ENGLISH HERITAGE

South Downs National Park

Outline Summary

SURVEY REPORT

The South Downs National Park Project

National Parks are designated with the twin aims of conserving natural beauty and providing for open air recreation. They are extensive areas of country, selected for their natural beauty, the opportunities they offer for open air recreation and their position in relation to centres of population. They are administered for planning and management purposes by special statutory authorities. (Countryside Commission 1997, 3)

This briefing is aimed at providing a supportive framework for archaeological fieldwork within the proposed South Downs National Park. It will begin with a statement about existing legislation concerning the area and its context in a national setting and will include a short landscape characterisation, discussing the natural environmental background as well as issues such as current land use and the threat to archaeological monuments. The report will provide an assessment of the need for this proposed work and conclude with recommendations as to how the project can be advanced.

As yet the boundaries of the proposed National Park have not been fixed, but for the purposes of this report it will be presumed that the area of the current AONBs (East Hampshire; Chichester Harbour and the Sussex Downs) (Fig 1) form its core constituency. The value of the archaeological resource in the area is acknowledged explicitly by the Countryside Commission, who make a clear case for the importance of protecting and enhancing the cultural heritage of the area (*ibid.* 4).

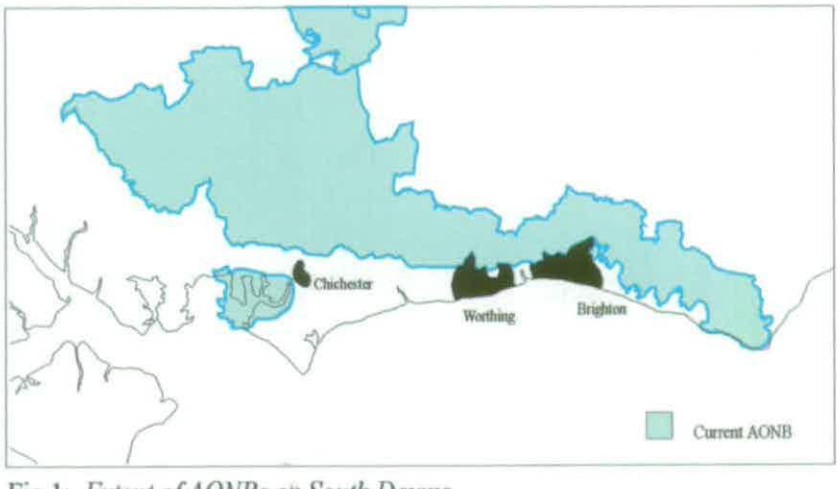


Fig 1: *Extent of AONBs on South Downs*

Background to the Proposal – Significance of the Area in a National Context

Existing Legislation

The Hobhouse Report (1947) first proposed that the South Downs be designated as a National Park. This was subsequently considered and rejected by the National Parks Commission in 1956 on the grounds that too much of the specified area had been adversely affected by agriculture. The Commission did, however, recognise that the South Downs had great natural beauty and that their ready accessibility from London made them especially vulnerable to development. As a consequence the statutory body proposed to consider their designation as an Area of Outstanding Natural Beauty (AONB). Within the immediate area of our concern there are now three such designated areas:

a) The East Hampshire Downs

b) The Sussex Downs

c) Chichester Harbour.

The first of these, the East Hampshire chalk hills, received designation in 1962, followed by the Sussex Downs and Chichester Harbour in 1966.

An experimental method of administering and managing the Sussex Downs AONB was established in 1992 – this was called *The South Downs Conservation Board* and it is anticipated that this umbrella organisation will provide the management framework for the new National Park authority.

Between 1986 and 1992 the chalk hills of the South Downs from Winchester to Eastbourne were designated an Environmentally Sensitive Area (ESA) to encourage changes to agricultural practices to conserve and enhance the landscape, wildlife and access to the Downs. The ESA is administered by MAFF and the Farming and Rural Conservation Agency (FRCA). The Countryside Stewardship scheme, developed by the Countryside Commission and now administered by MAFF and FRCA, operates outside the ESA.

The Sussex Downs currently attracts approximately 32 million visitors each year and there are constant concerns about balancing the needs of visitors with sustaining the natural beauty of the area. There are concerns also at the effects

wrought by the Common Agricultural Policy (CAP) with a widespread belief that changes to long established farming practices, practices which through the centuries have been responsible for creating much of the natural beauty of the Downs and have maintained many of the most valuable wildlife habitats on chalk grassland, are detrimental to the landscape and wildlife of the Downs. There is also a view that recent developments in land use, such as intensive game rearing and off-road vehicle rallies, are adversely affecting the landscape, wildlife and amenity value of the South Downs.

Apart from those areas given protection as Sites of Special Scientific Interest (SSSI) or Scheduled Ancient Monuments (SAMs), there is no legal imperative to halt damaging farming, and other, practices. Other environmental schemes, such ESAs and Countryside Stewardship, are voluntary.

Characterisation of the Project Area

Geology, Drainage and Topography: The project area contains visually distinctive and diverse landscapes dominated by a broad anticline spine of upland chalk running roughly WNW-ESE; which extends longitudinally for a distance of some 110km with a well-defined south-eastern terminal close to Eastbourne (TV 612 978). To the west, the chalk escarpment is less clearly demarcated and merges into the broader Salisbury Plain chalk massif. It maintains an average width of between 5 and 10 kilometres, rises to a maximum height of 290m and is capped in places by tertiary deposits of clay-with-flints. Both the northern and southern flanks of the chalk spine are delimited by pronounced escarpment edges; that to the north, overlooking the Weald is the more prominent but has been heavily eroded by the sapping back of springs. To the south, escarpment definition is poorer, but with similarly impressive chalk escarpments close to Chichester. In the area between Brighton and Eastbourne, the chalk is exposed as sea cliffs.

To the north of the South Downs, the low lying area is dominated by linear outcrops of Upper and Lower Greensand, Gault and Wealden Clay. To the south, a similarly low-lying area along the coastal fringe is characterised by drift deposits over clay and gravel with occasional outcropping of Greensand and gravel terracing. Along this littoral there are significant wetland deposits either inter-tidal remains, as in the Chichester Harbour AONB, or marsh and peat bog on the western fringe of Eastbourne.

Five major watercourses dissect it roughly perpendicularly (from the east): Cuckmere River; River Ouse; River Adur; River Arun; River Meon. Each is associated with broad bands of alluvial deposition and occasional gravel terracing. Other significant rivers and streams spring from it and are the current protagonists in a continual process of erosion and sapping back which give the escarpment edges their distinctive 'scalloped' appearance.

There are also substantial deposits of colluvial sediments that have built-up by excessive soil creep either naturally initiated, such as gravity or rain-wash, or resulting from anthropogenic effects such as ploughing. Colluvial soils can sometimes contain stratified sequences of land use histories and the limited work undertaken by Bell along the South Downs (1983) has shown the potential of future work on these deposits.

Current Land use:

Current land use within the proposed National Park can be characterised by the following categories:

a) *Arable* – land under continuous cultivation. Recognised as causing extensive destruction to landscape features and can also lead to serious soil erosion.

b) *Semi-natural* – is a common land resource on the High Downs and some of the steeper valley slopes and consists of grassland with scrub. Low intensity usage and vegetation cover ensures that it is important for archaeology and wider conservation interests. The MARS report identified this land use type as a declining resource nationally, but there is good, as yet unquantified, survival in the proposed National Park area.

c) *Pasture* – defined as permanent managed grassland, of which there are large expanses on the chalk downs, and is the best possible form of land use for archaeological monuments.

d) *Urban and developed land* – is the most rapidly expanding land use in the south-east generally and is extremely damaging to archaeological sites. There are potential concerns with the urban expansion of Worthing, Brighton, Eastbourne, Chichester and Winchester, as well as proposed threats from out-of-town developments and road construction work.

e) *Forestry* - forests and woodlands are an important element of the South Downs landscape, especially to the west of the River Arun. The value of woodland has long been recognised but little evaluated and has good potential for monument survival, particularly those forests not intensively managed, due to land use stability and the exclusion of arable agriculture.

Current State of Knowledge

At present there is no coherent and inclusive statement regarding the archaeological resource within the proposed South Downs National Park. *The South Downs Conservation Board* plays a strictly supervisory role and has no specific agenda with regards to the management of archaeological sites within its domain. The individual local authorities, Hampshire, East and West Sussex County Councils, who provide advice on conservation strategies through their respective county archaeological officers, manage this, however. In addition, each maintains a comprehensive sites and monuments record service.

Monument density, for the South Downs, as outlined in the MARS report is low; less than 2 monuments per km^2. This compares with Cornwall where monument density is put at around about 5 monuments per km^2 (MARS Report 1998). This statistic reflects the amount of arable land in the area and undoubtedly masks locales at which monument density is high, e.g. Coombe Down, Wolstonbury, Devil's Dyke, St Roche's Hill. (If non-earthwork sites were included a much denser pattern of activity would be evident).

Other, more general, archaeological work in the area has been intense, and consequently, much is already known. RCHME had a substantial involvement in the area with a range of one-off surveys on sites of all periods. Both *The Neolithic Flint Mines of England* and *Neolithic Enclosures* also assessed sites on the South Downs. These were site specific and only occasionally made detailed recommendations about monument attrition or future management strategies.

Vulnerability and Threat

Today the East Hampshire and Sussex Downs AONBs are under considerable threat from a wide range of sources, predominantly, new patterns of agriculture and greater developmental pressures; these all have an adverse effect on the area's special character and qualities. Results from the *South Downs Public Consultation* (Countryside Commission 1998) showed that there was great concern about inappropriate development threatening the natural beauty of the South Downs. Perceived threats include development of the urban fringe, out-of-town stores and business parks, major recreation facilities and unsympathetic conversion of redundant buildings. The main threats can be characterised as follows:

a) *Cultivation* – extensive spreads of the chalk downland and its hinterland are under continuous arable cultivation. Studies of archaeological monuments in East Anglia show that upstanding earthworks under cultivation erode by an average of 19mm a year.

b) *Natural erosion* - particularly relevant along active river courses and unstable coastline with serious problems in the area to the west of Eastbourne.

c) *Development and urbanisation* – with increasing urbanisation along the south coast, this has the potential to be a serious threat.

d) *Road Building and Mineral Extraction* – are significant threats. Disruption due to the up-grading of roads along the south coast is apparent, in particular work related to the A27; other infrastructural elements associated with increasing urbanisation can lead to damage.

Other potentially damaging forces include commercially managed and intensively worked forestry; visitor/recreational erosion; military damage; and vandalism. All monuments or groups of sites which are affected by these agencies must be regarded as being at a high risk of facing imminent destruction or severe degradation.

Landscape (or monument) loss, damage and, therefore, vulnerability, is directly related to current land use and is thus a measurable condition. The nature and rate

of attrition is further related to the scale and age of the monument; total loss and significant damage is more frequent at smaller monuments but these sorts of sites lose less of their area than large monuments and field systems. A more detailed assessment of historic and current land use will facilitate an appraisal of the vulnerability of sites and their local contexts.

Public Need and Contribution of Survey to the Work of Others

The main difference between National Park and AONB designation is the importance attached to public access and enjoyment of the area. National Park designation also requires the promotion of public understanding and enjoyment of the special qualities of the area by providing information and interpretation. There is clearly a need for a current assessment of the totality of the archaeological resource within the proposed National Park area. At present, no such unified approach is apparent and the Sussex Downs AONBs as well as the Chichester Harbour and East Hampshire AONBs are dealt with on an ad-hoc arrangement each serviced by its relevant County Archaeological office. Through analytical recording our work would enable a systematic programme of investigation and interpretation to be put in place. It could address academic concerns, charting the development of the landscape, as well as providing the proposed Park Authority with a quantified resource base against which future management criteria can be assessed. Given the on-going archaeological research in the proposed areas (by local archaeological units, universities and local societies), it would be hoped that the results of our work could feed directly into a wider sphere of usage. One of the stated aims of the National Park would be to encourage visitor awareness and foster social inclusion, as well as an understanding and enjoyment of its cultural diversity and heritage, the English Heritage survey could ensure that its end-products suit these needs either through outreach in the form of lectures/field trips; more traditional forms of publication as well as electronic media.

It is clear that current land use continues to have a great impact upon the character of the area's historic landscape. A careful assessment must be made of the various threats to the cultural environment, and solutions and opportunities for added protection and mitigation identified. Thus, the survey work could also provide a good analytical basis for MARS implementation in that information will be provided on a larger, regional, scale; affording scope, not only for integrated assessment with colleagues at Fort Cumberland (AML, palaeo-environmental researchers are keen to be involved in this work), but also throughout the wider conservation concerns of the organisation.

Any survey work resulting from the project could be targeted to support regional casework concerns (including MPP enhancement and MARS Implementation) as well as other countryside conservation initiatives. Here, we could tailor a number

of our decisions to meet the needs of any SAMs 2 study and thus fulfil our stated desire to continue, albeit in a controlled fashion, a commitment to this work.

The Way Forward

Our work could target a number of key areas:

- We must target our fieldwork to assess the degree of vulnerability and threat to the archaeological resource and from this make recommendations about the best methods of damage limitation and monument/landscape conservation.
- Clarification of outstanding concerns and the creation and maintenance of best management practice via targeted management plans.
- Contribute to on-going research and be pro-active in terms of outreach. This will involve the creation of a research agenda, and thus, ensure that English Heritage take the initiative.
- Creation of suitable media for data analysis and management through a project GIS.
- Our work must integrate with that of the proposed South Downs National Park Authority and other natural heritage agencies (English Nature, MAFF, FRCA), to enable a fuller and more holistic understanding and enjoyment of the landscape.

The Survey in practice

A project of this scale will be highly complex in terms of the consultation and co-ordination required. English Heritage could take the initiative, and have the co-ordinating role, but there may well be the need to develop a consortium of local interests and contributions from county curators, local archaeological societies, The National Trust, relevant university departments, the Countryside Agency, etc.

The scale of the proposed project area precludes any total coverage on the ground and suggests that sampling would be most effective. If we assume that the current AONBs constitute the proposed National Park we are looking at close to 88 1:10000 sheets which will have to be assessed. This equates to ground checking of some 2200 sq kms (each sheet @ 25 sq kms x 88). Even as part of drive and walk-over survey this is an enormous undertaking and is not feasible.

The entire area is to be included within the NMP, so there will be good coverage at 1:10000 scale. This could form the basis of the total rapid survey of the proposed National Park area. I don't suggest that we do a walk-over survey and assess all that has been done by aerial survey. However, much of the area is wooded and includes extensive tracts of newly created plantations as well as long established woodland. On both counts the archaeological value is likely to be very high indeed. These can only be tackled on the ground. So as part of the initial NMP, we should, in tandem, be tackling those areas inaccessible to aerial survey. (Free exchange of information, strong flowlines and goodwill must be established with *external* organisations as well as *internally* if a duplication of effort is to be avoided – this will allow the survey methodology, in a sense, to evolve within the Project parameters).

A Historic Land use Assessment (HLA) should also be a major component of our first phase work. This is important in that it provides a broad overview of previous histories of land use and the forces of change that have acted upon it. These assessments can isolate specific events or processes which had an impact on the cultural environment but they can also lead to the discovery of relict features.

We also need current land use analysis against which to set the archaeological resource and to target those areas deemed most at risk from a number of factors (urban expansion, contra-land use, bikes, rallies, agriculture). High-risk monuments are those which face imminent destruction or vertical loss. Obvious cases include monuments falling into the sea or eroding cliffs; monuments in the path of a road scheme; extraction; urban development. High levels may be seen in forestry activities, arable or urban development.

It would be useful, perhaps, to establish a scale of loss database, in order to plot monument condition over a long period of time. We would then see contrasts between monument type and scale. By providing a general overview of the condition of the archaeological resource and the risks it faces it becomes possible to set a benchmark against which future changes can be monitored. Our work here could be set alongside other environmental assessments and act as a guide to the development and evaluation of conservation and management policies and initiatives.

Our work could help define the South Downs National Park boundaries which, at present, are floating (but are assumed to hold good to the current combined AONBs along this stretch of the south coast).

In addition to the NMP assessment, case study research would be used to investigate patterns of decay relating to particular monument types across as wide a geological and topographical range as possible and to provide background information against which to view the archaeological resource. In doing so we will move away from site specific concerns and look at wider settings and contexts, assessing rates of destruction, threat or vulnerability either through urban expansion, inappropriate agricultural processes or other environmental/recreational conflicts. The results of this would then be used as a platform to establish new management procedures and ultimately to enhance the cultural heritage of the National Park.

In summary

i) Ground enhancement of the NMP survey of total proposed area

ii) Field checking of those areas not responsive to aerial reconnaissance

iii) Current land use assessment (using a combination of ground and aerial survey) – Hampshire County Council have already carried out this exercise for the East Hants AONB.

iv) Historic land use assessment

v) Detailed case-work analysis to include:

Rapid survey at 1:2500

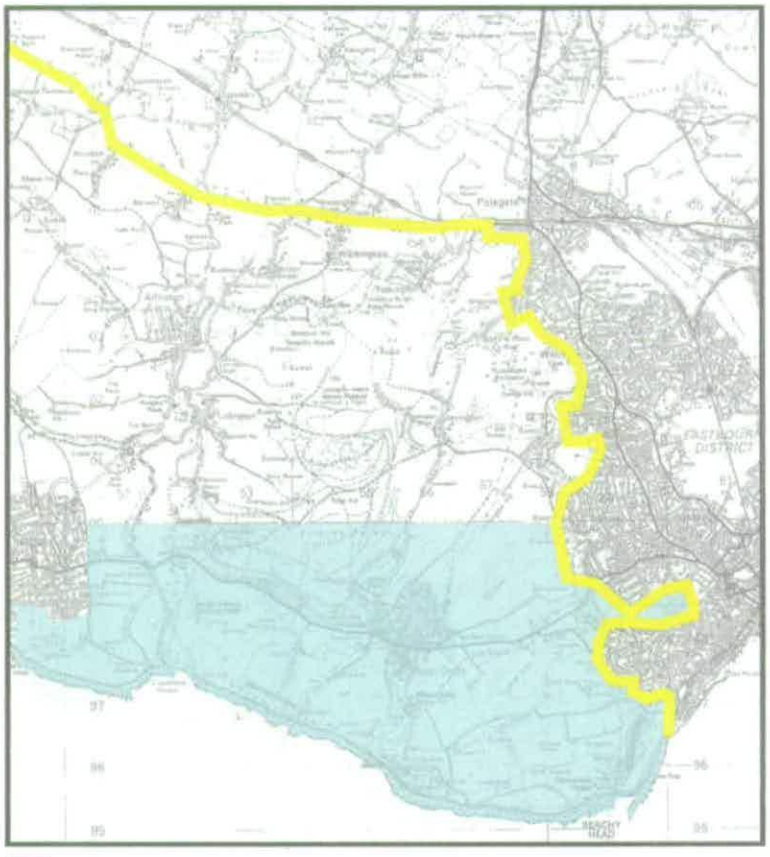
Detailed recording of specific areas within the case study to aid monument interpretation (and thus public and academic appreciation); to identify current management concerns regarding re- or de-scheduling; to enhance and protect vulnerable sites and landscapes; to find new sites and relict landscape features; to develop a coherent research framework that includes a wide range of investigative techniques.

vi) To develop a range of suitable outreach activities enabling a wide target audience to be addressed.

vii) Project duration is to be defined within the specifications of the Project Design but it is anticipated that the overall time limit will not extend beyond 3 years.

CASE STUDIES

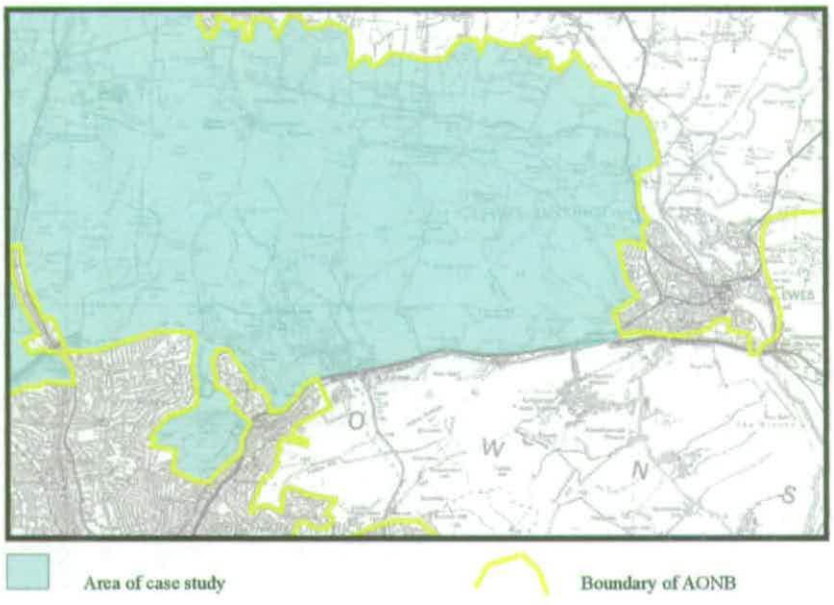
Case Study: Eastbourne



Area of case study Boundary of AONB

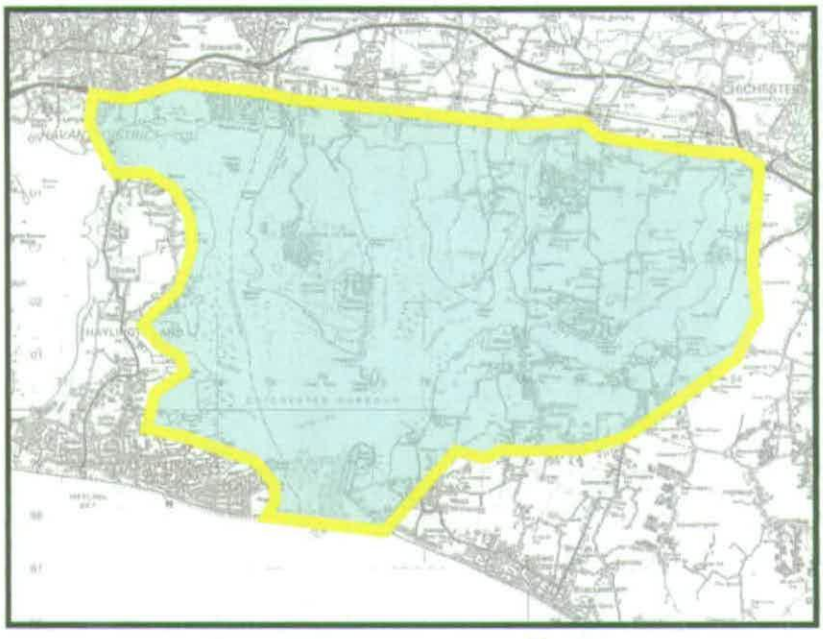
Eastborne Levels. The far eastern limit of the East Sussex AONB and the presumed eastern terminal of the proposed National Park. Evident contrasts between the chalk downland, emerging Greensand and other alluvial (and colluvial) build up. This area includes a coastal strip with good estuarine deposits recently sampled and revealing large-scale use during later prehistory. Much arable cultivation with substantial stretches of pasture and, on the eastern fringe, the expansion of Eastbourne. Severe coastal erosion on the cliff line to the west of Eastbourne.

Case Study: Lewes



Lewes. Largely chalk downland environment but with alluvial/colluvial deposits at the escarpment edges. To the north lie Wealden Clays and Greensand, marking pronounced topographical divisions between the northern scarp edge of the South Downs and the lower lying Clays to the north. Large scale arable exploitation with substantial tracts of semi-natural land and pasture. Recreational conflicts in the form of golf courses (at least two, Hollingbury and Devil's Dyke). Massive urban expansion from Worthing and Brighton, road construction and out-of-town shopping centres.

Case Study: Chichester Harbour

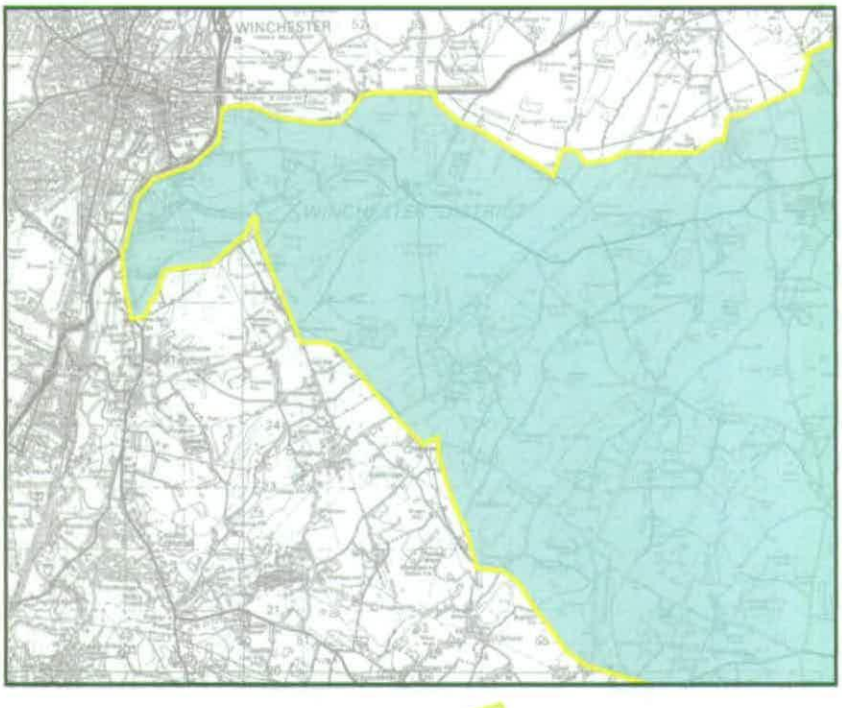


Area of Case Study

Boundary of AONB

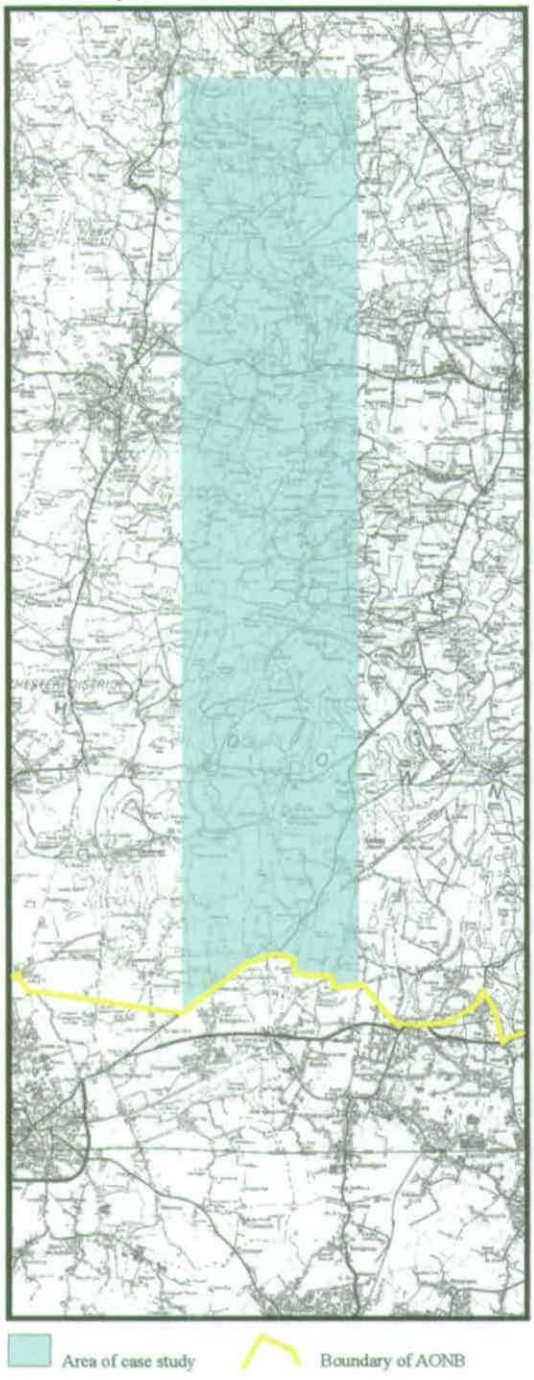
Chichester Coast AONB. Low-lying area off chalk. Flat terrain with lower chalk deposits with alluvial and possibly colluvial build up as well as sands and gravels. Large areas of south coast littoral with marsh and reed swamp; good palaeo-environmental potential in line with Langstone Harbour work (Langstone Harbour is contiguous). Mostly pasture with arable parcels; gravel extraction has taken place to the south west of Chichester but there has been little urban expansion or other recreational inroads.

Case Study: Eastern Hampshire



Winchester. At the western limit of the East Hampshire AONB. Still on the chalk downland, so a mix of middle and upper chalk with occasional tertiary cappings. Pronounced topographical distinctions are not obvious – chalk downland here is undulating and only marked at the western end of the South Downs (in the area of Old Winchester Hill) where a large escarpment drop-off is present. Apart from the chalk there are low-lying Reading Beds and Clay as well as Greensand outcrops, each with their distinctive land use histories. Almost the entire area here is under plough and those areas in pasture have clearly been heavily cultivated in the past. The only areas to escape cultivation in the historic period are the escarpment edges or other places where the steepness of slope is disadvantageous to the plough (e.g. on the steep slopes around Old Winchester Hill). Urban encroachment from Winchester and its satellites continues to be a problem. There are substantial areas of managed woodland.

Case Study: The Weald and Downs



Weald and Downs Transect. This transect will cover the marked topographical and geological changes moving from the lower-lying Weald, with its Clays and Greensand, through to the upland chalk ridge of the South Downs. In doing so it will be possible to assess the landform and its relationship with a range of variables from past land use through to monument density and survival. Current land use varies; on the chalk there are large areas of arable cultivation as well as pasture and woodland. Similarly, in the Weald there are large belts of woodland, some of it long-established and, close to Henley Common, there is a well developed heathland environment.

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