NEW FOREST NATIONAL PARK

LANDSCAPE IN THE NEW FOREST NATIONAL PARK

1 Shaping the land

Bull Hill Landscape

Reed beds on river floodplain

The New Forest National Park is renowned for its diversity of landscapes, natural beauty and recreation value.

The combination of heathland, mire and pasture woodland has a unique cultural identity and forms the largest remaining expanse of this habitat type in lowland Europe.

Many of its features and habitats are therefore of both national and international importance.

Introduction

As you travel from west to east across the National Park, variations in geology, land management and landscape pattern reveal a sequence of contrasts in character.

From the flat, wide floodplain of the River Avon in the north west of the National Park, the landscape changes with a steep wooded ridge marking the edge of the central New Forest plateau. This marks the start of the distinctive Forest core – a mosaic of woodland, heathland, mire and ancient forest farmlands.

En route to the coast the landscape includes areas of more fertile land surrounding the Forest Core. Much of this fertile area was enclosed as private farmland at the time the Royal Forest was formed and enclosed farmland continues to provide an important economic and ecological landscape today.

The landscape then changes again as we travel southwards towards the coastal fringes where it is characterised by shingle spits, saltmarshes and low cliffs.

This factsheet examines the reasons why the National Park has such a magnificent and varied landscape and the key physical and human influences that have led to its development.

Typical landscapes of the Forest core

Woodland in Autumn

Heathland

Landscape structure

The basic structure of any landscape is formed by its underlying relief and geology. The action of weathering, erosion and deposition alter the form of the landscape, drainage and soils and consequently patterns of vegetation and land use.

In the New Forest the landscape is dominated by gravel terraces separated by wide, eroded valleys and hollows. These landforms and the resulting drainage pattern have been largely influenced by phases of erosion caused by the successive fall in sea levels during the Pleistocene period. This resulted in the erosion of the higher terraces and subsequent deposition of this material at lower levels.

Marine processes also influence the shape of the land, vegetation cover and coastal settlement patterns.

Lymington river

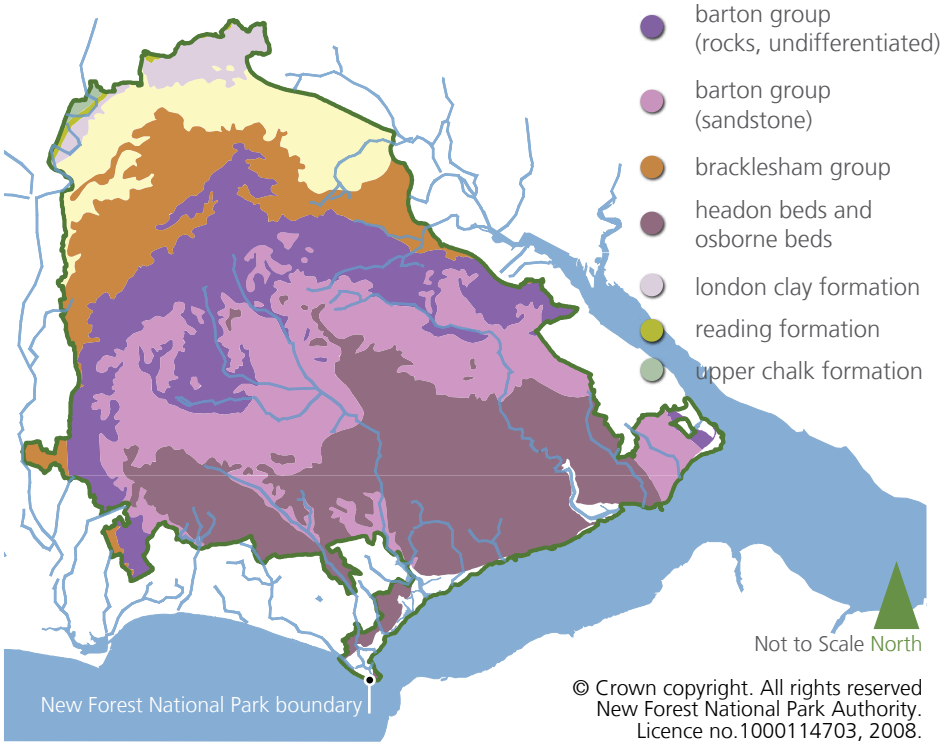
Physical influences

Geology

The New Forest National Park is underlain by clays and sands of Tertiary deposits: a series of marine, non-marine and estuarine deposits of clays, clay marls and sands. The Bracklesham Beds and underlying Bagshot Sands show the most dramatic landforms and are exposed in the relatively high elevation plateaux and U-shaped valleys of the northern part of the Park. Following these, and occupying a large central belt of the New Forest National Park, are the younger Barton Clays and Sands which form the wide valleys and gently rolling hills of the central New Forest. The Hampstead Beds and Bembridge Marls are the youngest rocks and produce the flat plains and wide shallow valleys characteristic of the southern part of the Park, including the Solent coast.

Large areas of the New Forest are covered in superficial deposits of Plateau Gravels and Valley Gravels of varying depths. The Plateau Gravels almost certainly date to the Pleistocene when much of Britain was undergoing glaciation. The Valley Gravels, which lie in existing river courses, formed at a later date.

Simplified map of geology



Views across grassland on the coastal fringe

Shingle deposition at Hurst beach

Coastal features

Coastal geomorphology has formed many classic examples of coastal features, despite these being modified by a series of coastal defence works. At the entrance to the Solent sits a classic shingle feature, Hurst Spit. Saltmarshes occur on more sheltered coasts, for example in the lee of Hurst Spit at Keyhaven. The low cliffs between the Beaulieu River and Southampton Water are important as they are a valuable source of sediment for feeding Hurst Spit and the offshore sediment stores of the Solent.

Keyhaven marshes and Hurst spit

Vegetation

The complex mosaic of vegetation within the New Forest National Park is a direct result of the underlying soils and human activity.

The northern part of the National Park is underlain by clays and sands which give rise to very acid soils and support a complex mosaic of low vegetation including heather and grass heath. The Barton clays of the lower valley slopes support acid grasslands and bog or, where alluvium has accumulated in the valley floors, streamside lawns. Much of the woodland in this area is coniferous plantation on former heath.

The main areas of woodland are found in the central portion of the New Forest on the less acid brown forest soils overlying the Barton clays, loamy Barton Sands and loam clays of the Hampstead Beds. These woodlands are a combination of ancient and ornamental woodlands, enclosed plantations of oak and beech and enclosed coniferous plantations.

Acid heathlands at Hyde Common

To the east of the central woodlands the Beaulieu River drains a complex of heaths. In the shallow valley of the river itself lie gravel deposits; in general, the gravels and the Barton sands are dominated by heather. The scattered areas of woodland can largely be attributed to isolated exposures of the underlying Hampstead Beds and Bembridge Marls and the extensive valley bogs in the area carry accumulations of peat.

In the south of the Park, along the Solent coast, the Hampstead Beds and Bembridge Marls support grassland and farmland.

Drainage

In general, the drainage pattern of the Forest is determined by the three principle drainage basins into which surface water flows. These are the broad valleys of the Avon, Test (Southampton Water) and the Solent. Geomorphologically, the New Forest is a series of eroded benches or plateaux. The greatest in height are in the north where stream erosion has left little more than a series of high ridges separated by wide, fairly steep sided, almost 'U' shaped valleys. By contrast, in the south and east, the land is generally expansive, undulating plains and the landform here is less fragmented by drainage systems.

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Logging at Knightwood

Human influences

From the hunter gatherers of the Mesolithic Period onwards, humans have shaped the New Forest landscape.

The choice of the New Forest as a Royal Hunting Forest in 1079 indicates it was probably sparsely populated and comprised large tracts of open heath and interspersed woodland – the type of landscape most suitable for hunting. Since this time the character of the New Forest has largely been preserved by Forest Law, protecting large areas of common, coppice and open woodland from damaging agricultural practices.

Medieval clearance of woodland or 'waste' in the 13th-16th centuries through the process of 'assarting' (the creation of small, irregular parcels of land for arable or grazing) brought large scale changes to the Forest landscape. Many of these small-scale, irregular field systems remain visible in the landscape today. During the post-medieval period there was a move towards the creation of larger, more regular field systems. The best known is the enclosure period which started at the end of the 17th century when large landowners enclosed lands by a fence or hedge to transform communal open fields and small individual strips into large unitary fields.

Within the Forest the 1698 Enclosure Act provided for the enclosure and planting of up to 2000 acres of oak woodland. At the same time some old coppices were cleared, re-fenced and sown with acorns. By 1851 the Deer Removal Act allowed the Crown to enclose more land for timber production, compensating the commoners for the reduced area of ecological resource. In 1969 the New Forest was recognised as having status equivalent to a national nature reserve. Ecological factors were given extra weight in 1974 by the designation of the Forest as a Site of Special Scientific Interest (SSSI).

At the same time as the Forest was being recognised for its ecological value, its popularity as a recreational resource was increasing. During the 19th and 20th centuries commoner grazing, timber production and improved visitor access have interacted with each other. Gradually legislation has attempted to satisfy the requirements of all three as well as preserve the special landscape character of the New Forest.

The New Forest National Park was created in March 2005 and the New Forest National Park Authority took up its full powers in April 2006. National Park designation gives the strongest possible level of protection to this unique landscape and will help to preserve its special qualities for generations to come.

Longslade Bottom

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Further reading/ useful information

Other New Forest National Park Authority fact files

The New Forest : Colin R. Tubbs, 2001

New Forest District Landscape Character Assessment, 2000 : Countryside Agency Publications

www.newforestnpa.gov.uk Factsheet available on CD, in large-print, or Braille on request

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