (1977) The Cotswolds

During the late Bronze Age the deterioration in the climate to colder, wetter conditions forced upland communities to relocate to the lowlands, placing habitable land under increasing amounts of pressure.

2.8.5 Iron Age (c.750 BC – AD 43)

Iron working was one of a series of new technologies introduced to Britain from the continent in the Iron Age period. Population growth led to competition for land and the development of a more territorial society, hillforts and defensive enclosures being clear manifestations of this in the landscape. Hillforts themselves are both defensible and symbolic, occupying as they do strategic and prominent locations for maximum effect.

Single rampart camps, most probably cattle pounds or sheep folds, have been identified throughout the Cotswolds such as at Norbury, Colesbourne and Radbury Ring. These may have represented safe havens for cattle during times of conflict or simply enclosed areas to bring cattle together for trading or feasting purposes.

The most readily identifiable features of the Iron Age landscape, however, are the large hillforts which are likely to represent tribal centres in which 'council' meetings were held, trade and production controlled, and supplies stored in above ground granaries and clay lined pits predominantly for use during the winter period, as well as during times of unrest. The hillforts would have been at the centre of a widespread pattern of settlement with small, primarily agricultural, farmsteads and hamlets located throughout the landscape. A number of these would have been surrounded by a simple ditch, and perhaps a stock proof fence, although the remains of these are difficult to interpret in the landscape. Perhaps the simplest way to locate these pre-Roman settlements is to identify place names ending in the suffix 'bury'. Although the name derives from the Saxon period, the suffix attests to the presence of earthworks that were still visible at the time of Saxon settlement. Archaeological investigation of many sites containing the 'bury' suffix has unearthed late Iron Age or early Roman remains although many other sites await archaeological confirmation of their pre-Roman origins[13].

RAMPARTS OF PAINSWICK BEACON

Hillforts of various sizes have been identified at Uley, Painswick, Leckhampton Hill, Sodbury, Crickley and Shenberrow. Excavations at Bagendon, where ditches enclose an area of approximately 200 acres, indicate that the fort was located in a pastoral landscape in which cattle, sheep and pigs were all grazed. The site interestingly contained a coin mint and must therefore have been an important local centre.

Little is known about the political or territorial organisation of the area until just prior to the Roman conquest although it is believed that one tribe, the Dobunni, occupied lands stretching from the upper Upper Thames valley to the Severn.

2.8.6 Roman and Romano British Period[14] (AD 43 – AD 410)

In the Cotswolds, as was the case for much of England, the Roman invasion was followed by a rapid implementation of centralised administration based on towns and villas, supported by a network of forts. Roman army engineers also built substantial roads with metalled and cambered surfaces to expedite the movement of soldiers, food, equipment and materials. Naturally these roads were also exploited as trade and communication routes. In the Cotswolds the road network appears to have grown around the main routes of Ermin Street, which linked GLEVVM (Gloucester) to CORINIVM (Cirencester), and Fosse Way, which extended north eastwards from AQUA SULIS (Bath) to Cirencester and subsequently to Stow-on-the-Wold and Moreton-in-Marsh. Other notable Roman roads crossing the AONB include Akeman Street, and Ryknild Street, which

13. Bryan Walters (1992) Ancient Dean and The Wye Valley

14. The principal source of information in this section is Geoff Sindrey (1990) Roman Dean – The Forest of Dean in the Roman Period and Bryan Walters (1992) Ancient Dean and The Wye Valley

for part of its course occupied the alignment of a prehistoric trackway. Despite their low survival rates, Roman roads can be traced in the landscape in the course of modern roads, footpaths and lanes and in the lines of hedges and field boundaries. Their alignments are important and tangible traces of ancient occupation and communication.

The peace and stability offered by centralised Roman administration gave a great prosperity to the Cotswolds and luxurious villas were built all over the AONB. These varied in size and opulence from modest farmhouses to large and impressive country houses. Estates and land holdings surrounding these residences were organised to provide food for the inhabitants of the villa and its workers, but perhaps more importantly to trade in the local urban centres and supply the army, defending the frontiers. Wool and corn production were the principal activities on these vast rural estates and enabled their owners to generate great wealth, which was displayed in the construction of impressive civic buildings and temples in the towns and ever more elaborate mosaics, formal gardens and impressive buildings on their rural estates.

Large and impressive villas were located at North Leigh, Frocester, Woodchester and Witcombe where walls and fine pavements are still visible. A collection of rich villas was also sited in the valleys of the Upper Coln and Churn, including Chedworth, one of the best-preserved villa sites in the country. In the south of Cotswolds a number of other villa sites have been identified including the two villas recently excavated at Bradford-on-Avon and at Horton at the foot of the escarpment where the villa fills in an important gap in understanding the importance of the region in the Romano-British period.

Beyond these well-organised rural estates, the countryside was well settled, principally in small rural villages and towns. These would have been where the majority of the rural population lived and worked, tending fields much as they would have done prior to the Roman invasion.

The Roman empire was in decline from the 4th century and after AD 400 the economy is likely to have been almost completely agricultural and rural. By the middle of the 5th century, the Roman armies having left and much of the infrastructure increasingly falling out of use, local governance had replaced direct Roman rule. For the majority of those living in the Cotswolds, lifestyles would have reverted to something appearing very similar to that of their Iron Age predecessors.

2.8.7 Saxon Period (AD 410 – AD 1066)

Shortly after the decline of Roman control in Britain, the Angles, Jutes and Saxons began to invade and settle in England. Following gradual incursions into British territories, the battle of Dyrham in 577 ensured the West Saxons had control over the townships of Bath, Cirencester and Gloucester, shortly after extending their control to cover the Cotswolds and the Severn Vale.

Perhaps the most notable landscape features to arise from the Saxon period were churches and monastic sites that were being founded from the end of the 7th century. At a time when the majority of buildings were simple thatched structures, these buildings would have gained a symbolic resonance and marked the permanence of the new religious order. Saxon ministers and monasteries are known to have been established at numerous locations including Bath, Gloucester, Tetbury, Withington, Bibury and Hawkesbury. Malmesbury, founded by an Irish scholar, was a particularly important site and acted as a powerhouse of learning during the westward expansion of Wessex.

In the absence of significant archaeological evidence, place names are also perhaps the most direct link to understanding the spread of Saxon settlement across the district.

Some time after 600 the Saxons began to establish their settlements and most are likely to have been very small comprising perhaps a homestead in a clearing on the edge of the forest, and maybe taking advantage of surviving Roman fields. These settlements are evident in place names ending with *ham* (a dwelling or homestead), and '*tun*' or '*ton*' (a farm or enclosed land). Elsewhere, names containing '*Hlaw*' indicates a burial mound or hill and '*Stow*', a sacred place.

It is thought that the influx of Saxon settlers expanded the area of cultivated land in the Cotswolds, which would have in many instances been done at the expense of woodland. Place names containing the suffix '*leigh*' or '*ley*' indicates such settlements. The absence of such names on the high wold is thought to indicate that, in very general terms, this upland landscape was already substantially clear by the time of the Saxon incursions[15]. This is confirmed by the absence of major Anglo Saxon settlements containing the element '*wold*', itself derived from '*wald*', meaning forest.

There are a number of alternative theories for the derivation of the name 'Cotswolds'. In accordance with

15. Josceline Finberg (1977) The Cotswolds

the 'English Places Names' definition, however, the name Cotswold is thought to date to the early Anglo Saxon period, and is understood to refer to an area of wooded land held by the Saxon Cot. He also held a valley (dean), which has subsequently become known as Cutsdean. In the later Anglo Saxon period 'wold' changed its meaning and came to describe treeless upland pasture. Gradually the term Cotswold became an appropriate name for landscapes that stretched over much of the uplands and indeed in subsequent centuries, the term Coteswaud, Coteswold and Cottyswolde were all used to describe areas of land in the AONB and much later still began to be used to describe a much wider geographical area. The first known use of the term is attributed to Giraldus Cambrensis (1146-1223) a cleric and writer who used the term 'Montana de Codesuualt' to describe the land between Blockley and Evesham.[16]

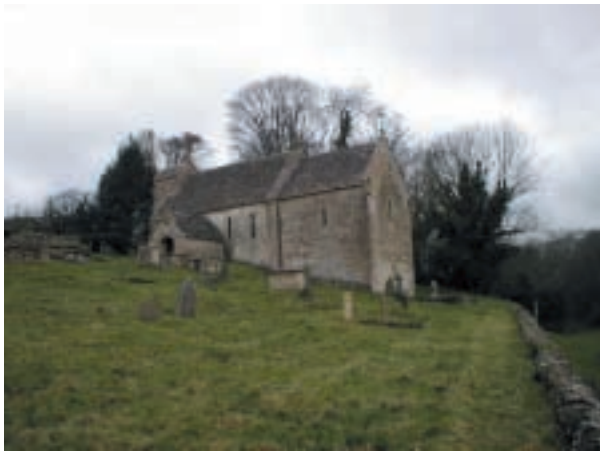
The uplands had been extensively grazed and settled since the Neolithic. Evidence suggests, however, that from the 8th century, sheep became increasingly important. Downs are the most important indicators of sheep husbandry; the Anglo Saxon term '*Dun*' referring to hill pasture. Therefore, many villages had their downs, that were unfenced uplands, shared by villagers. Names such as Hawling Down, Northleach Down and Blockley Downs indicate their presence, although many were ploughed up and enclosed during the late 18th and early 19th centuries.

Almost all traces of Saxon settlements has been removed from the landscape or covered by subsequent development. The 'headland', a bank that formed at the edge of village fields, is taken as an indication that where present, many of the fields that contain ridge and furrow in the vale at the foot of the scarp could have originated in the Saxon period.

2.8.8 Medieval Period (AD 1066 – AD 1500)

Following the defeat of Harold at Hastings in 1066 William the Conqueror either killed or dispossessed the majority of English earls and thanes and allocated confiscated lands to his followers. This was to ensure the security of this part of the kingdom, and was part of a wider policy of creating powerful lordships that could provide money and military support to defend against uprisings and invaders, and maintain order over the local population.

To achieve this, castles were built at a number of strategic locations. The early types were Motte and Bailey castles positioned to control important routes. There are some



ST MICHAELS CHURCH IN DUNTISBOURNE ROUS IS OF NORMAN CONSTRUCTION ALTHOUGH SOME EVIDENCE OF SAXON ARCHITECTURE REMAINS

good examples in the AONB including castles at Ascott-under-Wychwood, Brailes and Ratley, where impressive earthworks can still be seen. Where a more durable castle and a potent symbol of authority was required, strongholds were rebuilt of stone as at Castle Combe. This hilltop was also the site of an Iron Age Promontory fort, which was occupied between 100 BC, and AD50. It was also later re-occupied by the Saxons at some time before 600 AD. Other former stone castle sites have been identified at Beverstone and Brimpsfield. Both were destroyed by Edward II's army, which was instructed to ensure that "*not one stone should stand upon another*".

The Normans were also great church builders (and re-builders) and numerous churches in the AONB contain Norman architecture. Village churches were also built or rebuilt on a grander scale. St. Johns at Elkstone is noted for its Norman architecture.

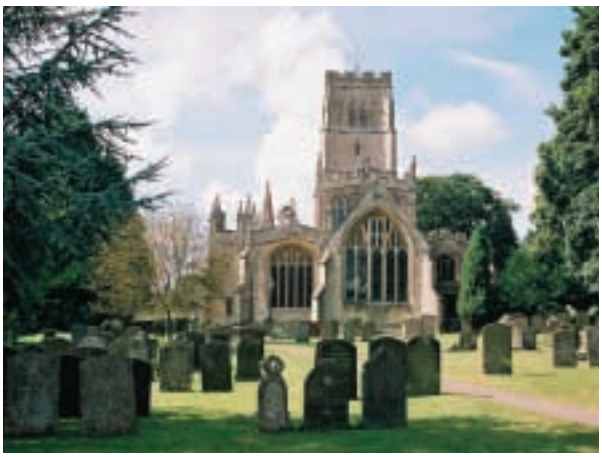
While holding court at nearby Gloucester in the winter of 1085, William established the concept of the Domesday Book, the particulars of which provide an invaluable glimpse of the contemporary landscape.

For example it has been estimated that at the start of the Norman period arable production was prevalent and may have extended to up to two-thirds of the land surface. Up to half of the arable land would have been left fallow, grazed by villagers' animals partly in order to restore the soil's fertility. The summer scene would therefore have been a patchwork of browns and greens with sweeps of yellow where cornfields were ripening. Open areas would have been interspersed with woodland. There would have been few large woodlands in the Cotswolds except those clinging to the steep, uncultivable slopes along the escarpment and within valleys. Smaller copses and woodland would, however, have been located throughout the landscape and provided valuable timber for buildings and fuel.

16. Anthea Jones (1994) The Cotswolds

Arable farming was organised on the Open Field System, and located close to the village. Beyond these were areas of permanent pasture, an essential part of an arable economy where plough oxen could be grazed in the afternoon after a morning in the fields. Meadows along the floodplain of rivers were also important as these could be mown for hay and provide winter feed for animals. Interestingly, the downs, communally grazed by villagers' sheep were largely omitted from the Domesday survey as these did not provide the manor with income and were therefore not recorded. This might imply that sheep were not an important commodity in Norman times. This is not the case, however, as sheep and in particular wool was of principal importance. Indeed, Cotswolds wool was regarded as the some of best in Europe commanding the highest prices in Italy and the Netherlands.

Sheep were kept on hill pasture in the summer, and in winter were kept in the valleys where stocks of hay, peas and beans were available. An example of this 'transhumance' was employed on the land owned by Westminster Abbey, where sheep spent the summer on Bourton-on-the-Hill, moving to Moreton-in-Marsh during the winter. By the end of the 14th century this process was phased out in favour of carrying meadow hay to the flocks during the winter.



NORTHLEACH 'WOOL CHURCH' WITH PERPENDICULAR DETAILING

From the 13th century the wool trade was expanding and began to have an ever-increasing influence on the landscape. Expansion was facilitated by the Black Death, an epidemic of bubonic plague that struck between 1348-9. This killed nearly one third of the population of the Cotswolds and reduced the pool of labour available to cultivate the land. Much corn land was therefore reconverted to sheep grazing and a number of villages, such as Pinnock Caslett, Lower Harford, Hawling, Roel and Upton were deserted or destroyed by landlords. Widford is

STANWAY TITHE BARN

another example of a deserted village. The name Widford comes from the old English 'withig ford' meaning 'the ford by the willows'. In the 14th century, the community consisted of 13 houses close to the church, a mill, manor house and farm buildings. It is thought that the Black Death was the most likely culprit in the demise of Widford. The community never recovered, leaving the tiny church and a few grassy hummocks as the only evidence of its existence.

The wealth generated by merchants and landholders from the wool and cloth trade have had a profound and lasting influence on the Cotswold landscape. Perhaps the most enduring symbol of the wealth this trade generated are the 'Wool Churches' that are located throughout the landscape. These all share the English Perpendicular style, their towers often the only element to help locate villages in valleys when viewed from the surrounding hills. Large and impressive churches were built in the main wool towns such as Northleach, Burford and Chipping Campden. However, smaller village churches also received perpendicular detailing and additions from wealthy benefactors. Tithe barns were also constructed and are an impressive legacy of Medieval architecture. Many were built by the abbeys, such as the Frocester Tithe Barn built by the Abbot of Gloucester in c1300 to store wool clip and corn, and the tithe barn at Stanway built by the Abbot of Tewkesbury.

Other manifestations of the success of the wool trade in the landscape were to do with the processes of cloth manufacture. Throughout the valleys draining the High Wold, streams were dammed to harness waterpower for fulling mills. Their location in the landscape indicates the two principal requirements for their successful operation, ie clean flowing water and Fuller's Earth, a thin band of clay outcropping on the escarpment and in valleys. The first recorded fulling mill in England (1185) was at Barton

at Temple Guiting and was probably located adjacent to a corn mill. Fulling mills were also recorded a few years later at Bourton-on-the Water, Sherbourne, Kingswood and Wotton-under-Edge indicating the expansion of the cloth trade in the area during the medieval period.

2.8.9
Early Modern Period (AD 1500 – 1750)

The largest single event to influence the Cotswold landscape in the 16th century was the Dissolution of the Monasteries (1536-1540). Prior to the dissolution wealthy merchants and clothiers who had generated significant wealth over the past century or so in the trade of undyed broadcloth, found few means by which to display their wealth. However, following the dissolution, they were able to consolidate their success by the acquisition of large tracts of land that was formerly owned by the monasteries and build fine new houses, often from the very stones of the abbey ruins they had also purchased. They were also able to establish great parks on the lands they had acquired. This led to the first flowering of the Cotswold style of domestic building.

The period also saw the long established land use traditions of the past evolve from a subsistence way of life to the use of agriculture as very much more of an economic enterprise. The new class of gentry, keen to increase their wealth, began to purchase the open fields which they consolidated into single holdings that were easier to manage and capable of generating yet more wealth. New technologies and methods were embraced and new crops such as Sanfoin were widely used to raise production, this being a fodder crop that made it possible to carry even more sheep on a given area of land.

There was a marked increase in the extent of woodland in the Cotswolds during this period. The new mansions and parks that were springing up across the area (estimated to be at least 100[17]) were planted with trees for shelter, to line drives, provide fuel and give cover for game. A fine example is the early woodland planting undertaken at Cirencester Park by Richard Master, physician to Elizabeth I, which was created on the lands previously in the ownership of Cirencester Abbey.

During the 17th century further changes occurred in how the rural landscape was farmed and administered. The ancient rights of 'copyholders', that is villagers whose right to hold land was recorded on the copyholds held in the

TYPICAL HIGH WOLD ROAD

manor court, were gradually replaced by 'lifeholds'. In effect this made farmers tenants who would lease the land they farmed from the Lord of the Manor. Over time, fewer and fewer tenants farmed larger portions of land. It was at this time that enclosures started in earnest although the process became much accelerated in the 18th and 19th centuries. Prior to enclosure, farming practices had for centuries been dictated by custom as a result of the copyhold system which frustrated farmers who were keen to improve the output of their land. However, Enclosure allowed farmers to consolidate their holdings into a single unit and build farmhouses, often surrounded by trees to provide shelter and beautify their setting. Many shelterbelts were planted alongside the new 'enclosure roads' that were built to link the new farms to the existing road network. These roads were specified as being 40ft (12m) wide leaving verges on either side that could be planted with trees or left to develop naturally into scrub woodland. It is these belts of trees that provided much needed cover on exposed landscapes such as the high wold. Whilst Enclosure proved beneficial to a minority of increasingly wealthy landowners, the landless labourers were thrown into poverty.

2.8.10
Industrialisation and the Modern Period (AD1750 – 1945)

After 1760 the pace of enclosure accelerated, effectively creating the patchwork landscape of hedged and walled fields, interspersed with stone farmhouses, that we see today. The Napoleonic War (1799-1815), and growing urban populations in the ever-expanding industrial cities, increased the demand for food and caused further land to be enclosed. Indeed, between 1800 and 1840, the few remaining open fields and commons were enclosed. In response to increased demand wealthy landowners became deeply involved in improving and reorganizing their farms in order to maximise efficiency. A number also provided new cottages in local villages. These cottages were often built in the traditional style from locally available materials

17. David Verey in Stan Fagg (2003) The Evolution of the Landscape of the Cotswolds, Research report for Latham Architects

and using local labour. So strong was the local vernacular style that these cottages are often indistinguishable from cottages that date to the 16th and 17th century. It is to these 'golden years' that many people return to as 'the hey day' of the Cotswolds rural landscape. However, in the late 19th century the Cotswolds saw a decline in agriculture, which resulted in the great cornlands to be seeded to grass, understocked pastures become covered in scrub, and walls began to fall into disrepair.

WORCESTER LODGE, BADMINTON

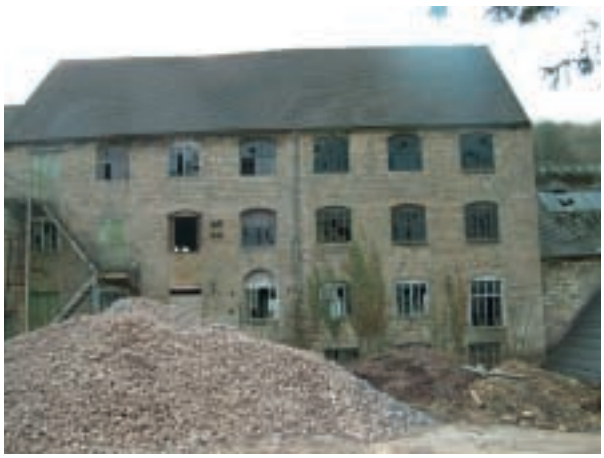
A minority of wealthy landowners and gentry in the Cotswolds, who had already established great houses and parks, began to further beautify their surroundings according to the tastes and fashions of the day. Throughout the Cotswolds numerous parks and gardens date from this period and display the smooth, landscaped gardens and parks associated with the style of Lancelot 'Capability' Brown (1716-1783) and the rugged, natural scenery endorsed by Humphry Repton (1752-1818). Whilst these parks are often surrounded by tall stone walls, their impact on the wider landscape cannot be underestimated, parkland planting, follies or estate buildings often being evident in the landscape some distance from the house and parkland boundary.

Throughout the Mediaeval and Early Modern period, the wool and cloth trade had essentially been a cottage industry. However, from the beginning of the 19th century mills were steadily enlarged or rebuilt to accommodate new machinery as the industry became increasingly mechanised. These were sited adjacent to the fast flowing streams draining the High Wold as great quantities of clean water were required to produce high quality cloth, and the fulling mills also needed water for power. These requirements essentially tied the mills to the valleys. It is to this period that the valley of the Frome and Avon saw rapid expansion; indeed between 1790 and 1825 over 200 new mills were opened in the south Cotswolds. A fine example is Longfords Mill. Milling began on the site as early as c.1300 and both corn grinding and fulling were being carried out there by 1650. In 1806 a dam was constructed to form a large lake (Gatcombe Water).

The period also saw a number of new settlements that were established to house cloth workers. These were generally sited on marginal land, not valued for agriculture on the steep valley sides close to the mills. Cut into the hillsides were rows of terraces and interspersed between houses were areas for tenter frames on which lengths of cloth could be stretched. The plain three storey loom houses and terraced cottages of the period may still be identified in villages such as Sheepscombe, Painswick and all along the Frome Golden Valley. A good example of an industrial settlement is Chalford with a mix of mills, big houses for the wealthy, and terraces of workers cottages with areas in between for the tenter frames.

Within these settlements terraced houses were built by speculators and were let to workers. The newly arrived railways and canals were able to bring in cheap new building materials from great distances, as well as coal from the Forest of Dean enabling the 19th century mills to be steam powered. Houses were often of poor construction using the imported brick and slate.

Towards the middle of the 19th century competition from foreign markets resulted in the virtual collapse of the cloth trade. Many mills ceased production and thousands of people were thrown out of work. However, the agricultural and industrial depression of the mid to late 19th century was short-lived and the Great War (1914-1918) brought about rapid but temporary revival to the area's fortunes. Indeed many of the mills that once produced cloth were converted to produce agricultural and



DERELICT MILL BUILDINGS IN THE VALLEY TO THE EAST OF NAILSWORTH

other essential equipment. The revival essentially saved these industrial buildings from dereliction and ensured their survival as features of the modern landscape.

The pattern of the rural landscape from the Great War onwards was again undergoing significant change; mechanical reapers, steam traction engines and later, tractors replaced human effort and horse power in the fields. Beyond the farm, steamrollers coated the Cotswolds roads with tarmac, and in the towns fine Lias pavements gave way to concrete and asphalt. It is this period of transition that Laurie Lee describes in his book '*Cider with Rosie*'.

Similar to the Great War, World War II saw increased pressure on domestic agriculture and again Cotswolds pastures were ploughed up for grain production. The tractor, now widely in use, was the major agent of landscape change at the time.

"Mechanisation is being developed increasingly on the Plateau, and very large fields... makes this economically possible... the face of Gloucestershire will alter considerably as a result of the increased use of machines".[18]

SECOND WORLD WAR AIRCRAFT HANGAR

The wartime landscape also saw the introduction of large airfields. Many have disappeared; however, the tarmac runways and hangars of the larger establishments still dominate the dip-slope landscape.

2.9 Recent History: (1945 – Present)

Since the end of the Second World War the Cotswolds has witnessed many changes that reflect national trends, notably population growth, increased mechanisation, and greater personal affluence, mobility and leisure time. In the past 60 years the AONB has seen changes so profound and far reaching that they are comparable in scale to the those witnessed by the generations present at the time that the open fields were replaced by a patchwork landscape of enclosed fields and small isolated farmsteads. Some of the changes have been gradual and often imperceptible, but over a period of decades the effects are significant. As a consequence, the landscape that we see today within parts of the AONB is no longer a reflection of the traditional image so often associated with the Cotswolds, of a landscape with a timeless quality, and a pastoral retreat.

The most significant changes that have occurred within the Cotswolds in the post war period, and their consequent effect on landscape character, are summarised below.

Agricultural Change

- As petrol and materials were released from war production, agriculture became increasingly mechanised. Large machinery such as combine harvesters and tractors required large scale sheds to be constructed and field entrances to be widened. In many areas, field boundaries were removed in order to maximise efficiency.

- Ploughing up of extensive areas of the Cotswolds, and the conversion of permanent pasture for sheep grazing to arable cultivation for cereal production, has resulted in the most significant landscape change in the Cotswolds, particularly within the high wold and dip-slope. In 1983 there was only a 2% cover of permanent pasture, compared to some 40% immediately prior to World War II, which gives an indication of the scale of the change that has taken place. Sheep pastures, so long a feature of the high wolds, are now a mosaic of arable fields, with seasonal variations reflected in the changing pattern of ploughed field and cereal crops.

- An increase in the intensive rearing of beef and dairy cattle has replaced the once extensive flocks of sheep. While sheep are still present their numbers are vastly depleted. Manifestations in the landscape are sometimes evident in large scale milking parlours or feeding sheds in close proximity to traditional farmhouses.

18. Gordon E. Payne, Gloucestershire: A Physical, Social and Economic Survey and Plan

- Increased mechanisation and intensification of farming, including grassland improvement, has resulted in a shift to silage rather than hay production. There has subsequently been a reduction in the variety of grassland species present. Tall silos, and black and increasingly bright green silage bails are now evident in many fields as opposed to stacks of the more traditional hay bails.

- Since joining the European Union, European directives, and the Common Agricultural Policy (CAP) in particular, administered more recently through the England Rural Development Programme (ERDP) have had a major influence on farming. Landscape change has occurred as a direct result of financial incentives and subsidies, influencing and directing farmers' activities, and encouraging the growth of subsidy supported crops, for example oilseed rape and linseed oil. The arresting colours of these crops alone have a significant albeit seasonal effect on landscape character.

- There has been focused efforts to promote environmental enhancement work within farms through a range of agri-environment schemes and incentives, with enhanced levels of grant focused on the two Environmentally Sensitive Areas (ESAs) within the AONB, comprising The Cotswolds Hills and Upper Thames Tributaries ESAs.

- Farm diversification in recent years has occurred in response to increasingly difficult economic conditions for farming, including the effects of lowering returns for products, and the uncertainty associated with the recent BSE and Foot and Mouth crises.

- A significant decline in the dry stone wall network has occurred through lack of maintenance and replacement, resulting in intermittent patterns of neglect and poor maintenance where farms have allowed walls to fall into disrepair.

- A progressive loss of hedgerows and walls associated with field amalgamation took place up to and principally during the 1960s and 70s, followed by a levelling off of the rate of removal, and some consolidation of the hedgerow network.

- There has been a decline in the extent of traditional methods of hedgerow management, notably hedge laying and hand trimming, and the retention of selected standards left to grow at intervals. The principal changes in the character of hedges has resulted from the increasing use of mechanical flail cutters resulting in standard 'A' shaped hedges bordering many roads. By contrast, many miles of hedgerow are left un-managed and have grown out and become over-mature and gappy.

- Roadside verges, once rich in a wide variety of wild flowers, display a range of conditions arising from either intensive, or lack of management. Grass verges bordering many roads are regularly mown, although generally only to a single width, and sprayed with herbicides, reducing their biodiversity and visual appeal. In other areas, however, the opposite has occurred and wide verges have been left to colonise, further increasing the sense of enclosure, the self-regenerated scrub vegetation merging with the adjacent hedgerows, and engulfing and concealing stone walls.

Forestry and Woodland

- There has been a decline in the extent of ancient woodland in response to agricultural intensification, with clear felling and conversion of woodlands to intensive forestry production, notably during the 1960s and 70s.

- Planting of geometric coniferous woodland for shelterbelts and game coverts has continued, notably within the high wold and dip-slope.

- Loss of English Elms occurred during the 1970s and early 80s as a result of Dutch Elm disease, resulting in a notable change in landscape character, particularly within the dip-slope and dip-slope lowland.

- A deterioration or lack of management of some of the beech woods on the escarpment has occurred.

- A progressive maturation of many post enclosure beech and conifer copses, shelterbelts and roadside tree belts has occurred. These are an important element of the landscape, particularly on the high wold and dip-slope and their loss will have a significant impact on landscape character.

- Woodland and tree planting incentive schemes have resulted in the planting of many acres of woodland. Whilst this is of obvious benefit to local wildlife, the shape, location and species composition of new plantings has led to a number being inappropriate to their landscape setting, and discordant with the local landscape character.

Biodiversity

- There has been an irreplaceable loss of semi-natural habitats including areas of common land and species rich limestone grassland, now converted to arable production.

- Loss of wetland, water meadows and river margin habitats has occurred as a result of the effects of nitrate-rich run off, abstraction, and drainage associated with agricultural intensification.

Development Pressures

- Despite stringent controls of building development, there is evidence of inappropriate materials, style and layouts that do not accord with the 'Cotswold vernacular'. These adversely affect the otherwise remarkable unity and charm of the many settlements.

- Pressure for edge development can adversely affect the historic form of the villages and mask the direct relationship with geology, landform and land use. Inappropriate village edge development can often have a significant impact on the wider landscape setting of a settlement.

- Within the rural landscape, an increasing number of modern, industrial scale farm buildings constructed in prefabricated materials conflict in form and scale with the more traditional Cotswolds stone barns.

- At a local level, there is evidence of a creeping 'suburbanisation' within house curtilages, within which there is no direct control eg window design and garden treatments. Such changes, whilst having only a minimal impact locally, when viewed over a wide area, can have a significant impact on how a landscape is perceived.

- Demands for new housing both from affluent 'incomers' and young local people will continue to exert pressure to establish new housing. There is a need for affordable housing in particular to ensure that rural communities can remain intact.

- Within agricultural land, the construction of modern and often large 'industrial' scale agricultural buildings impact on the landscape and contrast with the more traditional vernacular stone farmsteads and field barns.

Quarrying

- As recently as the 1930s numerous Cotswold quarries were still being worked by hand. In the post war period, however, a limited number of larger scale mechanical quarries have been established in response to increased demand for crushed aggregate for road building, as well as the continued requirement for locally sourced 'dimension' stone for building purposes.

- Compared to the number of quarries that once extended across the Cotswolds, the remaining working quarries are relatively small in number. They are large in scale, and therefore likely to affect, and be visible from the surrounding area for a long period. Quarries are generally located in fairly remote areas, however, and detached from settlements. As a consequence their 'area of influence' is confined, but the effects of heavy traffic generated through quarrying activities is a source of potential disturbance.

Infrastructure

- Following the publication of the Beeching Report in the 1960s, the network of minor railway lines that crossed the AONB was significantly reduced, leaving a legacy of disused railway lines. Some of these have been absorbed into agricultural land, others still bear witness to their earlier function with embankments and cuttings still crossing the landscape, and remnants of bridges remaining. The railway perimeters are often rich in wildlife interest.

TELECOMMUNICATIONS MAST ON THE COTSWOLDS HIGH WOLD

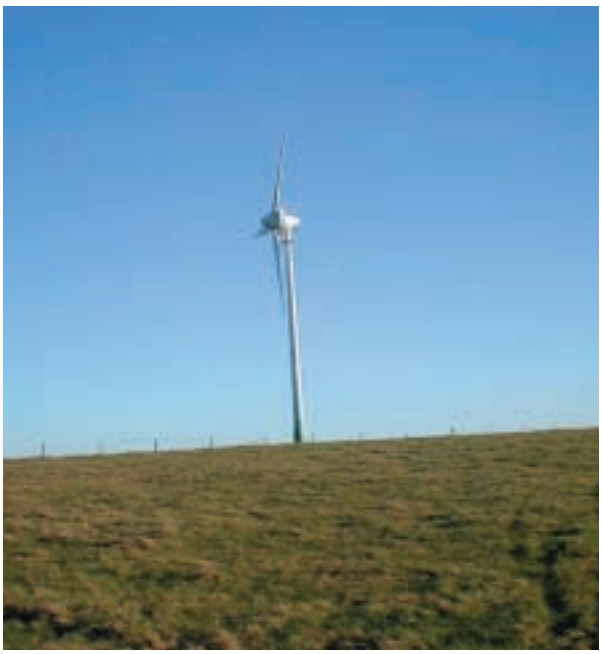
- A number of major infrastructure elements, notably high voltage power lines and telecommunication masts, have been erected within the AONB and where they occur, these large vertical elements have a major impact on the landscape. In recent years, a growing number of radio and mobile phone masts presents a further impact on the landscape and a threat to landscape character.

- Although the road network within the Cotswolds AONB has remained largely unchanged since 1945, a series of road improvements, including bypasses and trunk road improvements have had a major effect locally as well as in the wider landscape. Improvements to the A417(T) undertaken in 1997 included the construction of a major new road bridge across the River Churn north of Baunton, with sections in deep cutting across the limestone terrain.

- Over the past 10–15 years or so, local road 'improvements' have resulted in a further suburbanising effect, and loss of local character. The provision of concrete kerbs, a plethora of road signs including the ubiquitous 'brown signs', lighting, and insensitive traffic calming measures have all contributed to a standardising effect on many of the rural roads and village entrances.

Renewable Energy

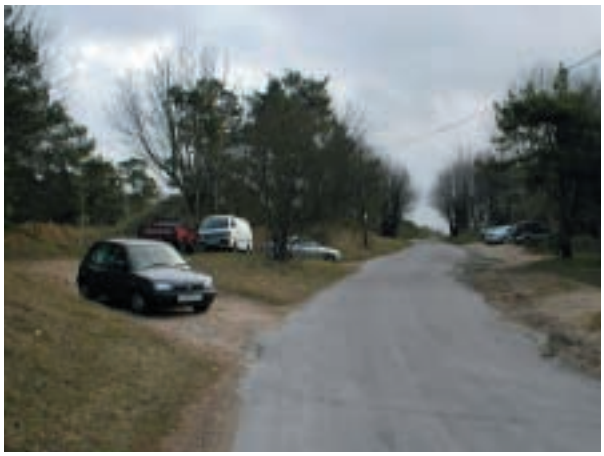
- There is limited evidence of the growth of Biofuels – notably Short Rotation Coppice of Willow and Poplar, Miscanthus and straw. An increase in the production of these crops is most likely to result from the stimulus of enhanced government incentives linked to the renewable energy targets. The shallow, light soils on the high wold and dip-slope generally precludes the economic viability of the growth of these crops. Within the lower valleys, however, notably the Windrush and Evenlode, soils are deeper and wetter and may therefore be more likely to support biofuel crops and hence be subject to landscape change.



WIND TURBINE ON NYMPSFIELD PLATEAU

- A single wind turbine has been erected east of Nympsfield and is indicative of the potential and significant landscape impact that wind turbine clusters would have on the landscape, bearing in mind that the most favourable locations for such developments would be on the more elevated and open, and hence visually prominent, sections of the high wold and escarpment edge.

Recreation and Tourism



CAR PARKING AT PAINSWICK BEACON

- Greater affluence and leisure time, particularly in the last two decades, has placed considerable pressures on the Cotswolds. The AONB attracts an increasing number of visitors throughout the year. During the peak period, the most popular venues suffer from the adverse effect of visitor pressure, congested roads and inappropriate parking. These factors increasingly detract from the 'rural tranquillity' that visitors seek.

- The tourism industry has provided an outlet for farm diversification, and additional sources of income, through the provision of accommodation and 'holiday homes' through the conversion of farm buildings, and development of managed leisure activities, eg horse trekking.

- Implementation of the CROW Act is likely to result in greater access across farmland and former commonland, although the visual impact of such uses is likely to be negligible.

2.9.1
Planning Context: AONB designation

Planning Guidance and legislation tiered down from the national to local level, exerts considerable influence and provides the framework within which landscape change can be positively managed.

The Cotswolds was designated as an AONB in 1966, in recognition of the highly valued and outstanding quality of a landscape that is of national as well as local interest. Boundary revisions confirmed in 1990 resulted in an extension to the designated area, and deletion of a few small areas that were considered to no longer meet the stringent standards required for AONB inclusion.

The AONB designation was one of the most significant events in the post war period for the Cotswolds in that it introduced a statutory designation of national importance that provided much greater weight in terms of planning control and protection of the landscape from injurious effects. Through the setting up of the Joint Advisory Committee, and subsequently the AONB Partnership in 1999, a body was established for the management of landscape change. Issues regarding planning control remain with the Partnership Authorities that extend across the AONB. Nevertheless, each Authority is mindful of the additional protection required in respect of this nationally designated landscape. As a consequence, development plan policies include specific or restrictive clauses that seek to restrain inappropriate development, as well as encouraging positive development that is sympathetic to the character of the AONB.

2.9.2
Recent Planning Control

In more recent times, and particularly since the early 1990s and the Rio Summit, the formal recognition of 'sustainable development' has permeated from national down to local government and had significant effects on the development planning system, particularly in terms of visions and aspirations. In the first years of the 21st century, the concept of sustainability has transcended into 'Quality of Life', a concept that is equally of importance in a nationally protected landscape like the Cotswolds as in an urban area. The requirements and targets are different, but the aspirations remain to protect, manage and enhance quality in a wide range of interrelated fields of interest. The challenge is to match these 'holistic' aspirations to implementation. Within the Cotswolds, there is an opportunity, through the emerging Management Plan, to develop and disseminate integrated management guidelines that meet sustainable targets. The concept is also consistent with the emerging Regional Spatial Strategies that encourages a stronger emphasis on place and character. Visions, and their delivery through more practical guidelines, can in turn be integrated into the current cyclical reviews of Structure, Unitary and Local Plans for the Partnership local authorities that extend across the AONB, and their replacement by Local Development Frameworks.