

# Chilterns

## Key Characteristics

- Chalk hills and plateau with a prominent escarpment in many places, and extensive dip slope with numerous dry valleys.
- Remnants of chalk downland on the escarpment and valley sides. Extensive areas of downland invaded by scrub.
- The most extensive areas of beech woodland in the country on the plateau, and 'hanging' woodlands in the valleys.
- Enclosed and intimate landscapes of the valleys contrasting with the more open plateau top and extensive views from the scarp to the clay vale below.
- Small fields and dense network of ancient hedges, often on steep ground. The agricultural landscape often dominated by hedges, trees and small woodlands.
- Many surviving areas of semi-open common land on the plateau.
- Scattered villages and farmsteads, some of medieval origin, displaying consistent use of traditional building materials including flint, brick, and clay tiles.
- Network of ancient green lanes and tracks including the Ridgeway which links numerous archaeological sites and settlements.
- Frequent grand country houses and designed landscapes occupying prominent positions on sloping valley sides.

## Landscape Character

The Chilterns rise to just over 900 feet and stretch from the Thames in Oxfordshire across Buckinghamshire and Hertfordshire to Bedfordshire. The area includes the lower-lying substantial settlements of Luton, Dunstable, Hemel

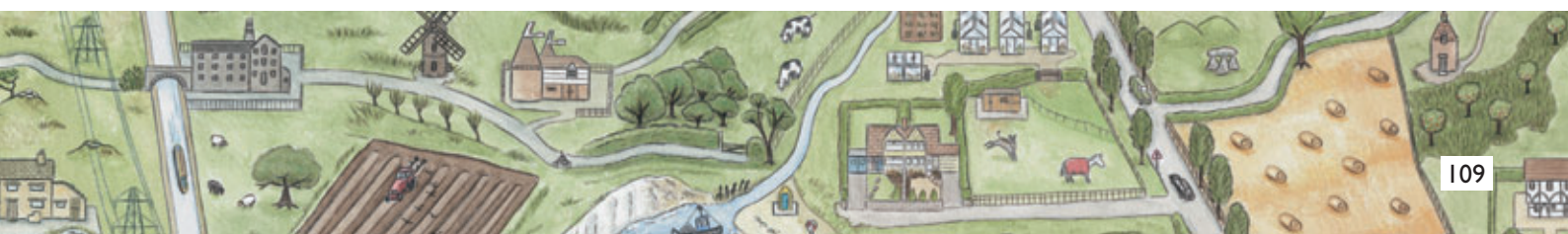
Hempstead, Berkhamstead, Chesham, Amersham and High Wycombe, as well as a section of the M40 and M1 motorway corridors. The Chilterns rise above Aylesbury Vale to the north, abut the East Anglian Chalk to the north-east and slope into the Hertfordshire Plateaux and River Valleys, and the Thames Valley to the south-east. The Berkshire and Marlborough Downs form the western boundary to the Chilterns.



JEFF PICK/COUNTRYSIDE AGENCY

Chalk streams with their associated waterside landscapes remain an important, if localised, landscape feature. Most of the chalk streams are affected, to some degree, by decreased flow.

The hills are formed by an outcrop of Chalk, overlain by clay with flints, up to a depth of four metres on the north-western side of the London basin. The Chalk strata have been tilted to create a dip slope that rises so gently towards the north-west that it generally has the character of a plateau. However, it ends abruptly in a steep scarp slope which forms the more dramatic north-western face of the Chilterns above Aylesbury Vale. The plateau is cut by a series of through-valleys that divide it into roughly rectangular blocks with many branching dry valleys further dividing these blocks and thereby creating a varied mix of landscapes. As well as the distinctive landform, the scarp is

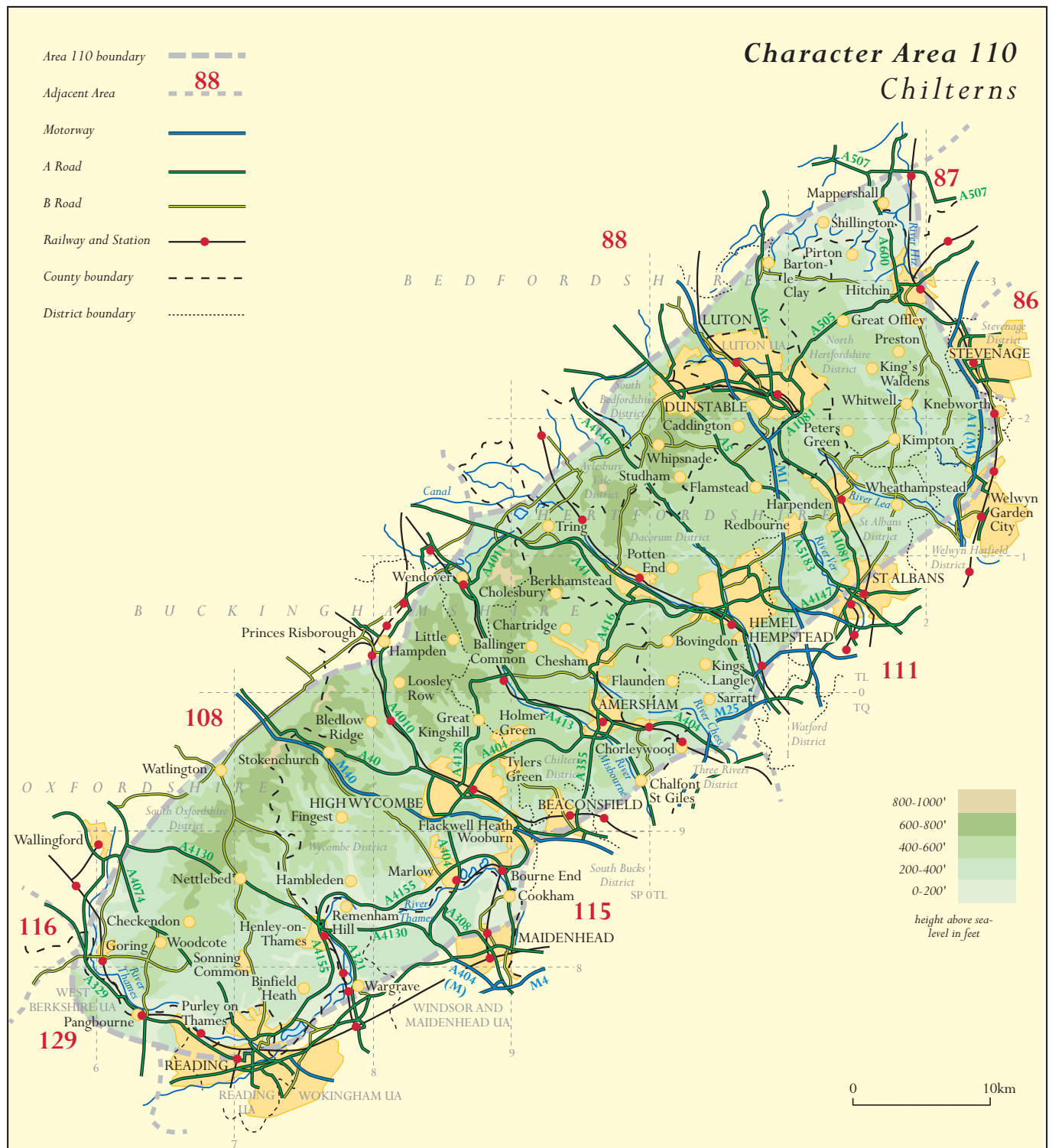


characterised by fragmented and occasionally substantial areas of unimproved chalk grassland with a uneven texture and colour. The influences of the underlying Chalk are apparent in the smooth, rounded sides of the numerous valleys that incise the dip slope. Most of the valleys were formed by glacial melt water but a small number of them support spring-fed streams. In recent years they have all been affected by drought and some by over abstraction. There are many coombes and dry valleys hidden away in the folds of the hills, sometimes giving rise to bournes (streams which flow intermittently).

The extensive areas of woodland dominated by beech on the plateau and the 'hanging' woodlands of the Chalk valleys are

a characteristic feature of the area and make the Chilterns one of the most wooded lowland landscapes in England. Beech was selectively encouraged by management because of its value in the 18th and 19th century furniture industry. Today, the extent of the woodland and the grandeur of the 'cathedral-like' beech woods in particular, dominate the landscape and distinguish the Chilterns from other chalk landscapes such as the more open Berkshire and Marlborough Downs immediately to the south-west of the area.

The south-western boundary is formed by the river Thames as it flows past Wallingford, Henley and Marlow. Although part of the Chilterns, this belt of countryside is dominated by the river and its floodplain rather than by the Chiltern Hills.





MARTIN TRELAWNEY/COUNTRYSIDE AGENCY

The escarpment, with its distinctive form, varies in character from the wooded scarp and gentler landform of the west, to the steep dramatic grassland scarp of the north east.

The escarpment varies in character with the more wooded scarp and gentler landform of Oxfordshire giving way to the more dramatic steep grassland scarp face of Buckinghamshire to the north-east. Sheep grazing is common on the improved chalk grasslands with remnants of species-rich pasture on the steeper valley slopes and scarp face. Scrub is invading chalk downland following cessation of large scale sheep grazing earlier this century and the effects of myxomatosis on rabbits more recently. Much of the largest area of surviving species-rich chalk grassland has been designated as an SSSI or National Nature Reserve. Many of these valuable sites are in public ownership.

Towns and villages of medieval origin are found throughout the Chilterns, the oldest are located in valleys with reliable water supplies. Most of these ancient villages boast Norman churches, village greens and ponds. From the mid-19th century, scattered linear villages have developed on the

plateau, usually around commonland. During the 20th century there has been large-scale development along major road and rail corridors, typified by development along the Metropolitan line from the 1930s onwards. The result is that most Chiltern villages have grown rapidly during this century and house styles from the previous 300 years can be found in most of them.

Designed parklands and large gardens associated with grand historic houses make a dramatic contribution to the local landscape. The designed woodlands, tree clumps, parkland trees, lime avenues, houses and related buildings are distinctive in the Chilterns landscape and often occupy prominent positions on sloping valley sides. Designed landscapes such as Shardeloes, Tring Park, West Wycombe Park, Wycombe Abbey, Park Place, Remenham and Ashridge demonstrate the 18th century design of Bridgeman, Brown and Repton for which the Chilterns are particularly renowned.

Overall, the area has a predominantly quiet and prosperous farming character. The beech woods, the distinctive relationship between the Chalk scarp and the clay vale below, and the traditional villages are all significant characteristics of the landscape. When perceived from the extensive network of sunken lanes and tracks the landscape often feels hidden, enclosed and ancient. This give the Chilterns its special sense of place.

### Physical Influences

The Chilterns are formed by chalk, which creates the smooth rounded forms so typical of downland scenery. The chalk is exposed along the steep escarpment and along valley sides throughout the area. The dip slope is overlain



SIMON MELVILLE/ENGLISH NATURE

The Chilterns escarpment includes substantial areas of species-rich chalk grassland and scrub creating uneven texture and colour.

by clay with flints which supports extensive woodlands, medium-grade farmland and even remnant heath.

The valleys were primarily formed by glacial melt waters and are now dry. The main rivers are the Wye, Gade, Ver, Bulbourne, Chess and Misbourne. The Wye flows directly into the Thames whilst the others flow into the river Colne before joining the Thames. Small brooks known as 'bournes' flow in several valleys, fed by springs which periodically dry up.



STEVE RODRICK/CHILTERNAS AONB

A network of sunken lanes, known locally as hollow ways, are found on both the plateau and valley bottoms helping to link scattered settlements and woodlands.

### Historical and Cultural Influences

The area has been continually influenced by human settlement since early Palaeolithic times. Neolithic clearance of woodland for agriculture and the development of an important Roman communications network established a settlement pattern still evident today and set the scene for the emergence of a distinctive wood-based industry and agricultural change in medieval times.

The earliest archaeological evidence of human activity in the area comes from Caddington where extensive flint working sites dating from the early Palaeolithic period (125,000 - 70,000 BC) have been discovered. Evidence of flint implements are common and widespread from the Mesolithic period (10,000 - 4,000 BC). The local importance of flint from the Chalk is still evident in today's landscape with the use of flint with brick in the walls of buildings and garden boundary walls.

The Neolithic period (4,000 - 2,000 BC) saw a dramatic period of landscape change when the introduction of agriculture to Britain led to the widespread clearance of woodland from much of the Chalk escarpment and river valleys. During this period and into the Bronze Age (2,000 - 750 BC) the Icknield Way was in use as a trackway along the scarp of the Chiltern hills and is associated with evidence of burial mounds on the adjacent higher ground. Evidence from the Iron Age (750 BC - 43 AD) confirms the developing importance of the Icknield Way as a major

line of communication and demonstrates the territorial nature of this period in the history of the Chilterns. Earthworks of former defensive hillforts and dykes to control trade are found along the scarp and also along the Thames Valley to the south. Their presence also probably defined tribal boundaries in the area.

The appearance of the landscape during the Roman period (43 AD - 410 AD) may not have been radically different to that of the Chilterns in the early 19th century. Small towns linked by a system of roads, a mosaic of small fields interspersed with large blocks of woodland, rough grazing on what was then the marginal plateau soils and a more intensively farmed arable landscape on the lighter soils of the valley bottoms. The pattern of settlement as we know it today evolved during this period with many late Iron Age farmsteads developing into Roman masonry villas distributed at regular intervals along the spring line and river valleys. These developed into small towns linked by a system of roads including the establishment of Watling Street and Akeman Street, two major lines of communication that became the A5 London to Dunstable and the A41 St Albans to Aylesbury roads. The presence of extensive areas of woodland provided the charcoal necessary for the emerging iron slag industry which was one of the earliest non-agricultural industries to exist in the Chilterns.

The period from the 5th century through to the Tudors saw a major change in the agricultural land use of the Chilterns. From the early 5th century onwards farmers in the Chilterns returned to subsistence agriculture as a result of the collapse of their markets and a reduced population due to the depredations of the Saxons. Marginal fields on the plateau were abandoned or maintained as rough grazing and, as a result, woodland cover saw an increase during this period. The landscape, as indicated in Domesday Book, appeared to be similar to that of today. The woodlands have never been cleared to the same extent as other areas and the current cover of approximately 20 per cent remains a high figure by UK standards. The Oxfordshire Chilterns has a woodland cover exceeding 30 per cent. The boundaries of woodlands are known to have changed significantly, reflecting constantly fluctuating agricultural and forestry economics.

Settlements were predominantly scattered in farmsteads and hamlets, a pattern still found in the Chilterns today, although much of the land on the plateau had still not been reclaimed for cropping. As the population increased, the pressure on the land led to an expansion in agriculture indicated by the creation of strip lynchets on steeper slopes. New farms and settlements were established on the plateau and new small fields were carved out of the extensive common woods that covered the ridges and allocated to a particular tenant.

## Buildings and Settlement

The most notable feature of the vernacular buildings, both in villages and elsewhere, is the consistent use of materials especially the flints that occur in both the Chalk strata and the overlying clay-with-flints. In many places, flint is combined with brick both in the walls of older buildings and in the boundary walls around gardens. Most vernacular buildings also have tiled roofs, with the tiles often having been made from local iron-rich clay. Thatch has been used less, with notable concentrations in the Oxfordshire part of the Chilterns. The use of brick, flint and tiles is particularly characteristic of many of the historic farmsteads. The oldest farm buildings are commonly characterised by large timber-framed barns clad with black, horizontal weather boarding, brick and flint gable walls, which sometimes incorporate vertical ventilation slits and an owl hole. The consistent range of traditional building materials used in different combinations throughout the area contributes greatly to the distinctiveness of the landscape.

Settlements are linked by a network of ancient, commonly sunken lanes, some running straight along valley bottoms or ridge-tops while others wind up the scarp or valley sides. The sunken lanes pass through woodland, creating an enclosed landscape with an over-arching canopy of trees. On plateau areas and in some valleys the lanes can be lined with species-rich ancient hedges, the height and dense nature of which offer only limited views into the fields beyond. Much of the wider landscape is 'hidden' from the user of these lanes.

Along the loop of the river Thames, the towns of Marlow, Henley and Cookham expanded greatly in the 19th century. River frontages are characterised by ribbon development of summer homes.

## Land Cover

Woodlands are a significant and characteristic feature in the landscape and occur throughout the area. Broadleaved trees dominate the Chilterns woodlands and include the grand beech woods and wooded commons of the plateau and the hanging woodlands of the scarp and valleys. It is the extent of woodland in general, and of the beech woods in particular, which distinguishes the Chilterns area from other chalk landscapes which are often more open in character. The unnaturally high incidence of beech owes its presence to the furniture making industry. A considerable amount of ancient woodland with a much greater variety of trees and shrubs, including oak, birch, holly, hazel on the more acid plateau and ash, wych elm, field maple and cherry on the escarpment. The favourable growing conditions for cherry helped to support widespread orchards, especially in the central part of the Chilterns. These orchards are no longer commercially managed and are now disappearing rapidly.

Juniper heath also survives in some places and very rare natural box woods can be found on the scarp. The woods also add significantly to the ancient feel of the landscape and to its intimate and hidden character.

The Chilterns are dominated by Grade 3 soils which are capable of growing cereals but with limited yields. The result is a mixture of dairying and sheep and arable farming. The mixture at any one time depends upon the economics of each type of farming. More recently, set-aside has become a notable landscape feature.

The type of crops grown are generally winter wheat and barley. Spring sown crops are now rare so there is little winter stubble which has consequences for many bird species formerly characteristic of the Chilterns.

The Chilterns landscape is dissected by transport corridors which run across rather than along the escarpment. Major roads, railway lines and canals are a major feature within the area the majority of which tend to follow the arterial valleys (the M40 is a clear exception). The Thames valley at the western end of the Chilterns is dominated by the river with its associated floodplains.



STEVE RODRICK/CHILTERNs AONB

The extensive areas of ancient woodland, secondary woodland and plantations make the Chilterns one of the most richly wooded lowland landscapes in England.

## The Changing Countryside

- New commuter housing development and expansion of settlements by infilling leading to erosion of the traditional Chiltern's building style and adverse changes in the overall character of settlements. Recent developments on the edge of scarp-foot historic market towns are particularly intrusive. Suburbanisation through small scale but inappropriate development design.
- New road construction and road 'improvements' are a significant pressure on the small scale road network of the area.
- Intensification and changes in agricultural practice including the loss of characteristic chalk grassland on escarpment and valley sides because of scrub invasion and a cessation in

traditional sheep grazing regimes. The loss of winter stubble means that fields are now green in the winter months. Increasing number of new crops appearing.

- Cumulative effect of localised removal of field hedgerows and an associated lack of appropriate hedgerow management. The reduction in the quality of hedgerows is considered to erode the character of many Chiltern valleys.
- Increase in horse-related land uses and development of new golf courses on former agricultural land.
- Elements of ancient countryside within the Chilterns, such as narrow winding lanes, organic field patterns and mature tree specimens, are particularly vulnerable to change.
- Remnants of parkland within the agricultural landscape are gradually disappearing.
- Increasing number of telecommunication masts on the skyline.

### Shaping the Future

- The character of the transitional landscape between town and countryside needs attention.
- Management of popular recreational landscapes and sites would avoid environmental damage or deterioration.
- Schemes to re-establish characteristic chalk grassland at suitable locations, and to conserve those areas that remain, should be considered.
- Appropriate management would improve the quality of existing woodlands.

- Management and restoration of wooded commons would re-establish acid grassland.
- Landscape features which are remnants of ancient countryside including characteristic hedgerow patterns, old trees and lanes need positive management and conservation.
- The design of future development should reflect and help restore and reinforce a typical Chilterns character.
- Public transport, green lanes and quiet ways might be promoted to encourage people to visit the countryside without their cars.
- Many historic parklands are in need of conservation and management.

### Selected References

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