80. The Broads

Introduction & Summary

Summary

The Broads National Character Area (NCA) is situated on the eastern edge of East Anglia and is located predominantly in the county of Norfolk together with a small part of north Suffolk, between the peripheral urban areas of Norwich in the west and Great Yarmouth and Lowestoft in the east. Some 94 per cent of the NCA is open country and the remaining 6 per cent is urban. Its boundary follows the edge of the level, open marshland and valleys drained by the three principal rivers, the Yare, Bure and Waveney, and their tributaries, the Thurne, Ant, Wensum and Chet, giving the NCA its very distinctive shape. The rivers flow east into the sheltered estuary of Breydon Water, which lies at the confluence to the Broads river system.

The whole area has become known for the shallow lakes, referred to as ‘broads’ that are contained within the river valleys. These broads are the effect of medieval excavations of peat that became flooded as sea levels rose. Since the 1950s the network of navigable rivers and areas of open water has assured that the Broads is a popular tourism and recreation destination, principally for boating holidays, attracting over 7 million visitors annually.

The agricultural landscape is based on a long history of drainage to allow livestock grazing interspersed with arable cropping, mainly for cereals, which is supported by the moderately fertile river valley and flood plain soils. Woodland is limited, particularly across the coastal and flood plain marshes, although alder carr wet woodland is typical of the wetter areas surrounding the broads and on the flood plain of the middle and upper reaches of the valleys.

The low-lying marshes are traditionally unsettled, instilling a rather isolated character, while the pattern of settlement on the higher ground is clustered and linked by a minor road network that runs along the valley sides. A loose local vernacular of flint, pebble and brick, with pantiles and occasionally reed thatch, adds cohesion to settlements.

The ecologically rich wetland habitats form one of the finest and largest marshland complexes in the United Kingdom. Iconic species include the secretive bittern (rarely seen but frequently heard booming during the breeding season), the marsh harrier, and swallowtail butterfly and fen orchid. The coastline is also important for habitats such as dune heath and species including the natterjack toad, golden plover, little tern, and common and grey seals.

The importance of the Broads for biodiversity and nature conservation is borne out by the many sites within it afforded conservation status. Internationally designated sites cover 12 per cent of the NCA and include the Broadland and Breydon Water Ramsar site, three Special Protection

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Key characteristics

- The landscape is low-lying with some areas below sea level and has characteristic open, extensive views over slow meandering rivers, drained marshland and coastal plain in the lower valley flood plain. Views inland are framed by the tree-lined valley ridge lines.

- The middle, upper and narrow incised side valley tributaries are small-scale, low and enclosed, often supporting woodland.

- Rivers dominate the landscape with the middle and lower river reaches flowing between flood banks, above the level of the surrounding land which is drained by dykes, ditches and pumps.

- The broads, which are former flooded peat workings, form naturally nutrient-rich shallow lakes of various sizes surrounded by fens, wet woodland and large expanses of reedbed, rich in biodiversity.

- Woodland cover is generally sparse, especially in the marshland area. Small areas of mainly deciduous woodland occur around the broads. Carr woodland and willow pollards are typical of the wetter areas, while broadleaved woodland is present as copses and plantations on higher land.

- The dynamic coastal landscape from Happisburgh to Winterton-on-Sea is semi-natural in character with soft, eroding and mobile maritime cliffs and long, sweeping stretches of shifting sand and shingle beach habitat, backed by a coastal vegetated dune ridge.

- Glacial deposits of outwash gravels and till are in many places overlain by peaty, loamy and clayey flood plain alluvial soils. Where drainage has been carried out, the fertile soils support arable production while in the wetter areas grazing marsh is common.

- Field patterns are principally defined by drainage over most of the Broads. Regular 18th- and 19th-century enclosure fields (generally marshland) are clearly defined by straight, reed-fringed drainage ditches that form a strongly geometric layout across the lower flood plain. Some earlier curvilinear enclosure of marshland also survives.

- Much of the Broads is remote and isolated with settlements clustering on higher ground inland, linked by the few roads that run along the valley sides. Isolated farmhouses are the most significant buildings in the marshes.

- Vertical features are very distinctive in this generally flat landscape and include some very fine medieval churches on the higher ground and several traditional drainage mills located on embankments flanking some of the drainage channels on the marshes and coastal plain.

- Small boatyards and marinas form part of the traditional riverside scenery although, increasingly, extensive modern boatyard/marina developments challenge the traditional character.
Traditional buildings make use of flint, pebble and brick walls, with pantiles and rare surviving reed thatch.

The road system is limited and follows the edge of the rising land, although footpaths and boat access are extensive. Key river crossing points include bridges at Wroxham/Hoveton, Potter Heigham, Acle, Haddiscoe, Great Yarmouth, Norwich, Beccles and Bungay.

Three railway lines cross the Broads area, serving a number of smaller settlements between Norwich, Great Yarmouth and Lowestoft.

The sense of tranquillity and wildness is integral to the distinctiveness of the Broads, inspiring many writers, artists and naturalists and increasing its popularity as a recreation and tourist destination, which is notable within the popular villages particularly during the summer months.
Statements of Environmental Opportunity

SEO 1: Conserve and enhance the distinctive historic landscape of the Broads, which is of national and international significance for its heritage and biodiversity interest, through securing and expanding the open water, riverine and estuarine habitats which are vulnerable to abstraction, flooding, vegetation succession and altered land management. Manage the provision and quality of water in the whole catchment for human and ecological benefit.

For example, by:

- Working with landowners, partners and communities to restore the connectivity of key habitats across the landscape, reinstating and extending wet grassland and grazing marsh for breeding waders (for example, lapwing, redshank and snipe) and overwintering wildfowl, and expanding and creating new habitats and ecological networks for species.
- Maintaining and, where necessary, improving the condition of the Sites of Special Scientific Interest (SSSI) and continuing to conserve and protect the valuable habitats and species in the Broads' three Special Protection Areas (SPA), two Special Areas of Conservation (SAC) and ten National Nature Reserves.
- Facilitating the ability of viable agricultural businesses to undertake more tailored agricultural and conservation management to support the range of riverine and estuarine wetland habitats and landscapes, incorporating uncultivated margins and established habitat to protect watercourses in order to support rare species such as the otter, bittern and holly-leaved naiad, together with milk parsley, ragged robin and meadow thistle which are vital food plants for the rare swallowtail butterfly.
- Enhancing the management of wetland habitats, including ditch systems and river corridors, through the adaptive management of the adjacent flood plain, managing water quality and availability to achieve a favourable ecological condition while securing their natural and cultural value and the associated benefits.
- Identifying and developing strategies to mitigate some of the impacts of saltwater incursion – for example, through the creation of washlands and new wetlands to moderate flooding of existing wildlife sites.
- Promoting initiatives that facilitate re-wetting the drained flood plain to create new fenland habitat at the upstream extent of the system, restore watermeadows, undertake flood plain planting of wet woodland, and restore the structure and function of river channels which in turn will maintain water levels.
- Working in partnership with the Norfolk Non-native Species Initiative to reduce threats posed by non-native species colonisation of the open water, riverine and estuarine habitats.
- Working in partnership with landowners and farmers to conserve and enhance the deciduous woodland, copses, plantations and hedgerows on the higher ground of the valley sides and tops and prioritise the management of fen carr wet woodland along the valley bottoms to benefit the provision and quality of water in the catchment, while securing their natural, cultural and economic value and the associated benefits.
For example, by:
- Establishing a programme of community engagement to explain the vulnerability of the Broads to climate change and the interdependence between the wetlands of the Upper Thurne and the Winterton–Horsey dune system, identifying local concerns and aspirations to inform adaptation planning, and encouraging and promoting local volunteering opportunities for people to become engaged with the natural environment.
- Promoting and delivering climate change adaptation measures, such as the Connecting Wetlands project, using the ecosystem services approach to develop wider understanding of the operation of natural processes.
- Ensuring that the coastal dunes are conserved and protected from damage resulting from recreational pressure, through the development of a strategy for coastal public access management, so that they continue to function as a natural coastal flood defence of the low-lying hinterland.
- Raising awareness of the important sensitive habitats and the wildlife that the coastal environment supports, through clear signposting and interpretation, to improve the quality of understanding and enjoyment of the coastal environments and associated habitats and species (such as coastal dunes, little tern, golden plover, and common and grey seals).
- Working in partnership with landowners and farmers to achieve mutually satisfactory objectives, managing and promoting opportunities for sustainable access and outdoor recreation on land adjacent to the coast, through clear signposting and interpretation for both local people and visitors, that improve health, wellbeing and enjoyment of the environment.
- Facilitating the Broads Flood Alleviation Project to adapt to coastal change and sea level rise and seeking new opportunities for access enhancements to the flood plain and river systems.
- Working in partnership, in line with the north-east Norfolk (Kelling to Lowestoft Ness) Shoreline Management Plan, to ensure that dynamic coastal processes continue and conserve the range of estuarine, coastal and wetland habitats that contribute to landscape character and support the wide range of wildlife.
For example, by:

- Encouraging sustainable farming practices and the diversification of cropping and livestock to support the continued production of food supplied to local and national markets and the financial security of rural businesses.
- Encouraging increased uptake of agri-environment schemes and options that facilitate re-wetting the flood plain, to reactivate peat formation and promote carbon sequestration, and are targeted at expanding and connecting ecological networks to benefit biodiversity such as increasing farmland bird populations.
- Ensure that advice is provided to support and enable sustainable farming practices to be carried out efficiently, including follow-up monitoring and advice, to help inform future land management decisions.
- Working in partnership with farmers to encourage the uptake of agri-environment options that harvest and conserve water, protect watercourses and prevent water quality deterioration by reducing diffuse pollution and ensuring compliance with regulations on nitrate vulnerable zones.
- Working in partnership with farmers to encourage soil management improvements in order to prevent deterioration of water quality caused by soil erosion and nutrient leaching (which will also have negative effects on the semi-natural habitats of the Broads).
- Continuing to bring derelict reedbeds and sedgebeds into regular management and promote use of fen litter for biomass and new commercial uses for hay and reed such as reed faggots.
- Reconnecting rivers and their flood plains and the restoration of marginal reedswamp and salt marsh, where appropriate, to increase the use of river valleys for the storage of floodwaters, aquifer recharge, and restoring and creating new wetland habitats where not at risk from saline incursion and where this will not compromise water quality in the ditch systems.
- Facilitating the ability of viable agricultural businesses to undertake more tailored agricultural and conservation management to support the range of drier habitats and landscapes of the hinterland, incorporating uncultivated margins to arable fields in order to support rare arable weeds and farmland bird species.
- Encouraging the management and, where necessary, the replanting of damaged field boundary hedgerows on the valley sides, upper valleys and tops to strengthen the traditional pastoral landscape character of this area of the Broads, which is known for its thick, mature hedgerows with dense rows of trees, and assisting the linking of semi-natural habitats to benefit biodiversity and improve water quality.
Encouraging the creation of new woodland to expand and connect semi-natural habitats benefiting biodiversity and water quality, where this does not compromise other, more ecologically valuable, habitat or result in the loss of valley flood plain transitions.

Encouraging local farm businesses, isolated properties and small communities to increase appropriate-scale generation of heat, utilising woody biomass for woodchip boilers where it is sustainable to do so. This will in turn bring further opportunities for improved woodland management, while being mindful of locally valued landscape characteristics and sensitive landscapes, habitats and associated species.

For example, by:

- Working in partnership with landowners, farmers, local businesses and the Broads Authority to promote the NCA as an area of natural beauty and one that affords opportunities for open-air recreation, focusing on ecotourism as a mechanism to reduce environmental damage caused by tourism pressure to ensure that the Broads is maintained as a unique and inspiring landscape with its own sense of place and historical significance.

- Strengthening opportunities to sustainably manage recreation in order to meet the demand of visitors wishing to enjoy water-based interest; which contribute significantly to the character and local economy of the area.

- Strengthening opportunities for visitors to enjoy natural and cultural heritage by providing them with a wide range of opportunities to experience, enjoy and understand the special natural environment and heritage of the Broads.

- Managing and conserving heritage assets as an integral part of the historic character of the area, through appropriate measures and seeking to reduce conflicting or unsympathetic management regimes while recognising the high potential in this landscape for undiscovered remains.

- Managing visitor pressures at popular and sensitive sites by investing in high-quality infrastructure and interpretation that is designed to provide equality of opportunity, meeting the different needs and levels of use of a range of visitors, including local communities, recreational day visitors and tourists, and enhancing the experience without being the cause of damage or degradation of the Broads' natural assets and tranquillity.

- Working in partnership with the holiday and leisure businesses to encourage best practice to ensure that measures are taken to control light and noise pollution to reduce disturbance, enhancing people's enjoyment of the area by protecting high levels of tranquillity where appropriate.
Managing and promoting public rights of way by linking existing public footpaths, settlements and long-distance paths (for example, Weavers’ Way, Wherryman’s Way and the Bure Valley Path) as well as supporting improvements for cycling in the NCA in order to enhance sustainable tourism and recreational opportunities and ensure a high-quality experience for all users.

Maintaining and promoting the key physical, historical and cultural elements that provide local identity, amenity and aesthetic value to the area’s historic landscape character (for example, traditional farmsteads and buildings, wind pumps, staithes and boatsheds), ensuring that these are retained and actively managed while allowing the landscape to continue to evolve and reflect the interactions between people and the environment.

Promoting the links between the geological landscape evidence, the historical evidence of human activity and the biological interest of the area to achieve a wider understanding of the formation and the importance of the Broads landscape.

Conserving features distinctive to the Broads that are highly rare and distinctive in a national context, including early brickwork, reed thatch, round church towers, windmills and the traditional riverside buildings, boatyards and other waterfront industry (and views to them) that often have a strong visual impact in the landscape.
For example, by:

■ Conserving and appropriately managing the area’s sense of place within the built environment and using this understanding, and the area’s distinct patterns of settlement, to plan for and inspire new development.

■ Ensuring that high-quality green infrastructure is considered in all new building projects, encouraging developers and planners to consider this aspect at the outset of scheme design with the aim of promoting space for wildlife and outdoor recreation.

■ Promoting the use of traditional building materials such as flint, pebble and brick, and reed thatch in building restoration or new development, where this would be appropriate, to enhance the character of the local area.

■ Supporting the use of historic and landscape characterisations to inform change, and encouraging their use in community-based planning to help to identify locally valued townscapes, rural landscapes and heritage assets.

■ Establishing a planning and design approach that enables appropriate sustainable development within the Broads flood plain, including use of experimental and innovative techniques (for example, floating buildings) while maintaining the high levels of tranquillity associated with much of the area, especially where there is currently little settlement or infrastructure intrusion.

■ Investigating ways of securing better management of heritage assets that contribute to the character of the area, particularly those that have been identified as ‘heritage at risk’.

1: Encourage measures that lead to the enhancement of existing settlements and new developments providing more widely associated social and cultural benefits through the provision and management of high-quality green infrastructure networks.
Landscape opportunities

- Protect the open character of the marshland landscape with its long and expansive views and big skies as well as the character their more enclosed pastoral character.

- Protect areas with a strong sense of remoteness, ‘wildness’ and tranquillity, where intrusion, including light pollution, is low to ensure this valued resource is maintained. Such areas include the flood plains of Halvergate and the Upper Thurne and the coastal dunes and heaths between Eccles and Winterton-on-Sea.

- Manage development and recreation to reduce its impact on tranquillity. Protect identified existing rural areas where tranquillity and intrusion, including light pollution, are low to ensure this valued resource is maintained.

- Manage and expand the mosaics of wetland habitats, including fens, reedbeds, grazing marsh, wet woodland, salt marshes, and intertidal mudflats for their contribution to biodiversity and geodiversity.

- Manage and enhance the wet woodland in the valley bottoms and broadleaf plantations in the upper valleys for their contribution to the wooded landscape character, their wildlife value, and their contribution to retention of greenhouse gases.

- Plan to adapt agriculture in the river valleys to focus away from the river edge and to adopt complementary land management practices for wildlife, such as haymaking.

- Conserve, manage and expand semi-natural habitats that occur along the coast including embryonic shifting dunes, dune slacks and freshwater pools, coastal dune heaths including dry dune heath and birch scrub.

- Allow for the continuing dynamic natural coastal processes, and maintain and conserve the range of estuarine, coastal and wetland habitats that contribute to landscape character and support the wide range of wildlife.

- Ensure that the important network of ditches and dykes is managed to encourage emergent vegetation thus forming important landscape features and increasing habitat connectivity.

- Plan to reduce impacts of agriculture and development on the riverine systems, carefully managing water availability, water quality so that existing wetland habitats are protected from saline incursion, sedimentation and pollution.

- Seek opportunities to extend semi-natural habitats to help alleviate flooding while benefiting wildlife.

- Maintain the quality and knowledge of archaeological evidence and historic built features across the NCA, conserving and interpreting the historic landscape features, especially the derelict drainage pumps and mills that line the river banks.
Plan for land management practices to be sympathetic to potential historic evidence in the area and enhance public awareness of the breadth of historic wealth of the Broads.

Seek opportunities to interpret the particular landscape, seascape character and history, and provide opportunities for more people to understand and enjoy.

Work with landowners, farmers and businesses to manage and enhance sustainable tourism and recreational opportunities for local people and visitors alike to enjoy the Broads’ landscape and heritage assets, ensuring a high quality experience for all users and increase interpretation at key locations to help explain the Broads’ landscape through time and the importance of its ecology.

Conserve the high quality and productive soils for continued agricultural production while ensuring that the agricultural landscapes make a greater contribution to wildlife, especially farmland birds, avoiding or reducing cultivation where soil erosion is a risk.

Improve access, especially where it is possible to link existing path networks and sites with towns and villages, and provide interpretation, to enable more people to enjoy and understand the landscape, its underlying geology and its history and functions.

Promote the use of traditional, locally sourced building materials such as water reed thatch and the incorporation of vernacular styles in restoring traditional buildings and structures.

Where new development is considered, protect the distinctive landscape qualities of the Broads ensuring that new development enhances landscape character and secures multiple benefits through the provision and management of high quality green infrastructure networks where possible.

Plan for the challenges of climate change especially along the coast and across the marshes, in one of the lowest areas in England.