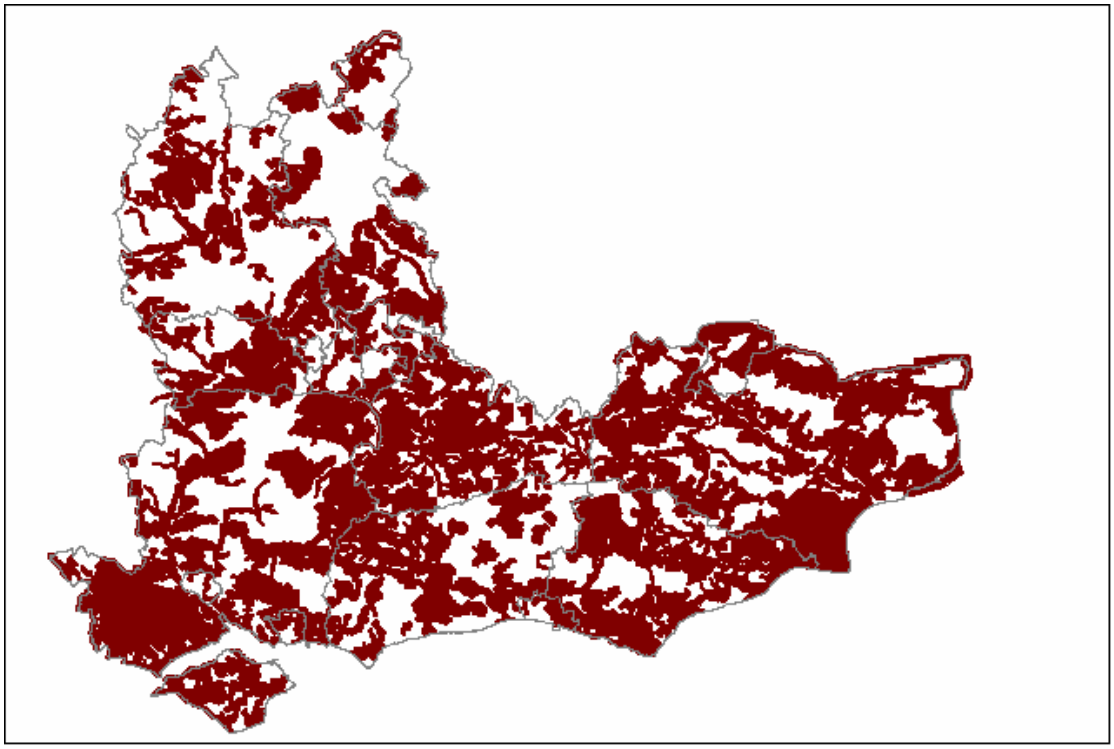
South East England
Biodiversity Forum

South East England Biodiversity Opportunity Areas 2009

Statements Folio



South East England
Biodiversity Forum

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Berkshire

01:01 Walbury and Inkpen Hill

The high chalk Walbury Hill and the escarpment running west into Wiltshire. It extends south along steep chalk slopes into Hampshire. The areas outside Berkshire are indicative only. It is likely that further areas Hampshire and Wiltshire could be added to this area.

Joint Character Area: Hampshire Downs is the east, Berkshire and Marlborough Downs in the west.

Geology: This area is on chalk with small areas of clay-with-flints on the flatter areas.

Topography: a north facing escapement along the northern edge and a chalk hill with steep slopes on the north and south side. The escarpment turns to the south in the east. There are steep west and east facing slopes in the rest of the area where dry valleys run southwards from the escarpment.

Biodiversity:

- Lowland calcareous grassland: extensive areas of chalk grassland on the steep slopes include a number of SSSIs.
- Lowland Mixed Deciduous Woodland: there are a number of woodland sites – a few are on the slopes and others are at the top of the slopes. The largest area is Coombe Wood and Linkenholt Hanging.
- Other habitats: there are some areas of the less steep slopes with grassland that is more neutral to acid in character where gorse scrub is also present.

Geodiversity: Walbury Hill is the highest chalk hill in England. There is a chalk pit at West Woodhay Down.

Access: Much of the downland sites has open access.

Targets and opportunities: chalk grassland management and re-creation. Woodland management.

01:02 Hampstead Marshall to Inkpen Plateau

The plateau that lies between the Kennet Valley and the chalk downs to the south. Encompasses all the acidic plateau sands and gravels. Includes some lower lying land along part of the Enbourne Valley and in the west near Wash Common.

Joint Character Area: Thames Basin Heaths

Geology: The underlying geology in the London Clay formation which consists of mixed areas of clay, silt and sand as well as areas of sand. Overlying this especially in the east and centre of the area there are deposits of Head which consists of a mixture of clay, sand silt and gravel

Topography: This area is a relatively flat or gently rolling plateau with steeper slopes along the edge of the Kennet Valley and above Kintbury.

Biodiversity:

- Heathland and acid grassland are found on the Head that overlies much of the western part of the area. Sites include Inkpen Common and areas within Hampstead Marshall Park, where some extensive flushes are also found.
- Lowland meadow: Lowland meadow habitat is found at Inkpen Crocus Fields and in the west at Avery's Pightle. There are remnants of this habitat in a number of sites in this area, on the London Clay.
- Parkland: The main area of parkland is found at Hampstead Marshall.
- Woodland: This is the main habitat in this area. It includes a number of Sites of Special Scientific Interest (Redhill Wood, Catmore & Winterly Copses, Irish Hill Copse and Enbourne Copse) and many Wildlife Heritage Sites.
- Other habitats and species: There are a number of ponds in the area including the BBOWT reserve at Kintbury, which supports a good population of great crested newt.

Geodiversity: Hampstead Marshall Pit is a geological SSSI.

Access: There are few open access sites such as Inkpen Common. There are a few green lanes such as Holly Lane and there are defined Berkshire Circular Routes in the east and west of the area.

Targets and Opportunities: Management and restoration of lowland meadow, heathland and acid grassland. Management of parkland. Management of woodland.

01:03 Kennet Valley West

The Kennet Valley from Newbury to the County boundary and beyond. The part of the valley in Wiltshire is indicative only and should probably extend along the whole valley to Marlborough. Also includes a section of the River Dun Valley west of Hungerford.

Joint Character Area: Berkshire and Marlborough Downs in the west and Thames Basin Heaths in the east.

Geology: Alluvium and some River Terrace sand and gravel.

Topography: Flat riverside land.

Biodiversity:

- Chalk River: The River Kennet is a rich chalk river notified as an SSSI.
- Lowland meadow and wet grassland: Extensive areas of river valley grassland including wet grassland and lowland meadow habitat. Sites include Hungerford Marsh and Eddington Marsh.
- Fen and reedbed: There are areas of fen at Hungerford Marsh and Eddington Marsh and scattered remnant sites elsewhere.
- Wet Woodland: There are some large areas of wet woodland including the Kennet Valley Alderwoods SSSI.
- Other habitats: the main other habitat is the Kennet and Avon Canal which is an example of standing water habitat. There is also some parkland at Benham.
- Species: The area supports a population of water vole and otter have been re-establishing in the Valley. The wet meadows attract waders such as snipe and the SSSI's, except for the river, are largely part of a Special Area for Conservation due to the populations of Desmoulin's Whorl Snail.

Access: The Canal is the focus of access. Hungerford Marsh is a nature reserve.

Targets and opportunities: River management, restoration and protection. Restoration of wet grassland, lowland meadow and fen habitat. Management of wet woodland. Parkland management.

01:04 Blackwater Valley

The Blackwater Valley from Eversley in the west to Camberley in the east. Includes areas in Hampshire.

Joint Character Area: Thames Basin Heaths

Geology: Alluvium and River Terrace sands and gravels. At the north edge there is occasional fringes of Bagshot Sand.

Topography: flat riverside land.

Biodiversity:

- Lowland Meadow: There are lowland meadows at the east end in the Blackwater Valley SSSI and a small area in a meadow at Eversley.
- Purple Moor Grass and Rush Pasture: This area has the main concentration of this habitat in Berkshire. Rush pasture is found in the Blackwater Valley SSSI and there is a small area in a meadow at Eversley.
- Standing Water: there are numerous Gravel Pits in the area including Moor Green Lakes Nature Reserve. These sites are important for birds.
- Woodland: Fleet Copse is the largest area. There are a number of other small sites including Seebys Copse at Sandhurst.
- Other habitats: the gravel pits have marginal fen, woodland, scrub and grassland areas.

Access: There is controlled access around some of the gravel pits, such as Moor Green and Trilakes Country Park. A footpath follows the River for the eastern half of the area.

Targets and opportunities: management and re-creation of grassland habitats, management of gravel pits and associated habitats. The Blackwater Valley Project works within this area.

In the long term the aim should be to extend the target area through to the River Loddon in the west.

01:05 Lambourn Valley

The valley of the Lambourn River SSSI from Lambourn to its confluence with the Kennet at Thatcham. Includes the valley of the Winterbourne. At the northern and southern ends, and also through some villages, the area narrows to a buffer along the River.

Joint Character Area: Berkshire and Marlborough Downs

Geology: Largely on the alluvium and river gravels extending onto a few chalk areas at the edge in places, including Boxford Chalk Pit.

Topography: flat riverside land with some gentle slopes at the edge in places.

Biodiversity:

- Chalk river: the River Lambourn is an SSSI and a Special Area for Conservation (SAC).
- Lowland Meadow: there are a number of site between Donnington and Great Shefford including Boxford Water Meadows, Easton Farm Meadow and a number of fields adjacent to Easton Farm Meadow.
- Fen: again the main concentration of sites is between Donnington and Great Shefford. Includes a number of areas in the Kennet and Lambourn Floodplain SSSI which includes Rack Marsh at Bangor.
- Other habitats: The Lambourn and the areas within the Kennet and Lambourn Floodplain are notified as a SAC due to presence of Desmoulin's Whorl Snail.

Geodiversity: Boxford Chalk Pit SSSI lies on the edge of the valley.

Access: The main access is along the lambourn valley Way footpath.

Targets and oppurtunties: River management, restoration and protection. Management, restoration and re-creation of lowland meadow, fen and wet grassland habitat especially between Donnington and Great Shefford.

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01:06 Fanborough to Leckhampstead Valley

A chalk valley within a largely clay-with flints area of the Berkshire Downs extending from just south of Farmborough in the north to Leckhampstead in the south.

Joint Character Area: Berkshire and Marlborough Downs.

Geology: Chalk slopes with clay-with-flints at the edge and on the east facing. Headis found along the valley bottom.

Topography: Mainly the eastern, west facing slope along a dry dipslope valley in the Downs. Extends onto the more gently sloping eastern bank in places

Biodiversity:

- Lowland calcareous grassland: Chalk grassland restoration has occurred on a number of fields on the eastern slope.
- Woodland: two areas of ancient woodland are found on the eastern slope.

Access: very limited

Targets and opportunities: restoration of chalk grassland. FWAG have been working in this area and further restoration is expected. Management of woodland.

01:07 Snelsmore Common and Woodlands

Two plateau areas topped by areas of acidic sandy soils encompassing Snelsmore Common and the adjacent woodlands and the woodlands between Shaw and Curridge. Includes any steeper slopes at the edge of the plateau especially along the Winterbourne Valley.
Joint Character Area: Thames Basin Heaths

Geology: The plateaus are topped by Head, which is acidic glacial sand, silt and clay and gravel. This overlies areas of the clay, silts and sands of the London Clay Formation and Lambeth Group (Reading Beds). At the edge there are areas of chalk in places.

Topography: The western area is a relatively flat plateau with slopes on the edge that range from fairly gentle to somewhat steeper, especially along the western edge. The eastern area is more of a ridge to the south, with a narrow plateau and quite steep sides. To the north, off this plateau area, the area is much flatter.

Biodiversity

- Heathland and acid grassland: The most important site is the extensive area of heathland and acid grassland at Snelmore Common, which is managed by West Berkshire Council.
- Woodland: There are extensive areas of woodland in the area including a number of large ancient woodlands such as Bussock Wood and Philip Hill, Upper Grange and Smithy Copses and High Wood and Brick Kiln Copse.

Geodiversity: Important sites include sink holes at Snelsmore and exposures in the sand near Chieveley.

Access: the main focus for access is Snelsmore Common. In the east there are a number of bridleways.

Targets and opportunities: Heathland and acid grassland management. Potential areas for restoration where the Head is found, especially south of Snelsmore Common and on the eastern plateau. Potential for acid and acidic neutral grassland elsewhere. Woodland Management. In the north proposed mineral extraction may provide opportunities for habitat creation.

01:08 Greenham and Crookham Plataeu

Encompasses the whole plateau from Brimpton to Greenham and the slopes along the Kennet Valley in the north and the River Enborne in the south and east. Includes some riverside land along the Enborne in the south, where the River forms the boundary. Extends west to include a group of woodlands at Sandleford.

Joint Character Area: Thames Basin Heaths

Geology: The plateau has a large area of Silchester Gravel the overlies London Clay Sand (Bagshot Beds) which is found in a band at the edge of the Gravel. There are also some areas of Head at the edge of the top of the plateau. The slopes are London Clay Formation clay, silt and sand. There is alluvium along the Enborne Valley. The western section has a similar geology with Silchester Gravel, London Clay Sand ad London Clay Formation.

Topography: a flat plateau that slopes away to river valleys in the north, south and east. The western area is the south facing slope at the edge of the plateau as it extends westwards into the developed land at Wash Common.

Biodiversity:

- Heathland and acid grassland: Extensive heathland and acid grassland areas at Greenham Common with small areas at Bowdown Woods and remnants at the mainly wooded Crookham Common and at Greenham Golf Course.
- Lowland Mixed Deciduous Woodland: Extensive areas on the plateau slopes. Bowdown Woods and the areas within Greenham Common SSSI.
- Wet Woodland: found in the gullies on the slopes at the plateau edge.
- Other habitat and species: farmland near Brimpton supports good populations of farmland birds. The heathland is important for birds and butterflies and there are populations of reptiles and great crested newts in the area.

Geodiversity:

Access: Large areas at Greenham and Crookham Common are accessible. Bowdown Woods is a nature reserve.

Targets and opportunities: management of heathland. Restoration of heathland at Crookham Common with good potential for heathland restoration on extensive Silchester Gravels in the east. Woodland management. Management for farmland birds. The West Berkshire Living Landscape project targets this area providing a focus for management and habitat restoration. FWAG have been working extensively with Manor Farm at Brimpton. There is potential to extend the area to include areas in Hampshire along the Enbourne and at Newtown Common.

01:09 Kennet Valley East

The Kennet Valley from Newbury to Reading extending to include large areas of gravel pits in the east. The area includes all the area in the valley covered by the West Berkshire Living landscape Project. Also includes the lower section of the Enborne Valley extending to include the valley of a tributary stream at Ashford Hill.

Geology: this area lies on the alluvium and River Terrace sand and gravel.

Topography: flat riverside land

Biodiversity:

- Chalk River: The River Kennet is an important chalk river and is notified as an SSSI as far as Woolhampton.
- Reedbeds: This area supports the most extensive areas of reedbed habitat in Berkshire including the SSSI and LNR at Thatcham and the SSSI at Woolhampton.
- Fen: There are some areas of tall fen habitat especially near Thatcham as well as areas within gravel pits in the east and in some of the meadows. There are also areas in the valley at Ashford Hill.
- Wet woodland: There are patches of willow dominated woodland.
- Lowland meadow: the most important area is at Ashford Hill where the valley supports a diversity of lowland meadow and fen habitat.
- Wet grassland: there are remnant areas of wet grassland throughout the valley.
- Standing water: The extensive gravel pits in the east provide important habitat for birds. Hosehill Lake is a Local Nature Reserve. Aldermaston Gravel Pit is an SSSI and Nature Reserve. The associated fen, scrub and woodland habitat adds greatly to the diversity of the area. The Kennet and Avon Canal runs the whole length of the area.

Geodiversity: Brimpton Gravel Pit has important geological exposures.

Access: The canal provides the main focus of access, while the are accessible Local Nature Reserves at Thatcham and Hosehill Lake near Theale.

Targets and Opportunities: River management, restoration and protection. Management and re-creation of reedbed and fen. Management of gravel pits and associated habitats. Potential for some nature conservation afteruse in future mineral extraction. Management, restoration and re-creation of lowland meadow and wet grassland habitat. The west of the area is within the West Berkshire Living Landscape boundary.

01:10 Bucklebury Plateau

The plateau that lies between the Kennet Valley and the Pang Valley. The area runs from Bradfield, west to Cold Ash and then north to Hermitage and Hampstead Norreys. Encompasses the glacial sands and gravels that overlie much of the centre and east of the area as well as the London Clay Formation sand (Bagshot Beds). Includes a small outlying area at Oare Common. Extends onto the chalk in the north west in order to include additional woodland. Also extends off the plateau in the east to include all of Englefield Park.

Geology: The centre of the area, around Bucklebury Common, has an extensive area of Bucklebury Sand. Further east there are patches of Silchester Gravel. In the Cold Ash area there are small patches of glacial deposits including Head. At the edge of the Bucklebury Sand and Head there is a band of London Clay Formation sand (Bagshot Beds). The most extensive underlying geology is the sand, silt and clay of the London Clay Formation. Along the northern edge and including much of the area near Hermitage there is the clay, silt and sand of the Lambeth Group (Reading Beds). At Hampstead Norreys and in the far east of the area there are areas of chalk.

Topography: In the centre this area is a relatively flat plateau with quite steep sides. In the east the plateau narrows and is cut through by the valley of The Bourne. In the west, as the area turns north, there are a group of low hills in the Cold Ash and Hermitage area. Here, the area slopes away more gently to the Pang Valley, in the east, but often more steeply to the dry chalk valley in the west.

Biodiversity:

- Heathland: There is an extensive area of heathland at Bucklebury.
- Lowland Meadow: this habitat is found at a number of sites on the London Clay and Reading Beds especially to the north of Bucklebury Common with a few scattered sites elsewhere. Includes Briff Lane Meadows SSSI.
- Woodland: Numerous ancient woodland sites are found throughout the area including Old Copse and Kings Copse SSSIs, as well as extensive sites owned by Englefield Estate. Some sites, such as Fence Wood, have been largely replanted.
- Parkland: includes Englefield Park which is known to be an important site and areas which are being restored. Also includes parkland at Benham Park.
- Other habitats: includes some land in Countryside Stewardship such as Elling Farm and Marlston Farmhouse including field margins, beetle banks and where re-creation of grassland habitat has taken place. There is a small area of chalk grassland on the old railway near Hampstead Norreys.

Geodiversity: Cold Ash Pit SSSI is included in the area.

Access: The extensive areas at Bucklebury Common and Bucklebury Lower Common provide the main focus for access. There are numerous tracks elsewhere, especially near Cold Ash and Hampstead Norreys.

Targets and opportunities: Heathland management and restoration, lowland meadow management, restoration and re-creation, woodland management. Woodland planting

should be restricted to forming links but needs to carefully consider the value and potential of land for other habitats. Parkland management. West Berkshire Council manage Bucklebury Common which has helped to restore heathland at the site. There are a number of sympathetic landowners including Elling Farm and Englefield Estate.

01:11 Yattendon and Basildon Woodlands

An extensive area encompassing the many woodlands on the clay and Head topped chalk from Aldworth and Basildon in the north to the edge of the Pang Valley in the South. The boundary with the adjacent Blewbury to Streatley Downs is largely dictated by the areas with more extensive, steeper chalk which are included in that area instead.
Joint Character Area: Thames Basin Heaths. The escarpment along the Thames is part of The Chilterns and small areas are with the Berkshire and Marlborough Downs.

Geology: Much of the area is covered with Head and Clay-with-flints. In places, especially where valleys cut through the area, there are areas of chalk. In the south, especially south of the M4, Reading Beds (Lambeth Group) is the main underlying geology with River Terrace sand and gravel and London Clay clay, silt and sand on the top of the hills in the area, such as Burnt Hill.

Topography: A gently rolling plateau cut through by chalk valleys, along with an escapement along the eastern edge. The southern area slopes down to the Pang Valley and the area is rather more hill like in nature.

Biodiversity:

- Lowland Mixed Deciduous Woodland – numerous woodlands, many are ancient woodland and there are some extensive areas.
- Parkland: Large National Trust site at Basildon Park.

Access: Basildon Park, Ashampstead Common, Frilsham Common and Burnthill Common. Numerous bridleways and footpaths including old green lanes such as Pinfold Lane while tracks at Frilsham are part of a defined Berkshire Circular Route.

Targets and opportunities: woodland management, chalk grassland re-creation especially on the valley that runs from Bradfield to Aldworth. The Pang, Kennet and Lambourn Valley's Countryside Project works within this area and there are good landowner relations.

01:12 Lower Pang Valley and Sulham Stream

The Pang Valley from Hampstead Norreys to Pangbourne and forming a wider area in the east to include the Sulham Stream. The extent is largely dictated by the location of alluvium and river gravels.

Joint Character Area: Mainly the Thames Basin Heaths. The north-western area is in the Berkshire and Marlborough Downs, and the north eastern area, at Pangbourne, is in the Chilterns

Geology: Alluvium and River Terrace sands and gravels

Topography: Flat riverside land

Biodiversity:

- Chalk River: The Pang is a chalk river.
- Wet grassland: There are extensive areas of wet grassland habitat along the Pang valley especially between Tidmarsh and Stratford Dingley
- Lowland Meadow: The main areas of lowland meadow habitat are found in the Sulham and Tidmarsh Woods and Meadows SSSI including areas at Moor Copse Nature Reserve. Some of this grassland is very acidic in nature. There are patches of lowland meadow habitat amongst wet grassland elsewhere in the valley.
- Wet Woodland: there are numerous areas of wet woodland along the valley including the woodland parts of the Sulham and Tidmarsh Woods and Meadows SSSI which includes Moor Copse Nature Reserve.

Access: There are a number of footpaths in the east and Moor Copse is a nature reserve. In the west access is limited to a few tracks in the valley.

Targets and Opportunities: River management, restoration and protection, management and re-creation of lowland meadow and wet grassland, management of woodland including wet woodland. The area has been targeted by a FWAG project. Significant areas are in Countryside Stewardship with landowners include Elling Farm and Englefield Estate. The recent extension to the BBOWT Moor Copse Nature Reserve provides significant opportunities for extending wet grassland and lowland meadow habitat.

01:13 Burghfield to Tadley Heaths

The plateau south of the River Kennet and east of the River Enbourne. Extends from Wasing in the west to Burgfield in the east. Encompasses all the glacial gravel soils that overlie much of the area as well as the steeper sides of the plateau. Extends into Hampshire to include areas with similar geology including the heathland at Silchester Common, although the extent of this area is indicative only.

Joint Character Area: Thames Basin Heaths

Geology: The area is extensively covered by the glacial Silchester Gravel deposits. Fringing this is an often narrow band of London Clay Formation sand (Bagshot Beds), which forms a few more extensive patches in places. There are some patches of Head which is gravel, sand, silt and clay. The slopes are largely London Clay Formation clay, silt and sand.

Topography: A largely flat plateau with steep sides in places especially in the north west.

Biodiversity:

- Heathland: Scattered heathland remnants are found at sites such as Decoy Heath, as well as the more extensive area at Silchester Common. Many heathland areas have been planted with woodland in the past.
- Acid grassland: there are scattered areas of acid grassland south of Aldermaston and associated with some of the commonland.
- Parkland: important parkland habitat is found at Aldermaston Court and there is also parkland habitat within the AWE site.
- Standing water: there are a number of important ponds and small lakes including those at Decoy Heath and Wasing Wood Ponds. These sites are important from dragonflies and damselflies.
- Woodland: this is the most extensive habitat in the area. Sites include Redlands Copse (part of Ashford Hill Woods and Meadows SSSI) and Wasing Wood. Also includes Pamber Forest which is an important site for butterflies. Much of the woodland is secondary woodland that has developed on common land or in plantation, often on old heathland sites. Wet woodland is found in gullies where narrow valleys cut through the plateau ay sites such as Padworth Gully.
- Lowland meadow: restricted to one site – West Meadow at Aldermaston which is quite acidic in nature.

Access: There are a number of accessible commons including Wokefield, Padworth and Silchester. Decoy Heath is a nature reserve.

Targets and Opportunities: heathland and acid grassland restoration. There is much potential for heathland restoration in planted woodland sites. Parkland and woodland management. There is potential for lowland meadow creation on the London Clay formation but this is not a priority target for this area. The West Berkshire Living Landscape Project area extends onto this area at the western end.

01:14 West Reading Woodlands and LNR

An urban fringe and urban site. In the west it encompasses the escarpments at the edge of the pang Valley where there is much woodland and land owned by Englefield Estate. The rest of the area includes the Reading Woodlands Local Nature reserve, a group of mainly wooded sites within Tilehurst as well as a number of other woodlands in this area.

Joint Character Area: Thames Valley. The northern sections fall into The Chilterns.

Geology: The western slopes are chalk with Reading beds to the south and a small area of London Clay clay, silt and sand near Calcot. At the top of the slope there are more areas of Reading Beds with some glacial Winter Gravel. The rest of the area is a mixture of the same London Clay Formation, Reading Beds, a little Winter Gravel and at McIllroy Park the glacial Black Park Gravel Formation.

Topography: There is a west facing escarpment in the west while most of the areas in Tilehurst area on the slopes of the plateau in the area

Biodiversity:

- Lowland Mixed Deciduous Woodland: There are extensive areas of ancient woodland on the western escarpment and a number of sites located within Tilehurst which are form the West Reading Woodlands LNR.
- Parkland: There is a small area of parkland at Purley Hall near Pangbourne.

Geodiversity: Includes the exposures at Pincents Kiln SSSI.

Access: A number of accessible LNR sites in an urban location. A number of bridleways in the west including parts of the Berkshire Circular Routes.

Targets and Opportunities: woodland management, parkland management, potential for restoration of grassland habitats on the steeper slopes in the west in particular. The LNR provide good opportunities for woodland management within an urban setting. Much of the western area is owned by the Sulham Estate who are keen to enter the HLS scheme at the time of writing.

01:15 Loddon Valley Gravel Pits

This area encompasses all the gravels pits at the north end of the Loddon Valley between Winnersh and Twyford and includes various areas of adjacent land with woodland and grassland habitats. The area extends northwards to include riverside land that floods regularly including land within Oxfordshire.
Joint Character Area: Thames valley

Geology: Mainly on alluvium and River Terrace Sand and Gravel.

Topography: Flat riverside land.

Biodiversity:

- Standing water: extensive areas in gravel pits including Lavells Lake LNR and Sandford Lake at Dinton Pastures Country Park and Loddon Nature Reserve. The whole area is important for wildfowl and other other birds.
- Wet Woodland: Includes Lodge Wood SSSI, Alder Moors LNR and Sandford Fen and small areas associated with the gravel pits. Loddon lily is found at Lodge Wood and Warren Wood in Oxfordshire.
- Lowland Mixed Deciduous Woodland: Alder Moors is ancient woodland and has lowland mixed deciduous woodland as well as wet woodland. There are areas of more recent woodland at Dinton Pastures.
- Fen and reedbed: there are areas of marginal fen habitat associated with the gravel pits and remnants at Sandford Fen. In Oxfordshire there is an area of reedbed at Warren Wood and remnant fen at Shiplake Marsh.
- Other habitats: sites include Charvil Meadows and meadows at Dinton Pastures with remnants of grassland habitat and there is scrub at the edge of the gravel pits.

Access: Numerous sites have access including Dinton Pastures Country Park, Charvil Meadows, Loddon Reserve, Alder Moors

Targets and Opportunities: Co-ordinated management of gravel pits to enhance biodiversity, management of Wokingham Council owned sites to enhance biodiversity, management of wet woodland habitat, re-creation of fen and grassland habitats. Mineral extraction provides further opportunities to enhance biodiversity. Significant areas of land are managed by Wokingham Council.

01:16 Loddon Valley (South)

The Loddon Valley from Winnersh to Stratfield Saye and includes the lower reaches of the River Blackwater and Swallowfield Park and the north end of Stratfield Saye Park in Hampshire. The area within Hampshire is indicative only. The extent is largely dictated by the extent of the alluvium and sand and gravels in the valley.

Joint Character Area: Thames Basin Heaths.

Geology: Alluvium and River Terrace sand and gravel.

Topography: Flat riverside land.

Biodiversity:

- River: The River Loddon is a Wildlife Heritage Site and the southern end is an SSSI. It supports a range of uncommon aquatic species.
- Lowland Meadow: Stratfield Meadows SSSI is the main area of this habitat.
- Wet woodland: there are some small patches of wet woodland close to the River and the wetter parts of some of the larger woodlands are also wet woodland.
- Parkland: Swallowfield Park is an extensive area of parkland with grassland and lies mainly on the sand and gravel.
- Lowland Mixed Deciduous Woodland: A small number of woodlands are found within the area including Great Wood at Swallowfield. There is an extensive area of recently planted community woodland near Lower Early.
- Species: the farmland near Swallowfield is important for farmland birds such as yellowhammer. These are also found along the River Blackwater along with lapwing.

Access: Generally quite limited although there is a large community woodland site in the north.

Targets and Opportunities: River management, restoration and protection, management and re-creation of lowland meadow habitat, management of wet woodland, management of parkland. Management of farmland for farmland birds. Mineral extraction is proposed in parts of the valley which should provide opportunities for habitat creation including reedbed creation. The Environment Agency have produced a biodiversity strategy for the Loddon catchment. In the long term this area should be connected to the main River Blackwater target area and could take in streams such as the Barkham Brook.

01:17 Chilterns Escarpment

The southern Chilterns escapement running from Wargrave to Cookham and including some of the steeper sloped chalk valleys that run south in places. Also includes a few areas of adjacent riverside land where important sites are found.

Geology: This area is largely chalk. There are patches of glacial gravel deposits on the gentler slopes and at the top of the escapement and small areas of Reading Beds (Lambeth Group). The riverside land is alluvium and river gravels.

Topography: A north facing escarpment that becomes west facing at the western end.

Biodiversity:

- Chalk grassland: There are scattered sites mainly at the western and eastern end. At the eastern end these include the escarpment at Cock Marsh SSSI, an area owned by the Woodland Trust and areas at Temple Hill Golf Course. There are small remnant areas in the west and very little in the centre except for a small area at Hurley Chalk Pit.
- Woodland: There are extensive areas of woodland owned by the Woodland Trust in the east including Bisham Woods SSSIs. In the west there are large ancient woodland sites including Remenham Wood and the mainly replanted Rosehill Wood.
- Fen: Wargrave Marsh is an extensive area of fen and wet grassland. There are marshy areas at Cock Marsh.
- Other habitats and species: there is a small area of wet woodland with Loddon Lily near Henley Rowing Club. Cock Marsh is an extensive area of riverside grassland. Park Place is an important site for bats.

Geodiversity: there are important sites at Bisham and at Church Quarry Remenham

Access: There is access at the Woodland Trust reserves and at Cock Marsh. There are limited access opportunities in the west.

Targets and opportunities: Chalk grassland management, restoration and re-creation. Woodland management. Fen and wet grassland management at Wargrave Marsh, extending the site further south. Grassland restoration at Cock Marsh. Large areas of woodland and some chalk grassland is managed by the Woodland Trust. Cock Marsh is owned by the National Trust.

01:18 Ashley and Bowsey Hills

Two hills that rise out of the chalk between Wargrave and Maidenhead with extensive areas of woodland extending to Knowl Hill Common in the south.

Joint Character Area: The Chilterns

Geology: Most of the area is London Clay Formation clay, silt and sand, topped in places by Head and sand and gravel of uncertain origin. On the lower slopes of the hills there are Reading Beds (Lambeth Group). At the northern edge there is some chalk.

Topography: two hills rising out of the chalk.

Biodiversity:

- Woodland: there are extensive areas of ancient woodland, though much of Ashley Hill Forest has been replanted with conifers and broadleaves. The woodland on Bowsey Hill is more semi-natural in character and some is beech woodland.
- Parkland: there is an area of parkland in the west of the area at Cayton Park.

Geodiversity: at Knowl Hill there is a quarry and old brickworks site with important geological exposures. This geological interest is also evident at Knowl Hill Common. There are also interesting gravel pit sites on both hills.

Access: Besides the good network of footpaths and bridleways, some of the woodland at Warren Row has open access.

Targets and opportunities: Woodland management including restoration of replanted ancient woodland sites, parkland management. Protection of geological exposures.

01:19 Waltham to Binfield Woods and Parklands

North of Wokingham and Bracknell there are numerous scattered ancient woodland sites as well as some areas of Parkland. This area encompasses the main concentration of these sites covering an area from White Waltham in the east to Haines Hill and Standlake Parks in the west and Binfield in the south.

Joint Character Area: Thames Valley

Geology: The southern part of this area is on the clay, silt and sand of the London Clay Formation with occasional areas of River Terrace Sands and Gravels. To the north there is a band of Lambeth Group (Reading Beds) There is also an area of chalk at the northern end and occasional areas of alluvium along streams.

Topography: A relatively flat area cut through by two shallow stream valleys.

Biodiversity:

- Lowland Mixed Deciduous Woodland: There are numerous sites with ancient deciduous woodland in this area including Great Thrift Wood SSSI and the large Great Wood. Some of the woodlands are obvious remnants of once larger sites.
- Wet Woodland and fen: Wet woodland is found in places along the streams and some is found in association with fen habitat. Some of the fen habitat has been planted with poplars and willows, including Hungerford Meadow, which supported a mix of fen, wet grassland and lowland meadow habitat.
- Lowland Meadow: There are a small number of sites with lowland meadow habitat, or remnants of lowland meadow habitat in the north-west of the area.
- Parkland: The parklands are not particularly well known but there is one large site, Haines Hill Park, the adjacent Standlake Park, both of which have veteran trees, and also Billingbear and Shottesbrooke Parks. There are a number of other parkland sites.
- Farmland: the area south of Littlewick Green supports the last known population of corn bunting in East Berkshire.

Access: Limited to footpaths and bridleways**.**

Targets and opportunities: management and restoration of woodland. The relative lack of other habitat makes this a good target area for additional woodland planting although there is good potential to recreate and to restore and extend the remaining lowland meadow habitats and there is also farmland bird interest. Parkland management. Fen management and restoration, including removal of some wet woodland. Management for farmland birds.

01:20 Maidenhead Thicket and Commons

Encompasses Maidenhead Thicket and the common land at Pinkneys Green and Cookhamdean Common as well as a few adjacent woodlands.

Geology: Chalk in the south with Lambeth Group (Reading Beds) in the north of the area.

Topography: The area is largely quite flat.

Biodiversity:

- Woodland and scrub: Maidenhead Thicket is largely secondary woodland and tall scrub. There are two areas of ancient woodland next to Cookhamdean Common.
- Grassland: there is small area of acid grassland at Maidenhead Thicket. The commons have remnant grassland habitats.
- Other habitats: there is remnant parkland habitat at Pinkneys Green.

Access: most of the area has open access.

Targets and Opportunities: woodland management, grassland restoration and management. Most of the land is owned by the National Trust providing potential for habitat restoration.

01:21 Chawridge Valley

The narrow valley of the Chawridge Bourne centred on Chawridge Bourne SSSI and including areas of woodland in the vicinity and sloping land at Folijohn Park.

Joint Character Area: Thames Valley

Geology: This area lies on the London Clay Formation of clay, silt and sand. There are areas of River Terrace Gravels at the top of the slopes in places.

Topography: a narrow valley running north south with east and west facing slopes. The slopes turn eastward and westward at the northern end and the slope faces north. The area includes some of the flatter land at the top of the slopes.

Biodiversity:

- Lowland Meadows: Chawridge Bank is a diverse area of lowland meadow habitat managed by grazing. Lowland meadow habitat has also been found in the south of the area.
- Lowland Mixed Deciduous Woodland: There are areas of woodland along the stream within the SSSI, on the valley slopes especially in the north, further areas along Hogoak Lane, west of the valley and two other areas of woodland in the west of the area.
- Scrub – there are extensive areas of scrub along the valley and scattered scrub in the grassland habitat.

Access: Chawridge Bank is a nature reserve and Hogoak Lane is a green lane.

Targets and opportunities: Management and re-creation of lowland meadow habitat to extend an important but fairly isolated site. Woodland management. Scrub management.

01:22 Thames Basin Heaths

This area includes the Thames Basin Heaths SAC and the area between Bracknell and Ascot including Swinley Park and Brick Pits SSSI and Englemere Pond SSSI. To the west it includes a band of land south of Crowthorne and Wokingham where there are more heathland and bog sites such as Sandhurst to Owlsmoor Bogs and Heaths and a group of sites with remnants of these habitats.

Joint Character Area: Thames Basin Heaths

Geology: This area has a complex and varied geology doiminated by various types of sand. The central area where the SAC is located has Camberley Sand with large areas of Surrey Hill Gravel. In the east there are the clays, silts and sands of the Windlesham Formation and in the north east Bagshot Formation sand. There are also patches of Swinley Clay, Head and River Terrace Gravel and Sand. The western has Camberley Sand, overlain in places by River Terrace Sand and Gravel, and a band of Windlesham Formation Sand. The north western area is Bagshot Sand with Head and River Terrace Sand and Gravel.

Topography: a relatively flat area with slopes running down to the Blackwater Valley in the west.

Biodiversity:

- Heathland and Bog: There are extensive areas of heathland and bog at Sandhurst to Owlsmoor Bogs and Heaths SSSI, Wellington Bog SSSI and within the largely wooded Broadmoor to Bagshot Heaths and Woods. Remnants are found elsewhere including the golf course at Crowthorne. Bog is also found in association with ponds and small lakes at Englemere Pond and Rapley Lakes. In the west remnants of these habitats are found. The heathland is important for species such as nightjar, woodlark and Dartford warbler and also reptiles and butterflies such as silver studded blue and grayling.
- Woodland: there are extensive areas of largely planted woodland and some semi-natural acidic woodland areas. There are patches of wet woodland in places.
- Parkland and Wood pasture. There are numerous veteran trees within planted woodland at Swinley Park.
- Ponds: the ponds and small lakes at Swinley Brick Pits, Rapley Lakes and Wellington College support good populations of dragonflies and damselflies, which are also associated with a number of other sites, and there are great crested newts at Swinley.
- Other species: there is a water vole population near Sandhurst.

Geodiversity: The area has a number of important features such as the clear changes in underlying geology shown at Finchampstead Ridges.

Access: Finchampstead Ridges is owned by the National Trust. Access in the east is extensive but controlled with nature reserves and other open access areas.

Targets and Opportunities: Heathland and bog restoration and management. Access control. Significant areas of land are owned by MOD, Crown Estate, national Trust and BBOWT.

01:23 Lambourn Downs

This area consists of two areas of the Berkshire Downs to the south, west and east of Lambourn, on either side of the Lambourn Valley, extending south to Great Shefford. This area has some steep slopes with areas of chalk grassland and also has a concentration of ancient woodland sites.

Joint Character Area: Berkshire and Marlborough Downs.

Geology: Chalk slopes with clay and flints at top of the slopes

Topography: Mainly north and east facing slopes extending onto some flatter areas along the southern edge.

Biodiversity:

- Lowland calcareous grassland: Chalk grassland is found on the steeper slopes including White Shute Hill, Westfield Farm Bank and Cleeve Hill which are SSSI's. Remnants are present elsewhere including areas on Coppington Down and Maidencourt Down. Restoration has taken place in the north of the area and in the valley stretching east from Great Shefford.
- Lowland Mixed Deciduous Woodland: Numerous ancient woodland sites are found at the top of slopes, often on the clay-with-flints but extending onto the chalk in places.
- Butterflies: chalk grassland butterflies are associated with the chalk grassland sites.

Geodiversity: Includes Fogham Quarry SSSI

Access: The area has many byways, bridleways and footpaths.

Targets and opportunities: Chalk grassland management and re-creation with the steeper slopes providing the best opportunities. Woodland management and possible link planting on clay-with-flints area. The extensive areas of arable land in the east provide potential for farmland management for birds in particular. In the long term the east of this area could be extended northwards where the geology is mainly chalk.

01:24 Windsor Great Park and Woodlands

This area includes Windsor Great Park SSSI along with adjacent parkland and various areas to the south with similar habitats including Silwood Park, some large woodlands, Ascot racecourse and a number of sites on the edge of Ascot.

Joint Character Area: Thames Valley. The southern edge is in the Thames Basin Heaths Area.

Geology: the northern area including most of Windsor Great Park is London Clay Formation clay, silt and sand. In the south there are low hills and other areas, with areas of Bagshot Sand and topped by River Terrace Sand ands Gravels and with some bands of Head.

Topography: relatively flat in the north with a mixture of low hills, gently sloping valley sides and flatter areas in the south.

Biodiversity:

- Parkland and Wood Pasture: Windsor Great Park is an extensive area of parkland and old wood pasture with large numbers of veteran trees. These support important specialist invertebrate and fungi populations. Further parkland is found to the north-west of the area. Parkland habitat is also found at Silwood Park.
- Woodland: There are extensive areas of woodland. Many areas are ancient woodland though significant areas have been replanted in the past. In the wet valleys there is wet woodland with extensive areas at Silwood Park.
- Acid Grassland: there are areas of acid grassland, especially in Windsor Great Park with remnants elsewhere.
- Lowland Meadow: There are areas of lowland meadow habitat in Windsor Great Park and also extensive remnants of this habitat.
- Standing Water: There are a variety of water bodies ranging from small ponds to large lakes, such as Virginia Water.
- Fen: there are a number of acidic flushes in grassland sites in the south, such as on Primrose Hill, and remnants of rush pasture habitat in places. There is also some swamp habitat fringing some of the water bodies.
- Heathland: though not extensive, there are areas of heathland in Windsor Great Park and remnants at Ascot Race Course.

Access: the is much access at Windsor Great Park

Targets and opportunities: management of parkland and wood pasture, management of woodland, management and restoration of lowland meadow, acid grassland, heathland and fen habitat. Natural England have worked closely with Crown Estates in the management of management of Windsor Great Park.

01:25 Bray to Eton Meadows and Pits

This area encompasses the main group of Thames Valley grasslands in East Berkshire, along with a group of gravel pits at Bray, the Eton Rowing Lake and adjacent country park. It extends northwards to include Dorney Common, in Buckinghamshire, and a section of the Jubilee River and adjacent land near Slough Sewage Works. The area within Buckinghamshire is indicative only.

Joint Character Area: Thames Valley

Geology: Alluvium and sand and gravel.

Topography: Flat riverside land.

Biodiversity:

- Lowland Meadow: includes a variety of sites with lowland meadow habitat including Bray Meadows SSSI, Bray Pennyroyal Field and Sutherland Grange LNR. Near Eton there are a number of meadows with remnants of lowland meadow habitat. Includes the extensive area of Dorney Common in Buckinghamshire. There are areas of recreated grassland habitat at Braywick Park LNR and adjacent to the Jubilee River.
- Gravel Pits: The group of pits at Bray, which includes Bray Pit Nature Reserve along with Eton Rowing Lake and the adjacent pits in the country park provide good habitat for birds.
- Other habitat: there is a small area of parkland along with planted scrub and wood at Braywick Park. There is a small area of fen near Eton. There are areas of wet woodland near the river in the east.
- Species: there is further ornithological interest along the Jubilee River especially for wading birds and kingfisher. Water voles are also found here. The area is also important for barn owls.

Access: There is extensive access to the areas at Eton and Dorney, much of which is commonland. Elsewhere there is access at Braywick Park LNR, Sutherland Grange LNR and the Country Park next to the rowing lake. The Thames Path goes through the area.

Targets and Opportunities: Management and restoration of lowland meadow habitat. Management of gravels pits. Creation of fen habitat. Dorney Common and areas at Eton are common land. Management for barn owls including nest boxes. The Environment Agency has been involved in habitat creation along the Jubilee River. Braywick Park and Sutherland Grange are LNRs. The Country Park, next to Eton Rowing Lake, provides good opportunities for habitat creation. Part of the area near Holyport is being considered for mineral extraction. There is potential to include additional areas in Buckinghamshire such as proposed gravel extraction areas near Taplow.

Note 01:26 Haymill Valley is a Local BOA and not included in the regional map.

01:27 Colne Valley Reservoirs and Gravel Pits

This area encompasses the extensive gravel pits near Wraysbury and the large reservoirs in the area including those at Staines in Surrey.

Joint Character Area: Thames Valley

Geology: Alluvium and river valley gravel known as Shepperton Gravel.

Topography: this area is flat, except for the man made embankments surrounding the reservoirs.

Biodiversity:

- Standing Water: extensive areas in the reservoirs and gravel pits. Includes Staines Moor SSSI and Wraysbury Gravel Pits SSSI. These areas are important sites for birds. Also included is the Arthur Jacobs Nature Reserve.
- Lowland meadow and wet grassland: extensive areas of wet grassland has developed on infilled land that is now part of Wraysbury Gravel Pits SSSI. There is lowland meadow habitat at Staines Moor SSSI.
- Other habitats: around the gravel pits there are areas of woodland, fen, wet woodland, rough grassland, scrub and tall herb. The River Colne and the Colnbrook flows through the area.

Access: A few sites are accessible such as Arthur Jacobs Reserve and areas at Staines Moor. There are bird watching viewpoints on some of the reservoirs.

Targets and opportunities: management of gravel pits and reservoirs for birds. Management of associated habitats and management of grassland habitats. Potential for biodiversity gains with future mineral extraction.

01:28 Berkshire Downs Escarpment

The western section of the escarpment running from Letcombe to the county boundary, divided into two core sections that correspond to the areas identified in the AONB Chalk Grassland report. These sections have the main areas of chalk grassland and significant archaeological features such as Uffington White Horse and Castle, Wayland Smithy and Segsbury Camp. The area extends south of the most steeply sloping escarpment to the Ridgeway. It also includes slopes along hills running south into Berkshire, in the vicinity of Seven Barrows, and land including Kingston Down and Ashdown Park. Besides the further areas of chalk grassland this section is rich in archaeological features.

Joint Character Area: Berkshire and Marlborough Downs.

Landscape Types: Chalk Downland Slopes.

Geology and geomorphology: Chalk with a number of coombes.

Topography: A north and north west facing escarpment and east and west facing steep banks in the southern area.

Biodiversity:

- Chalk grassland. Extensive areas of chalk grassland at White Horse Hill and Hackpen Hill. The main site in Berkshire is at Seven Barrows while there are remnants in some other locations.
- Woodland: The main sites are near Uffington, within the SSSI and at Ashdown Park. There are a few plantations.
- Parkland: Ashdown Park has some good veteran trees and includes an SSSI for the lichen flora on sarsen stones.
- Species: the arable land supports a good flora and the area is good for farmland birds. Stone curlew have been recorded in this area.

Geodiversity: there are a number of sites with sarsen stones including Ashdown Park and Parkfarm Down. Uffington Hill has important geomorpholoical features associated with the coombes.

Access: Open access at Whitehorse Hill. A number of areas are included in CROW. The Ridgeway and other bridleways. There is also some access on National Trust land at Ashdown Park.

Targets and opportunities: Chalk grassland management and restoration. Protection of archaeological and geological features. Management for arable wildflowers and farmland birds. Veteran tree and woodland management at Ashdown Park. This is a priority target area for Oxfordshire and work is already underway.

01:29 Blewbury to Streatley Downs

Originally included in the Oxfordshire Conservation Target Areas as Blewbury Downs South East and encompassing the Berkshire Downs area to the south east of Blewbury as far as Streatley. The area has been extended south towards Basildon to include further areas of steep chalk slopes in order to form a sensible boundary with the contiguous Yattendon and Basildon Woodlands target area.

Joint Character Area: Berkshire and Marlborough Downs

Geology: Chalk

Topography: Steep banks on the Berkshire Downs escarpment and dry valleys that cut into the escarpment.

Biodiversity:

- Chalk Grassland: extensive areas along banks throughout the area. Some restoration work has also taken place.
- Lowland Mixed Deciduous Woodland and Beech Woodland: One large site in Oxfordshire with both types of woodland. There is also woodland at Streatley and some plantations.
- Species: Stone curlew target area. An important area for butterflies. An important area for arable wildflowers.

Access: The area is crossed by the Ridgeway and other byways and bridleways. It includes the National Trust land at Streatley.

Targets and opportunities: Chalk grassland management and restoration. Management of arable land for farmland birds and arable wildflowers. Woodland management.

South East England Biodiversity Forum

Buckinghamshire

02:01 Thame Valley

The Thame Valley BOA covers the Thame between Waterperry and Haddenham.
Joint Character Area: Upper Thames Clay Vales with a small area in the Midvale Ridge,

Landscape Types: Mostly agricultural unwooded land. The area south of Ickford is agricultural wetland.

Geology: Predominantly mudstone and limestone interbedded, overlain by sand, silt and gravels.

Topography: A wide gently undulating valley

Biodiversity:

- Rivers and Streams – The River Thame and its tributaries offer an important means for species distribution through the area.
- Lowland Meadows – There is a concentration of neural grassland sites.
- Hedgerows – There are concentrations of pre-18th century enclosure around Shabbington and these may contain species rich hedgerows.
- Ponds – There are ponds scattered across the area.
- Wood Pasture and Parkland – There is potential parkland habitat at Tythrop House.

Access: There are some public footpaths crossing the BOA.

Archaeology: There is ridge and furrow scattered across the area. There are three Registered Parks and Gardens – Eythrope Park, Mentmore and Hartwell House. There are 12 SAMs in the area.

Targets:

- Rivers and Streams – Management, Restoration
- Lowland Meadows –Management, Restoration, Creation
- Hedgerows – Management, Restoration, Creation
- Ponds – Management, Restoration, Creation
- Wood Pasture & Parkland - Management, Restoration

02:02 Upper Ray

This area consists of the low lying valley of the Upper River Ray as it flows from Grendon Underwood to the border with Oxfordshire. It also includes the hills around Charndon. The BOA connects with the Bernwood BOA and the Ray Conservation Target Area in Oxfordshire

Joint Character Area: Upper Thames Clay Vales

Landscape Types: Unwooded agricultural lowlands

Geology: Largely Oxford Clay mudstone. There is alluvium along the streams and occasional patches of Till and Head

Topography: A flat river valley

Biodiversity:

- Lowland Meadows: Extensive areas of lowland meadows including MG1, MG4,MG5b,MG6 & MG11 communities.
- Ponds: There are numerous ponds scattered across the meadows.
- Streams:The Upper Ray is serviced by a number of streams, including the Tetchwick Stream.
- Species: An important area for Great Crested Newts, Brown Hairstreak and True Fox Sedge

Access: BBOWT own several parcels of land adjacent to the Ray. Otherwise parts of the area are poorly served by public footpaths

Archaeology: There is a large amount of surviving ridge and furrow in the area with the fields around Ludgershall being of national importance.

Targets:

- Lowland Meadow: Management, Restoration
- Ponds: Management, Restoration, Creation
- Rivers: Management, Restoration
- Hedgerows – Management, Restoration

South East England Biodiversity Forum

02:03 South Western Commons

An area with a diverse geology, topography and biodiversity. The higher ground, acid grassland and heaths of Lane End and the lower areas of chalk.
This BOA connects with Hambleden & Wormsley Valleys BOA

Joint Character Area: Chilterns

Landscape Types: Wooded agricultural land

Geology: Mudstone (including London Clay). Moorend Copse contains swallow holes where streams drop through the clay into the chalk beneath.

Topography: The land generally drops away gently to the south. There are two adjacent valleys with much steeper sides – to the south east near Marlow and the Hambleden Valley to the west.

Biodiversity:

- Acid Grassland – There are 2 areas of lowland dry acid grassland at Moorend Common SSSI.
- Lowland Meadows – There is an area of lowland meadow at Frieth Meadows SSSI.
- Heathland – There are areas of heathland on Moorend Common SSSI.
- Woodland - including areas of Beech High Forest and Wet Woodland (wet woodland at Widdenton Park Wood SSSI).

Access: Lane End Parish Council own Moor End Common. There are numerous footpaths across the area.

Archaeology:

Targets:

- Acid Grassland – Management, Restoration, Creation
- Lowland Meadows - Management, Restoration, Creation
- Heathland - Management, Restoration, Creation
- Woodland - Management, Restoration
- Hedgerows – Management, Restoration
- Arable Field Margins – Management, Creation

02:04 Whittlewood Forest

This area covers the Yardley-Whittlewood Ridge north of Buckingham. It is more heavily wooded than most of the rest of Aylesbury Vale and contains areas of parkland including Stowe.

Joint Character Area: Yardley – Whittlewood Ridge and Bedfordshire & Cambridgeshire Claylands

Landscape Types: Mostly wooded agricultural land, at 9% woodland the woodland cover is higher than in most of the north of the county.

Geology: A complex geology that can be summarised as limestone in the south, mudstone in the north, sandstone in the south east, mostly overlain by till with some sands and gravels and alluvium in the valleys

Topography A slightly undulating plateau running south west – north east incised by valleys with streams.

Biodiversity:

- Lowland Meadows – Small areas at Biddlesden Park, Longs Wood & Meadow and Akeley Playing Fields LWSs. Also semi improved neutral grassland at Foxcote Reservoir and Wood SSSI.
- Fen – There is a small fen at Vyladd Marsh LWS.
- Woodland – There are 15 woodland LWSs (and other potential BAP woodlands) in a belt between Evershaw and Wicken.
- Wood Pasture & Parkland – Stowe contains extensive areas of parkland, and there are 2 parkland LWSs at Biddlesden Park and Old Tilehouse Park.
- Eutrophic Standing Water – Foxcote Reservoir and Wood SSSI.
- Reedbed – There is a small area of reedbed at Foxcote Reservoir and Wood SSSI.
- Ponds – There are notable ponds at Foxcote Reservoir and Wood SSSI. There are numerous ponds scattered right across the area.
- Hedgerows – Much of the area outside the Stowe Parklands is made up of pre-18th century enclosures so these may contain species rich hedgerows.

Access National Trust own Stowe. BBOWT manage Foxcote Reservoir. There is a dense network of rights of way.

Archaeology: There are concentrations of ridge and furrow at Akeley, Lillingstone and around Stowe. Stowe (including Old Tilehouse Park) is a registered park and garden. Part of a much larger Mediaeval Hunting Forest.

Targets:

- Lowland Meadows –Management, Restoration, Creation
- Fen –Management, Restoration

- Woodland – Management, Restoration
- Wood Pasture & Parkland – Management, Restoration
- Eutrophic Standing Water – Management
- Reedbed – Management
- Ponds – Management, Restoration, Creation
- Hedgerows – Management, Restoration

02:05 Whaddon Chase

The area covers Whaddon Chase – a royal hunting forest

Joint Character Area: Bedfordshire & Cambridgeshire Claylands

Landscape Types: Wooded agricultural land.

Geology: Mudstone with overlying till, head and sand and gravel deposits.

Topography: The North western end of a ridge running NW – SE. With gentle slopes running into the Great Ouse Valley to the north.

Biodiversity:

- Woodland – There are many native woodland sites located across the area. There is a concentration of BAP quality woods south of Nash and Whaddon.
- Fens –There is a large fen north of College Wood.
- Lowland Meadows – There are several small areas of lowland meadow spread across the area.
- Hedgerows – There are concentrations of pre 18th century enclosures around Little Horwood and Nash and these may contain species rich hedgerows.
- Wood-pasture & Parkland – There is a large parkland site at Whaddon.
- Ponds – There are a few potential BAP priority ponds in the area.

Access: There is a good footpath network. The Woodland Trust own College Wood.

Archaeology: Fields with existing ridge and furrow are found around Nash and Saldon. Whaddon Chase was an ancient hunting forest. SMRs are Snelshall Benedictine Priory and Whaddon Bowl Barrow.
Part of a much larger Mediaeval Hunting Forest

Targets:

- Fens – Management , Restoration, Creation
- Hedgerows - Management , Restoration, Creation
- Lowland Meadows - Management , Restoration, Creation
- Woodlands - Management , Restoration, Creation
- Wood-pasture & Parkland - Management , Restoration
- Ponds – Management, Restoration, Creation

02:06 Greensands Ridge

This area contains Bow Brickhill Park and Heath, running south to the end of the Greensand Ridge and through the acid grassland foothills around Little and Great Brickhill to the Ouzel Valley
The BOA connects to the Bedfordshire Heathland Opportunity Area.

Joint Character Area: Bedfordshire Greensand Ridge (partially also Bedfordshire & Cambridgeshire Claylands)

Landscape Types: Wooded agricultural landscape with areas of heathland. The southern end is agricultural with dispersed woodland

Geology: Mostly Greensand, with mudstone on the bottom of the slopes. There are several pockets of glacial materials overlying the greensand.

Topography: The end of the Greensand Ridge, undulating foothills around Great and Little Brickhill. The western slopes around Bow Brickhill are very steep and the highest point is 180m at Bow Brickhill Heath.

Biodiversity:
Heathland - There are areas of heathland on Rammamere Heath and remnants of heathland vegetation can still be found on Bow Brickhill Heath and in some areas of plantation woodland
Acid Grassland – There are areas of acid grassland in association with the areas of heathland. There are extensive areas of semi-improved acid grassland throughout the Brickhills.
Fen / Purple Moor Grass and Rush Pasture – There are wet flushes in both the foothill grasslands and in the plantation woodlands
Hedgerows – many of the enclosures around the Brickhills are pre-18th century and may have species rich hedgerows associated with them
Lowland Meadows – There are areas of marshy lowland meadow to the west of Stockgrove Country Park
Ponds – There are ponds associated with seepages.
Wood-Pasture & Parkland – there is parkland at Stockgrove House
Woodlands – Most of the woods on the ridge plateau are coniferous plantation. Dunscombe wood is mixed conifer and broadleaved.

Access: Parts of Rammammere Heath SSSI are accessible.

Archaeology: Danesborough Hill Fort is an SAM. There are a few fields of surviving Ridge and Furrow

Targets:
- Heathland – Management, Restoration, Creation

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- Acid Grassland - Management, Restoration, Creation
- Fen - Management, Restoration
- Hedgerows - Management, Restoration
- Lowland Meadows - Management, Restoration
- Ponds - Management, Restoration, Creation
- Wood-pasture & Parkland – Management, Restoration
- Woodlands - Management, Restoration

02:07 South Bucks Heaths & Parklands

This area covers a large proportion of South Bucks District and contains a central core of commons, heathland and wood pasture (including Burnham Beeches ,Stoke Common and Black Park. This BOA connects with Colne Valley and Thames Valley

Joint Character Area: Thames Valley

Landscape Types: Agricultural wooded

Geology: Mostly mudstone overlain by sands and gravels. Small areas around Dorney Wood and Cliveden and in the Alderbourne Valley are chalk.

Topography: A generally flat plateau cut in the centre by the Alderbourne Valley. The areas to the south of Stoke Poges and to the east of Black Park are lower (by around 40m) and flatter and form part of the ancient river terraces of the Thames and Colne.

Biodiversity:
This area contains a complex mosaic of many BAP priority habitats.

- Heathland – The key heathland sites are Stoke Common, Black Park and Burnham Beeches. However a much wider area was once heathland and relict habitat can still be found in some areas.
- Acid Grassland – The key acid grassland sites are as per heathland.
- Calcareous Grassland – There is one calcareous grassland site at Cliveden.
- Fen – There are wet flushes in the west of the area, at Burnham Beeches and at Black Park.
- Hedgerows – There are several areas with concentrations of pre-18th century enclosures where there are species rich hedges. As some areas were once part of large parklands there are also likely to be veteran trees located in some hedgerows
- Lowland Meadows – There are also two sites around Stoke Poges and Wexham.
- Ponds – There are BAP quality ponds in Littleworth Common and Burnham Beeches and potential ponds across the area. The temporary ponds on heathlands are important for Starfruit.
- Traditional Orchards – There are potential BAP orchards around Langley.
- Woodland – The whole area is heavily wooded – with a concentration of BAP woods centring on Burnham Beeches.
- Wood Pasture & Parkland – Burnham Beeches SAC contains wood pasture with large number of ancient pollards. There are many parkland sites including Black Park, Langley Park, Dorney, Cliveden, and Dropmore.

Access: Burnham Beeches and Stoke Common are City of London. Langley and Black Parks are BCC. Cliveden is National Trust. Ingrams Copse is Woodland Trust. Littleworth Common is open access.

Archaeology: There are several registered parks and gardens – Clivendon, Dorney, Dropmore, Hedsor House, Langley Park, Hall Barn, Stoke Park and Stoke Park Garden of Remembrance. There are additionally 4 SAMs.

Targets:

- Heathland – Management, Restoration, Creation
- Acid Grassland - Management, Restoration, Creation
- Calcareous Grassland – Management
- Fen - Management, Restoration, Creation
- Hedgerows - Management, Restoration
- Lowland Meadows - Management, Restoration, Creation
- Ponds - Management, Restoration, Creation
- Traditional Orchards - Management, Restoration
- Wood Pasture & Parkland - Management, Restoration, Creation
- Woodland - Management, Restoration

02:08 Colne Valley

The Colne Valley is located on the south eastern corner of Bucks. The Colne flows through Herts before forming the boundary between Bucks and London and into Surrey.
The Colne Valley BOA is contiguous with the Colne Valley Key Biodiversity Area in Herts and there are SSSIs close to the borders in Hillingdon and Surrey. It is also connected to the South Bucks Heaths & Parklands and Central Chilterns Chalk Streams BOAs

Joint Character Area: Thames Valley

Landscape Types: Mostly wetland and agricultural, with woodlands limited to watercourses. The areas around Denham Green and Rush Green are wooded agricultural

Geology: Mostly mudstone with chalk in the Misbourne Valley and around Denham overlain with sands, silt and gravels

Topography: A shallow flat bottomed valley.

Biodiversity:

- Rivers and Streams – The River Colne provides a valuable route for species movement between the Thames and Hertfordshire.
- Lakes – There is one eutrophic standing water SSSI in Bucks – the Mid Colne Valley SSSI reservoirs. There are also open water SSSIs close to the border with Bucks in the Herts and Surrey sections of the Colne Valley.
- Reedbed – There are reedbeds in the Mid Colne Valley SSSI.
- Woodland – There are wet woodlands at Old Rectory Meadows and Denham Marsh Wood SSSIs (the latter is in Hillingdon) and small areas of wet woodland fringing the rivers and streams.
- There are also BAP woodlands at Meadows & Oldhouse Wood SSSI and in 2 LWSs.
- Lowland Meadows / Purple Moor Grass and Rush Pastures – There are areas of these habitats in Old Rectory Meadows and Kingcup Meadows & Oldhouse Wood SSSI.
- Fens – Fen habitat is found at Kingcup Meadows & Oldhouse Wood SSSI.
- Frays Farm Meadows SSSI in Hillingdon contains reedbed, lowland meadow, fen and wet woodland
- Ponds – There are ponds scattered throughout the Colne Valley
- Wood Pasture & Parkland- There is an area of Parkland around Long Coppice Farm at Dromenagh.
- Traditional Orchards – There is a potential BAP orchard at Denham Park
- Hedgerows – the lower Misbourne Valley, the Fulmer area and the area between Denham and Iver all contain concentrations of pre-18th century enclosures which may contain species rich hedgerows.

Access: Northmoor Hill Wood is an LNR. The Grand Union Canal Towpath passes some designated sites

Archaeology: Denham Place is a registered park and garden. There is a SAM at Savay Farm, Denham

Targets:

- Rivers & Streams – Management, Restoration
- Eutrophic Standing Water- Management, Restoration
- Reedbed –. Management, Restoration, Creation
- Woodland – Management, Restoration, Creation
- Lowland Meadows - Management, Restoration, Creation
- Purple Moor Grass and Rush Pastures Management, Restoration, Creation
- Fens – Management, Restoration, Creation
- Ponds – Management, Restoration, Creation
- Wood Pasture & Parkland- Management, Restoration
- Traditional Orchards – Management, Restoration
- Hedgerows - Management, Restoration, Creation

02:09 Ashridge & Ivinghoe Beacon

This area includes the Chiltern Escarpment around Ivinghoe Beacon, Pitstone Hill and the Ashridge Estate and the summit of the Escarpment at Ashridge. It also includes sites on the lower ground around Pitstone.

Joint Character Area: Chilterns

Landscape Types: The escarpment and lower slopes are agricultural unwooded, while the plateau is agricultural wooded

Geology: Chalk. The plateau is overlain with clay with flints.

Topography: The escarpment is very steeply sloping land.

Biodiversity:

- Calcareous Grassland – There is calcareous grassland on Ivinghoe Hills and Pitstone Hill SSSIs and in Pitstone Quarry One LWS
- Woodlands – Part of Ashridge is designated in the Chilterns Beech Woodlands SAC and in Ashridge Commons & Woods SSSI. It contains Beech and Yew Woodland, Mixed Deciduous Woodland and mature pollards.
- Eutrophic Standing Water – College Lake is a flooded gravel pit
- Fen – There is a small fen in Pitstone Fen LWS
- Arable Field Margins – Areas of College Lake LWS are used to grow rare arable weeds
- Hedgerows – There are some areas of pre-18th century enclosure which may contain species rich hedgerows.

Access: The Ashridge Estate, Pitstone Hill and Ivinghoe Beacon are National Trust. College Lake is managed by BBOWT.

Archaeology: Beacon Hill at Ivinghoe is a SAM

Targets:

- Calcareous Grassland – Management, Restoration, Creation
- Woodland - Management, Restoration
- Arable Field Margins – Management, Creation
- Wood Pasture & Parkland - Management, Restoration
- Eutrophic Standing Water – Management
- Fen – Management
- Hedgerows - Management, Restoration, Creation

02:10 Chilterns Escarpment

The steeply sloping Chilterns Escarpment runs from Wendover to Bradenham and contains many calcareous grassland and woodland SSSIs.
It is adjacent to the Dunsmore Woodlands and Radnage Valley BOAs

Joint Character Area: Chilterns (small area in Upper Thames Clay Vales)

Landscape Types: Wooded agricultural land

Geology: Chalk

Topography: A very steeply sloping chalk escarpment rising to 260m at Coombe Hill

Biodiversity:

- Calcareous Grassland – There is Calcareous Grassland in many SSSIs including Bacombe and Coombe Hills, Ellesborough and Kimble Warren, Grangelands and Pulpit Hill, Windsor Hill as well as on LRS such as Brush Hill and Whiteleaf Cross and LWSs. There are no large contiguous expanses of calcareous grassland however and most sites are isolated from each other by other habitats.
- Woodland – There are several woodland SSSIs Ellesborough and Kimble Warren, Grangelands and Pulpit Hill, Windsor Hill, Bradenham Woods and other BAP woodland on LWSs.
- Wood Pasture & Parkland – Chequers offers parkland habitat. Parts of Giles and Ninn woods are managed as wood pasture.

Access: The grassland SSSIs are open access. There are 2 LNRs near Princes Risborough (Brush Hill and Whiteleaf Cross).

Archaeology: Chequers is a registered historic parks and garden. There are 8 scheduled ancient monuments all in the northern half of the BOA.

Targets:

- Calcareous Grassland – Management, Restoration, Creation
- Woodland - Management, Restoration
- Wood Pasture & Parkland - Management, Restoration

02:11 Hambleden & Wormsley Woodlands

The Hambleden Valley is a mostly dry valley running from Skirmett south towards the Thames. The lower reaches do contain a chalk stream. The Wormsley Valley is a dry valley that connects with it.
The BOA connects to the Medmenham and South Western Commons BOAs

Joint Character Area: Chilterns

Landscape Types: Wooded Agricultural land

Geology: Chalk with overlying sand and gravels in the valley floor, and small areas of clay with flints and gravels as the slopes reach the plateau of the Wormsley Valley

Topography: Two valleys with gently sloping bottoms with steep sloping sides consisting of numerous spurs rising to a plateau.

Biodiversity:

- Calcareous Grassland – In the Wormsley Valley there are 3 calcareous grassland SSSIs spread over 6 sites. There are a few small sites of calcareous grassland on the eastern flank of the Hambleden Valley - including Fayland Chalk Bank SSSI.
- Woodland – There are areas of BAP woodland scattered across the plateau and on the steeper slopes including Lowland Mixed Deciduous Woodland and Lowland Beech and Yew Woodland.
- Hedgerows – The Wormsley Valley and the eastern edges of the Hambleden Valley contain pre-18th century enclosures and these may be bordered by species rich hedgerows.
- Chalk River – the Hambleden chalk stream flows through the lower reaches of the Hambleden Valley.

Access: There is a network of footpaths throughout

Archaeology:

Targets:

- Calcareous Grassland – Management, Restoration, Creation
- Woodland – Management, Restoration
- Hedgerows - Management, Restoration, Creation
- Chalk River – Management, Restoration

02:12 & 02:20 Central Chilterns Chalk Rivers

This area comprises of the valleys of 2 chalk streams – the Wye and the Misbourne. The Wye Valley connects the Upper Hughenden Valley, Radnage Valley and Gomm Valley BOAs while the Misbourne connects to the Colne Valley

Joint Character Area: Chilterns, Thames Valley

Landscape Types: The Misbourne flows through a wooded agricultural landscape until it's lower reaches where it has an unwooded wetland landscape, The Wye Valley is predominantly urban until south of Loudwater where it is wooded agricultural

Geology: Chalk except for the final reaches of the Misbourne which is mudstone. There is alluvium on the valley bottoms and wider sands and gravels on the lower reaches of both.

Topography: Valleys with steep slopes with protruding spurs and a strong convex profile to the upper slopes. The valley bottoms are gently sloping with little flood plain

Biodiversity:

- Rivers / Streams – Both the Misbourne and Wye are chalk streams and are a priority in the UK Rivers and Streams HAP.
- Lowland Meadows – There are lowland meadows at Old Rectory Meadows SSSI in the Misbourne Valley.
- Lakes – Shardeloes Lake in Misbourne Valley.
- Woodland – There are 2 woodland LWSs in the Wye Valley.
- Traditional Orchards – There are potential BAP orchards in both valleys.
- Wood Pasture & Parkland – There are potential parklands in both valleys – Misbourne Valley –Missenden Abbey, Shardeloes, Denham Place and Wye Valley – West Wycombe Hughenden Manor, Wycombe Abbey.
- Hedgerows – Some areas of the Misbourne Valley contain pre-18th century enclosures which may contain species rich hedgerows.

Access: The Wye flows through West Wycombe Park (National Trust), The Rye & Kings Mead (both Wycombe DC) and other public open spaces. Warren LNR is owned by Wycombe DC. The Hughenden Stream flows through Hughenden Park (National Trust / Wycombe DC). There are public footpaths along stretches of the Misbourne and Wye.

Archaeology: There are historic parks and gardens in both valleys – Misbourne Valley – Missenden Abbey, Shardeloes, Denham Place and Wye Valley – West Wycombe, Hughenden Manor, Wycombe Abbey.

Targets:

- Chalk Rivers – Management, Restoration
- Lowland Meadows – Management, Restoration, Creation

- Eutrophic Standing Water– Management, Restoration
- Woodland – Management
- Traditional Orchards - Management, Restoration
- Wood Pasture & Parkland - Management, Restoration
- Hedgerows - Management, Restoration, Creation

02:13 Medmenham

This BOA covers the north-south ridge west of Marlow, from the Thames Valley at Medmenham up to Moor Common in the north.
The BOA connects to the Hambleden and Wormsley Valleys and South Western Commons BOAS

Joint Character Area: Chilterns

Landscape Types: Wooded Agricultural land

Geology: Chalk with overlying clay with flints on some higher ground and sand and gravels in the lower areas.

Topography: A north – south orientated ridge.

Biodiversity:

- Calcareous Grassland – There several small sites of calcareous grassland including Homefield Wood SSSI, Lodge Farm Bank Field, and Munday Dean LWS.
- Woodland – The area contains part of the Chiltern Beechwoods SAC at Pullingshill and Hollowhill Woods. It also includes Homefield Wood SSSI and several woodland LWSs such as Munces Wood, Highruse Wood and Hog and Kings Hanging Woods.
- Hedgerows – The area around Marlow Bottom contains pre-18th century enclosures and these may be bordered by species rich hedgerows.

Access: There is a network of footpaths throughout.

Archaeology: There are 2 SAMs – Medmenham Hill Fort and the fort at Danesfield House.

Targets:

- Calcareous Grassland – Management, Restoration, Creation
- Woodland – Management, Restoration
- Hedgerows - Management, Restoration, Creation

02:14 Chess Valley

The River Chess flows through Chesham towards the Hertfordshire Border. The BOA also includes the headwaters of the Chess.
The area is adjacent to the Chess Valley Key Biodiversity Area in Hertfordshire

Joint Character Area: Chilterns

Landscape Types: Wooded Agricultural land on low hills

Geology: Chalk bedrock, with alluvial deposits at the valley bottom.

Topography: A narrow, steeply sloping valley with protruding spurs. The valley bottom is gently sloping.

Biodiversity:

- Chalk River – River Chess is a chalk river and is a priority UK BAP river
- Hedgerows – The valleys around Chartridge have a concentration of ancient species rich hedges, while the area around Bellingdon, Cholesbury and Hawridge is predominantly pre 18th Century enclosures. There are several green lanes designated as LWSs.
- Acid Grassland / Heathland – There are areas of these habitats on Hawridge and Cholesbury Commons and remnants on Leyhill Common.
- Calcareous Grassland – There may be areas of semi-improved grassland in the BOA.
- Arable Field Margins – There are many arable fields in the area and the Chilterns is a Plantlife priority area for rare arable plants
- Lowland Meadows – There are lowland meadows in 2 SSSIs – Frogmore Meadows and Sarratt Bottom
- Woodland – The area contains 11 woodland LWSs.
- Traditional Orchards – There are 2 potential BAP orchards in the area
- Wood Pasture and Parkland – There is existing parkland at Latimer

Access: The Chess Valley walk runs along the valley from Chesham. The Woodland Trust own 4 woods around Chesham Bois.

Archaeology: Latimer Historic Park and Garden. 1 SMR – Cholesbury Camp Hillfort

Targets:

- Chalk Rivers – Management, Restoration
- Hedgerows – Management, Restoration, Creation
- Acid Grassland – Management, Restoration
- Heathland - Management, Restoration
- Calcareous Grassland - Management, Restoration
- Arable Field Margins – Management, Creation

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- Lowland Meadows – Management, Restoration, Creation
- Woodland - Management, Restoration
- Traditional Orchards - Management, Restoration
- Wood Pasture & Parkland - Management, Restoration

02:15 Wendover Woodlands

Wendover Woods are located on the Chiltern Escarpment and the top of the Chilterns Plateau between Wendover and Tring.

Joint Character Area: Chilterns

Landscape Types: Low wooded hills

Geology: Chalk. The plateau and dipslope are overlain with chalk with flints

Topography: The escarpment is steeply sloping, rising to a plateau that falls away gently to the south east.

Biodiversity:

- Calcareous Grassland – There are a concentration of calcareous grassland in the 2 SSSIs at Dancersend. Aston Clinton Ragpits SSSI is a valuable site with 9 orchid species, Chiltern and autumn gentians and 27 species of butterfly. There are also small areas of calcareous grassland at RAF Halton RAF.
- Woodlands – There is beech and yew woodland at Dancersend, Wendover Woods, Pavis and Northill Woods and the Great Widmoor and Barn Woods Complex. There are also BAP mixed deciduous woodlands at Dancersend SSSI and in LWSs including Drayton Wood and Buckland Wood.
- Arable Field Margins – There are some arable fields on the plateau and the Chilterns is a Plantlife priority area for rare arable plants.

Access: Dancersend, and Aston Clinton Ragpits are owned by BBOWT and Wendover Woods is Forestry Commission.

Archaeology: There is 1 scheduled ancient monument – Boddington Hill Fort.

Targets:

- Calcareous Grassland – Management, Restoration, Creation
- Woodland - Management, Restoration
- Arable Field Margins – Management, Creation
- Hedgerows - Management, Restoration, Creation

02:16 Ouse Valley

The Ouse Valley runs right across the county from Whitfield in the west to Olney in the east. The stretch of the Ouse Valley in Milton Keynes only is included in the BOA.
The BOA connects with the Yardley Chase and the Bedfordshire Wetland Opportunity Area.

Joint Character Area: Bedfordshire and Cambridgeshire Claylands

Landscape Types: Predominantly agricultural unwooded.

Geology: Mudstone overlain by sand, silt and gravels.

Topography: A narrow meandering river valley – at its broadest north of Milton Keynes. There are confluences with 2 main valleys – the Ouzel from the south and the Tove from the north.

Biodiversity:

- Rivers & Streams – The Ouse is a predominantly natural river flowing across the county and creating a corridor for the dispersal of biodiversity. Otters have been spotted along its entire length in Bucks and MK.
- Floodplain Grazing Marsh – Areas to the north of Milton Keynes, around Olney and in the Tove Valley have been identified as Floodplain Grazing Marsh.
- Calcareous Grassland – Old Limestone Quarry LWS near Calverton contains calcareous grassland as well as neutral grassland species. There are degraded calcareous grasslands around Olney.
- Eutrophic Standing Water – There is an open water LWS - Kickles Pits and Gayhurst Quarry in Newport Pagnell. North of Milton Keynes there are numerous other areas of eutrophic standing water – mostly flooded gravel workings that are valuable for birdlife. These include the Hanson Centre and the Stony Stratford Nature Reserve.
- Reedbeds / Wet Woodland – The gravel site at Wolverton is to be reinstated as a floodplain forest including reedbeds, wet woodland, fen and lowland meadow habitats.
- Hedgerows – There is a concentration of pre-18th century enclosures between Tyringham and Emberton which may contain species rich hedgerows.

Access: Stony Stratford Nature Reserve and it is owned by Milton Keynes Parks Trust. There are riverside walks in Buckingham and some sections north of Milton Keynes.

Archaeology:

Targets:

- Rivers & Streams –Management, Restoration
- Lowland Meadows - Management, Restoration, Creation
- Calcareous Grassland –Management, Restoration

- Woodland – - Management, Restoration, Creation
- Fen – Management, Creation
- Eutrophic Open Standing Water – Management, Restoration, Creation
- Reedbeds – Creation
- Hedgerows – Management, Restoration, Creation
- Ponds – management, Restoration, Creation

02:17 Brill & Muswell Hill

A geologically complex hill rising from the surrounding lowlands of the Bernwood Forest It lies adjacent to Bernwood BOA.

Joint Character Area: Midvale Ridge, a small area is within Upper Thames Clay Vales

Landscape Types: Brill Hill is a wooded and farmed chalk outcrop.

Geology: Brill Hill and Muswell Hill consist of sandstone capping limestone, with the lower slopes being interbedded sandstone, limestone and mudstone.

Topography: Brill and Muswell Hills are very steeply sloping hills (rising up to 185m) rising out of a low flat floodplain.

Biodiversity:

- Woodland – There are a number of small lowland deciduous woodlands in the area.
- Calcareous Grassland –Brill Common is a matrix of calcareous and acid grasslands
- Acid Grassland - Brill Common is a matrix of calcareous and acid grasslands
- Ponds – The area contains many potential BAP habitat ponds including many on the slopes of Brill Hill
- Hedgerows – There is a good network of hedgerows around pre-18th century enclosures throughout the area, so many may be species rich.

Access: Brill Parish Council own Brill Common.
The Bernwood Way starts at Brill and there is a good network of footpaths throughout the area

Archaeology: There is a scheduled ancient monument at Brill.
Part of a much larger Mediaeval Hunting Forest

Targets:

- Woodland – Management, Restoration
- Calcareous Grassland – Management, Restoration
- Acid Grassland – Management, Restoration
- Ponds - Management, Restoration, Creation
- Hedgerows - Management, Restoration, Creation

02:18 Radnage Valley

The Radnage Valley is a valley with calcareous grassland surviving on its steep slopes .It also contains areas of BAP woodland, though the valley bottom is arable. The area also includes the ridge to the east containing Bradenham Woods and Naphill Common.
This BOA connects to Chiltern Escarpment, Central Chilterns Chalk Rivers and the Chilterns Escarpment North Conservation Target Area in Oxfordshire

Joint Character Area: Chilterns

Landscape Types: Wooded agricultural land

Geology: Chalk with overlying deposits of alluvium sand and gravel and head in the valley bottom, and clay with flints on the highest points of the ridges.

Topography: A system of steep sided valleys with gently sloping valley bottoms. Four separate valleys merge into one around West Wycombe.

Biodiversity:

- Calcareous Grassland. There are calcareous grassland sites on the northern slopes of the valley including Buttlers Hangings SSSI and the following LWSs Beechgrove Grassland, Janes Field/Daws Hill, Yoesden Bank and Wood, Chawley Manor Farm Fields, Bank opposite Plomers Bottom & Horseshoe Field.
- Woodland – The area contains part of the Chilterns Beechwoods SAC at Bradenham Woods and Naphill Common. There are also several LWS woods on West Wycombe Hill, Bradenham Hill and at the top of the ridge south east of The City.
- Arable Field Margins – The bottom of the valley is predominantly arable. The Chilterns is a Plantlife priority area for rare arable plants.
- Wood Pasture and Parkland – Naphill Common is relict wood pasture. The West Wycombe Estate contains an area of parkland.
- Traditional Orchards – There are two potential BAP orchards at Townend.
- Hedgerows – the area may contain species rich hedgerows as there is a concentration of pre-18th century enclosures.

Access: Much of the calcareous grassland is access land. National Trust own Bradenham Hill and manage West Wycombe Park. BBOWT manages Buttler's Hangings SSSI. Naphill Common is open access.

Archaeology: West Wycombe Park and Bradenham Manor. The Camp on Church Hill is a SAM. There is a short section of Grimms Ditch at Walters Ash.

Targets:

- Calcareous Grassland – Management, Restoration, Creation
- Woodland - Management, Restoration
- Arable Field Margins - Management, Creation

- Wood Pasture & Parkland – Management, Restoration
- Traditional Orchards - Management, Restoration
- Hedgerows – Management, Restoration, Creation

02:19 Gomm Valley

The Gomm Valley lies between High Wycombe and Beaconsfield.
The BOA is connected with the Central Chilterns Chalk Rivers BOA
Joint Character Area: Chilterns
Landscape Types: Wooded agricultural land on low hills
Geology: Mainly chalk with areas of mudstone around Beacon Hill. Overlain in some areas by clay with flints with sands and gravels in the Wye Valley.
Topography: In the south of the area is the Wye Valley which is a narrow valley with steeply sloping sides. North of this are the three hills of Beacon Hill, Common Wood and Pond Wood (which rise to about 180m). There are 2 dry valleys (very steep sided on the Common wood slopes).
Biodiversity:

- Calcareous Grassland – There are small unconnected calcareous grassland sites on the slopes of the Wye Valley including Gomm Valley SSSI.
- Woodland – There are three large areas of wood on the higher ground and small designated woodland sites on the Wye Valley slopes.
- Wood Pasture & Parkland – Penn Wood and Common Wood are relict wood pasture.
- Lowland Meadows – There is one lowland meadow site at Thatchers Field LWS.
- Hedgerows – The area between Wooburn Manor and Forty Green is mostly pre-18th Century enclosures and so may contain species rich hedgerows.

Access: There is a good network of footpaths through the area. In addition the Gomm Valley SSSI is managed by BBOWT, Butterfly Conservation own part of Holtspur Bank, there is the Holtspur Bank LNR owned by South Bucks DC, while Gomm Wood is owned by Wycombe DC. Penn Wood is owned by Woodland Trust, Common Wood by Penn & Tylers Green Residents Assn and Kings Wood by Chepping Wycombe PC.
Archaeology:
Targets:

- Calcareous Grassland – Management, Restoration, Creation
- Woodland – Management, Restoration
- Lowland Meadows – Management, Restoration
- Hedgerows – Management, Restoration
- Wood Pasture & Parkland - Restoration

02:12 & 02:20 Central Chilterns Chalk Rivers (see pg 47)

02:21 Yardley Chase

Two areas of plateau forming the watersheds between the Ouse and Nene. Some of the lower slopes have been included around Hanslope and including Little Linford Wood This BOA connects with The Ouse Valley.

Joint Character Area: Yardley – Whittlewood Ridge (some in Bedfordshire & Cambridgeshire Claylands.

Landscape Types: Wooded agricultural land

Geology: Limestone with overlying clay.

Topography: The edge of a much larger prominent ridgeline and plateau that continues over the County boundary in Northamptonshire running in a south-west, north-east direction. The ridgeline forms the watershed between the Rivers Ouse to the South and Nene to the north. The Hanslope Plateau sub area is a more obvious plateau landform within the Milton Keynes Council administrative area and forms the watershed between the Ouse and the Tove.

Biodiversity:

- Woodland –The predominantly woodland SSSIs of Salcey Forest and Yardley Chase lie right on the border with, and inside Northamptonshire with only a small area of Yardley Chase in Bucks. There are three LWSs Little Linford Wood, Threeshires Wood and Lavendon Wood north of Lavendon, and an area of BAP woodland at Stokepark Wood near Hanslope.
- Hedgerows – there is a network of hedgerows connecting the woods many of which are potentially species rich.
- Ponds – There are many ponds in the area.
- Wood Pasture & Parkland – There are parkland sites at Hanslope Park.

Access: Yardley Chase is managed by Forestry Commission

Archaeology: Part of a much larger Mediaeval Hunting Forest

Targets:

- Woodland – Management, Restoration
- Hedgerows – Management, Restoration, Creation
- Ponds - Management, Restoration, Creation
- Wood Pasture & Parkland – Management, Restoration

02:22 Dunsmore wood

This area covers the Chilterns dipslope behind the Escarpment covers an area of BAP priority beech and yew and mixed deciduous woodlands.
This BOA connects with the Chiltern Escarpment BOA

Joint Character Area: Chilterns

Landscape Types: Wooded Agricultural land

Geology: Chalk overlain by clay with flints on the higher ground.

Topography: The Chiltern dipslope sloping gently away from the top of the Chilterns Ridge.

Biodiversity:

- Woodland –There are 6 woodland LWSs in the area.
- Lowland Heathland- There is an area of lowland heathland at the top of Coombe Hill, within Bacombe and Coombe Hills SSSI.
- Hedgerows –There are 3 green lane / hedgerow LWSs in the south of the area.
- Arable Field Margins – There are several arable fields in the area and the Chilterns is a Plantlife priority area for rare arable plants

Access: National Trust own Coombe Hill & Low Scrub.

Archaeology:

Targets:

- Woodland – Management, Restoration
- Hedgerows - Management, Restoration, Creation
- Arable Field Margins – Management, Creation

02:23 Bernwood (Buckinghamshire)

The area extends in a south western arc from the ancient woodlands south of the Claydons, to the lower lying Shabbington and White Cross Green Woods
It lies adjacent to Upper Ray, and Brill & Muswell Hill BOAs in Bucks and the Brill & Muswell Hill, Otmoor and Oxford Heights East Conservation Target Areas in Oxfordshire

Joint Character Area: Upper Thames Clay Vales, Midvale Ridge

Landscape Types: Wooded Farmland. The majority is rolling lowland with seasonal waterlogging

Geology: Mudstone except for a thin vein of sandstone near Boarstall and a thin layer of inter-bedded mudstone and limestone around the base of Brill Hill.

Topography: Low and undulating. In the north of the area Finemere and Sheephouse Woods sit on the most westerly of a range of lower hills that extends across Aylesbury Vale.

Biodiversity:

- Woodland – The area contains 7 ancient woodland SSSIs. There is a concentration of 4 ancient woodland SSSIs (Grendon & Doddershall, Finemere, Sheephouse and Ham Home-cum-Hamgreen Woods in the north of the area). Rushbeds Wood is a wet woodland on the lower ground. In the south west are the Shabbington Woods complex and White Cross Green and Oriel Woods. There are numerous smaller woods designated as LWSs scattered across the area
- Wood Pasture & Parkland – Wooton Underwood Estate
- Lowland Meadows – There are lowland meadows at Bernwood Meadows, Shabbington, Whitecross Green Wood and Lapland Farm.
- Calcareous Grassland – There is 1 calcareous grassland site – the railway cutting at Rushbeds Wood SSSI
- Ponds – The area contains many potential BAP habitat ponds including the area around Ludgershall
- Hedgerows – There is a good network of hedgerows throughout the area – and the area is a hot-spot for Brown Hairstreak butterflies

Access: BBOWT own Finemere Wood, Rushbeds Wood, Whitecross Green Wood and Bernwood Meadows (part of Shabbington Woods SSSI). National Trust own Boarstall Duck Decoy
The Bernwood Way starts at Brill and there is a good network of footpaths throughout the area

Archaeology: There is ridge and furrow scattered throughout the area. There are 2 historic parks and gardens (Wooton Underwood and Middle Claydon) and a scheduled ancient monument at Ludgershall.

Part of a much larger Mediaeval Hunting Forest

Targets:

- Woodland – Management, Restoration
- Wood Pasture & Parkland – Management, Restoration
- Lowland Meadows – Management, Restoration, Creation
- Ponds - Management, Restoration, Creation
- Hedgerows - Management, Restoration, Creation

02:24 Upper Hughenden Valley

The Hughenden Valley is a valley which runs north from Hughenden up to the villages of Speen and Bryant's Bottom. It contains several BAP woodlands – especially on the eastern flanks and areas of neglected calcareous grassland survive on its steep slopes.. This BOA connects to Central Chilterns Chalk Rivers BOA.

Joint Character Area: Chilterns

Landscape Types: Wooded agricultural land

Geology: Chalk with overlying deposits of alluvium sand and gravel in the valley bottom, and clay with flints on the highest points of the ridges.

Topography: A steep sided valley with gently sloping valley bottoms. The valley splits into three at its head.

Biodiversity:

- Woodland – The area contains BAP quality woodlands at Millfields Wood SSSI and Gomms Wood, Longfield and Hatches Woods and Piggott's Wood. There are several other mixed deciduous woodland sites spread across the area.
- Calcareous Grassland. There are calcareous grassland sites at Millfield Wood SSSI and the LWS at Cowslip Meadow. The area also contains concentrations of unmanaged calcareous grassland that has now reverted to rank grassland or scrub but which offer the opportunity for restoration. Little Stocking Meadow is one of the few sites in the county containing Meadow Clary.
- Arable Field Margins – The bottom of the valley is predominantly arable. The Chilterns is a Plantlife priority area for rare arable plants.
- Traditional Orchards – There is a potential BAP orchard at Orchard Farm.
- Lowland Meadows – There is lowland meadow habitat at Prestwood. This site is an ex-brickworks and its complex geology has created an area of lowland meadow containing both calcareous and acid species.
- Hedgerows – there is a concentration of pre-18th century enclosures throughout the valley which may contain species rich hedgerows.

Access: National Trust own Hughenden Park. BBOWT own Millfield Wood. The Woodland Trust owns some of Gomms Wood. Prestwood Picnic Site is a LNR.

Targets:

- Calcareous Grassland – Management, Restoration, Creation
- Woodland - Management, Restoration
- Arable Field Margins - Management, Creation
- Traditional Orchards - Management, Restoration
- Hedgerows – Management, Restoration, Creation
- Lowland Meadows - Management

South East England Biodiversity Forum

Hampshire

03:01 Faccombe

Landscape Character Area: Hampshire Downs

Landscape Types: Downland Mosaic and Assarts

Geology: Chalk bedrock overlaid in places with Clay-with-Flints deposits. Sand and Gravel river terrace deposits to the west.

Biodiversity: This area lies within the North Wessex Downs AONB and consists of an undulating landscape of large areas of chalk capped by a superficial deposit of clay. There are numerous ancient semi-natural woodlands of oak-ash-hazel coppice, and remnant pockets of downland on the steeper slopes. Sites of significant nature conservation value include Linkenholt Hanging, Sidley Wood and the complex around Pilot Hill. The boundary had been determined by the County boundary, the geology and strong contour data and the clusters of both existing BAP habitats and number of high opportunity areas for downland restoration and reversion of planted ancient woodland back to semi-natural woodland

Targets and opportunities:

- Lowland Calcareous Grassland
- Lowland Mixed Deciduous Woodland

03:02 Vernham's Dean to Hurstbourne Tarant

Landscape Character Area: Hampshire Downs

Landscape Types: Downland Mosaic and Assarts / Major River Valleys

Geology: Chalk bedrock with Sand and Gravel river terrace deposits along the north-east boundary.

Biodiversity: This area lies within the North Wessex Downs AONB and consists primarily of a chalk downland landscape on a steepish mostly north east facing scarp running along the west side of the Bourne Rivulet from Hurstbourne Tarrant to the county boundary at Vernham Dean and continuing into Wiltshire. Sites of significant nature conservation value include Rushmoor & Conholt Down SSSI and various remnant downland SINCs including Kiblet Down and Hurstbourne Tarrant Down. The boundary had been determined by the County boundary, the geology and strong contour data, the cluster of existing BAP habitats and the large area of land suitable for downland restoration.

Targets and opportunities:

- Lowland Calcareous Grassland
- Lowland Mixed Deciduous Woodland

03:03 Northern Escarpment: West Woodhay to Watership down

Landscape Character Area: Hampshire Downs

Landscape Types: Greensand Terrace Major Scarps and Hangers / Downland Mosaic and Assarts

Geology: Chalk bedrock with some deposits of Clay, Silt, Sand and Gravel

Biodiversity: This area comprises a steep north facing chalk scarp extending from West Woodhay SSSI on the western county border to Watership Down SINC and White Hill/Stubbington Down SINC in the east. The area supports many relic areas of unimproved calcareous grassland, in particular Burghclere Beacon SSSI and Ladle Hill SSSI and numerous downland SINCs some of which once formed part of the once more extensive Cannon Heath Down, Great Litchfield Down and Upper Woodcott Down.

Targets and opportunities:

- Lowland Calcareous Grassland
- Lowland Mixed Deciduous Woodland

03:04 Silchester/Tadley (Hants)

Landscape Character Area: North Hampshire Lowland and Heath

Landscape Types: Settled Lowland Mosaic Ancient Forest / Settled Lowland Mosaic Heath Plantation

Geology: Clay, Silt and Sand bedrock in the eastern half with Sand bedrock for the western half. Deposits mainly consist of Sand and Gravel, and Clay, Silt, Sand and Gravel.

Biodiversity: This extension into Hampshire from Berkshire includes the extensive ancient oakwood, Pamber Forest; two heathland Commons and a series of unimproved wet meadows. This association of ancient woodland, heath and grassland supports a diverse range of plants and animals. Pamber Forest is dominated by sessile oak with an understorey of coppiced hazel and a ground flora dominated by bracken with bilberry and heather locally frequent on the poor, acidic soils. To north of the site, woodland grades into the heathland of Silchester Common, which together with Tadley Common, represents the largest remnants of the once extensive north Hampshire heathland to the west of the River Loddon. The west side of Pamber Forest is bounded by a series of unimproved neutral to acid, wet unimproved meadows which support an outstandingly rich flora. The heathlands supports the silver-studded blue and grayling butterflies, both of which are declining nationally and the three bird species listed in Annex 1 of the EC Directive on the Conservation of Birds: woodlark, nightjar and Dartford warbler. The BOA extends as far as Silchester Brook to take in the ancient woodlands surrounding the Roman Town of Silchester and the extensive oak and pine plantations within Benyon's Enclosure which support bilberry and heather in the ground flora.

Targets and opportunities:

- Lowland Dry Acid Grassland
- Lowland Heath
- Lowland Mixed Deciduous Woodland
- Wet Woodland
- Lowland Meadow

03:05 Rivers Loddon/Lyde/Whitewater Catchment & Headwaters

Landscape Character Area: North Hampshire Lowland and Heath / Hampshire Downs

Landscape Types: Settled Lowland Mosaic Ancient Forest / Open Downland and Downland Mosaic and Assarts in the southern reaches

Geology: A bedrock of mainly Clay, Silt and Sand, with areas of Sand in central and eastern regions and Chalk to the southern edges. River terrace deposits of Clay, Silt, Sand and Gravel reach down through valleys and Sand and Gravel deposits occur around the valleys.

Biodiversity: The rivers arise from a line of chalk springs along the northern edge of the chalk outcrop east of Basingstoke and flow slowly northwards across the clays, sands and gravels of the Thames basin. The valleys are broad and shallow and so are liable to flood. Although much of these valleys now contain agriculturally improved grasslands there remains many relic areas of species rich grassland, swamp and fen including Basing Fen SINC, Mapledurwell Fen SSSI, Stanford End SSSI, Greywell Fen SSSI and many more SINCs. The headwaters of the Loddon, in particular, contain a nationally restricted type of chalk peatland which presents a high opportunity to restore to species-rich fen meadow. Odiham Common, Butter Wood and Hook Common SSSIs, all relicts of the ancient Odiham Forest are also included in the BOA along with numerous other important commons, village greens and ancient woodlands. The varied geology and wide floodplains have resulted in a matrix of different habitat types, supporting a diverse range of species.

Targets and opportunities:

- Wet Woodland
- Lowland Meadow
- Purple Moor Grass and Rush Pastures
- Floodplain Grazing Marsh
- Lowland Mixed Deciduous Woodland
- Lowland Dry Acid Grassland
- Lowland Heath

03:06 – removed at local consultation stage

03:07 North Hampshire Lowland Heath & Ancient Woods

Landscape Character Area: North Hampshire Lowland and Heath / Hampshire Downs (small areas to south-west)

Landscape Types: Settled Lowland Mosaic Heath Plantation / Settled Lowland Mosaic Ancient Forest

Geology: Bedrock of Sand and Clay, Silt and Sand, with deposits of Clay, Silt, Sand and Gravel and Sand and Gravel along the northern fringes.

Biodiversity: This area derives from the old Forest of Freemantle which originally formed a complex belt of forest lying across the north of the County, and may once have been part of the Great Forest of Windsor. It extends almost to the chalk escarpment where there are a number of medieval deer parks. The area contains a complex series of ancient commons which would once have been covered by heathland and acid grassland with a scatter of small woods. The BOA includes Highclere Park SSSI and an exceptionally high concentration and ancient woodland and unimproved grassland SINCs.

Targets and opportunities:

- Lowland Heath
- Lowland Dry Acid Grassland
- Lowland Meadow
- Lowland Mixed Deciduous Woodland
- Wet Woodland
- Purple Moor Grass and Rush Pastures

03:08 The East Hampshire Hangers

Landscape Character Area: Hampshire Downs, Western Weald Lowland and Heath

Landscape Types: Greensand Terrace Major Scarps and Hangers / Downland Mosaic. Assarts & Wooded Downland Plateau along western boundary

Geology: Predominantly Upper Greensand and Chalk bedrocks along with Mudstone along the eastern boundary. Some deposits of Clay-with-Flints on higher ground and Clay, Silt, Sand and Gravel in river valleys.

Biodiversity: The Hangers ('hangra' meaning wooded slopes) lie on two scarp faces; the Upper Greensand rises from the clays of the Weald and is deeply dissected by small stream valley resulting in groups of Hangers commencing below the South Downs at Buriton and extending beyond the northern limit of the chalk scarp north of Binstead. The more spectacular chalk scarp, capped in places by Clay with flints, runs roughly parallel to the Greensand with a plateau averaging half a mile between. The general aspect is south east or north east but the deep valleys produce south, north and east slopes with differences in climate and flora. The majority of the woodlands are SSSIs and support a wide range of woodland types including yew (in some cases developed over former juniper scrub), yew/beech and beech/ash with beech/wych elm /field maple ash, and oak /hazel, on deeper soils, and moist ash/alder wood by escarpment-foot springs. Ash, beech and elm all occur in coppice forms. The ground flora of this series of woods is collectively rich and includes large populations of many rare or locally distributed species such as white helleborine, narrow-leaved helleborine, broad-leaved helleborine, and bird's-nest orchid. The many natural rock exposures on the Upper Greensand Hangers are of particular interest and support nationally rare mosses.

Targets and opportunities:

- Lowland Calcareous Grassland
- Lowland Mixed Deciduous Woodland
- Lowland Meadow

03:09 Itchen Valley

Landscape Character Area: Avon, Test, Itchen and Meon Valleys / South Hampshire Lowland and Heath / Hampshire Downs / Mid Hampshire Downs

Landscape Types: Major River Valleys / Settled Lowland Mosaic Ancient Forest

Geology: Bedrock of Chalk to the northern half of the river valley, some Clay, Silt and Sand, and Sand in the central and southern areas. Deposits of Clay, Silt, Sand and Gravel in the northern half, with desposits of Calcareous Tufa and Clay and Silt, and Sand and Gravels in the southern regions.

Biodiversity: The Itchen is a classic chalk stream and is botanically very important with extensive areas of unimproved vegetation along its length including fen, carr and herb-rich meadows, much of it on peat. Many of the meadows were managed as water meadows in the 19th century. The rich vegetation supports important populations of wetland birds and the river supports one of the few populations of the native white-clawed crayfish remaining in the rivers of southern England as well as breeding otters, nationally important populations of water vole and Southern damselfly, and freshwater fish including bullhead, brook lamprey and Atlantic salmon.

Targets and opportunities:

- Wet Woodland
- Lowland Meadow
- Purple Moor Grass and Rush Pastures
- Floodplain Grazing Marsh
- Reedbed

03:10 The Forest of Bere

Landscape Character Area: South Hampshire Lowland and Heath, Avon, Test, Itchen and Meon Valleys

Landscape Types: Settled Lowland Mosaic Ancient Forest / Major River Valleys

Geology: Predominantly Clay, Silt and Sand and Sand bedrock with Clay, Silt, Sand and Gravel river terrace deposits in the valleys.

Biodiversity: The core area of the Forest of Bere is centred around the Southwick Estate and includes the present Forest of Bere SINC, West Walk SINC, and Bishops' Inclosure (SINC) on the western boundary of the BOA, owned by the Bishop of Winchester in medieval times. This area contains high concentrations of ancient woodlands, wooded common, wood pasture and unimproved grassland, and is of particular importance for its small-leaved lime woods.

Targets and opportunities:

- Lowland Heath
- Lowland Dry Acid Grassland
- Lowland Mixed Deciduous Woodland
- Wet Woodland
- Lowland Meadow

03:11 Portsdown Hill

Landscape Character Area: South Hampshire Lowland and Heath

Landscape Types: Open Downland

Geology: Chalk bedrock with no notable superficial deposits.

Biodiversity: Portsdown Hill SSSI is itself an isolated east-west chalk anticline with a long south-facing escarpment. Despite only limited grazing and extensive disturbance, these slopes still support a rich chalk grassland flora and a rich and diverse insect fauna. The BOA extends this area to include other relic fragments of specie-rich chalk grassland (SINCs) and areas of high suitability for restoration to chalk grassland

Targets and opportunities:

- Lowland Calcareous Grassland

03:12 The South Downs (East hampshire)

Landscape Character Area: South Hampshire Downs / Avon, Test, Itchen and Meon Valleys

Landscape Types: Downland Mosaic and Assarts / Major River Valleys

Geology: Chalk bedrock with some deposits of Clay, Silt, Sand and Gravel

Biodiversity: This area covers the chalk downland on the predominantly north-facing escarpment of the South Downs between Coulters Dean SSSI in the west and Old Winchester Hill SSSI in the east, passing through Butser Hill SSSI. Butser Hill SSSI is a most dramatic chalk massif which has been eroded to leave a series of deep combes which on the south-east flanks support dense yew woods and sheep-grazed chalk grassland on the remaining slopes of the Hill. The calcareous yew woods are outstanding examples of a habitat with a very small representation in Britain and the downland flora is varied and rich with the north-facing escarpment supporting an exceptionally rich bryophyte flora. Old Winchester Hill SSSI/ is an Iron age hill fort is situated at the western extremity of the South Downs BOA overlooking the Meon Valley. Here all stages from open grassland through scrub to mature woodland are represented. The downland on the south-facing slope of the hill-fort in particular is renowned as one of the richest botanical sites in southern England, containing probably the largest population of the scarce round-headed rampion in the country. The SSSI also supports an extensive stand of juniper contains in excess of 5,000 bushes of varying ages, representing one of the largest stands in Hampshire and about 5% of the total population in southern England. Also of significance in this BOA are large tracts of ancient semi-natural and replanted woodland and secondary woodland which are designated SINCs; at Hen Wood, Hyden Woods, Ditcham Woods and Queen Elizabeth Country Park, plus relic areas of unimproved chalk grassland at Tegdown, Long Down, Hockham Down and Wether Down.

Targets and opportunities:

- Lowland Calcareous Grassland
- Lowland Mixed Deciduous Woodland

03:13 Blackwater Valley

Landscape Character Area: North Hampshire Lowland and Heath

Landscape Types: Settled Lowland Mosaic Heath Plantation

Geology: Sand bedrock in the eastern and southern reaches with Clay, Silt and Sand in the western reaches. The whole area is overlaid with Sand and Gravel or Clay, Silt, Sand and Gravel deposits.

Biodiversity: This area is a river valley in the far north-east of Hampshire. The Blackwater river has a number of tributaries each with its own character. The main one is Cove Brook, which contains a wide diversity of habitats and open spaces supporting a multitude of species, it supports extensive marginal vegetation beds in its lower reach. Streams draining into the river from the surrounding heathlands can be acid and fairly poor in plants, but a few or these support wild Brown Trout. The upper stretches of the Blackwater have luxuriant marginal vegetation dominated by reedmace and branched bur-reed. The river supports a healthy fish and Odonata population. The valley floor contains over 150 lakes and ponds mostly created by gravel workings. Gravel extraction is now confined to the north of the valley. Ringed and Little Ringed Plovers nest in these bare gravel conditions, and this area is important for breeding, wintering and migrant bird species in southern England. Bats and great crested grebes thrive in these open conditions. Surrounding wetland areas include alder carr, reedbeds and marshland. Rowhill Copse constitutes one of the few ancient semi-natural woodland sites within the valley. The riverside meadows support species such as greater birds foot trefoil, bladder sedge and marsh stitchwort, whereas the drier neutral soils contain species such as sweet vernal grass and tormentil. There is a rich invertebrate fauna including several rare flies.

Targets and opportunities:

- Floodplain Grazing Marsh, Wet Woodland
- Purple Moor Grass and Rush Pastures
- Lowland Meadow
- Reedbed

03:14 Ashford Hill (Hants)

Landscape Character Area: North Hampshire Lowland and Heath

Landscape Types: Settled Lowland Mosaic Heath Plantation / Settled Lowland Mosaic Ancient Forest

Geology: Clay, Silt and Sand and Sand bedrock with Sand and Gravel deposits in the north east and a combination of Sand and Gravel with Clay, Silt, Sand and Gravel deposits in the river valley.

Biodiversity: This extension into Hampshire from Berkshire forms part of the same Opportunity Area in Berkshire called the Burghfield toTadley Heaths encompassing all the gravel soils that overlie much of the area. The extension covers the Ashford Hill Woods and Meadows SSSI and several ancient woodland SINCs which border the SSSI. The Ashford Hill Woods and Meadows SSSI comprises an extensive and varied complex of ancient species-rich coppice woodland, secondary woodland on former common land, hay meadows, grazed meadowland and peaty flushed areas, drained by a clear unpolluted small river. The intimate juxtaposition of habitats within a small area gives rise to great biological richness.

Targets and opportunities:

- Lowland Mixed Deciduous Woodland
- Wet Woodland
- Lowland Meadow
- Purple Moor Grass and Rush Pastures

03:15 Wealden Heaths

Landscape Character Area: Western Weald Lowland and Heath

Landscape Types: Settled Lowland Mosaic Heath Plantation

Geology: A bedrock predominantly of Sandstone with Sandstone, Siltstone and Mudstone running through the central regions of the area. Deposits of Clay, Silt, Sand and Gravel run through the area with Sand and Gravel featuring in the central regions.

Biodiversity: The Wealden Heaths BOA comprises the old hunting forest of Woolmer which lies predominantly on the Folkstone beds of the Western Weald and has a long history of management as wood pasture and heathland. Much of the area was managed as common land although Woolmer itself was finally enclosed in 1864 and passed into military occupation where much of the heathland still survives. Other heathland commons SSSIs include Bramshott and Ludshott Common, Shortheath Common and Broxhead Common. They have mostly passed into public ownership and are being managed sympathetically. The Woolmer Forest SSSI contains the largest and most diverse area of lowland heathland habitats in Hampshire (outside the New Forest) and is considered the most important area of heathland in the Weald of southern England. It is the only site in Britain known to support all twelve native species of reptiles and amphibians and supports a nationally important heathland flora, with associated birds and invertebrate fauna. The SSSI includes the watersheds of two major drainage systems. The largest of these flows north to Holly Water, which forms a tributary of the River Wey and the smaller flows south from Longmoor Inclosure to form a tributary of the River Rother). Areas of open water occur within the Woolmer Forest SSSI including Woolmer and Cranmer Ponds which are rare dystrophic lakes fed by ground water poor in mineral nutrients. All the heathlands are of international importance for their rich diversity of breeding and wintering heathland birds including nationally important breeding populations of nightjar, woodlark and Dartford warbler. Small relic areas of heathland, ancient woodland, wet woodland and lowland meadow are scattered across the BOA and are designated SINCs. The ancient semi-natural would have been traditionally managed as wood pasture in the past and he resulting woodland has a distinctive structure and species composition dominated by beech and pedunculate oak with many old pollards.

Targets and opportunities:

- Lowland Dry Acid Grassland
- Lowland Heath
- Wet Woodland
- Lowland Mixed Deciduous Woodland

03:16 Rother Valley (Hants)

Landscape Character Area: Western Weald Lowland and Heath

Landscape Types: Settled Lowland Mosaic Heath Plantation / Settled Lowland Mosaic Ancient Forest

Geology: The bedrock in the southern and north-eastern reaches is predominantly Mudstone, with the central region predominantly Sanstone. Clay Silt Sand and Gravel deposits are the main desposits found along the length of the area, with some Sand and Gravel deposits to the north and south-east reaches.

Biodiversity: The majority of the Hampshire Rother Watershed lies on mudstone thus making soils prone to erosion which has a high impact on river ecology. There are many SINCs within the Rother valley, in particular a series of wet woodlands and rushy fen meadows between Petersfield and Liss and extending into the Wealden Heaths BOA. The wet woodlands are of particular botanical interest supporting species such as Alternate-leaved Golden-saxifrage and Large Bitter-cress. This stretch of the Western Rother is also though to be an important in-migration route for otters from Hampshire.

Targets and opportunities:

- Lowland Meadow
- Wet Woodland
- Reedbed
- Lowland Fen

03:17 Northern Wey Valley (Hants)

Landscape Character Area: Western Weald Lowland and Heath and partly Hampshire Downs (to the west)

Landscape Types: Settled Lowland Mosaic Ancient Forest / Greensand Terrace Major Scarps and Hangers

Geology: Calcareous Sandstone and Siltstone is the bedrock in the western reaches (with Chalk on the western fringe) and Mudstone bedrock for the rest of the area. Clay, Silt, Sand and Gravel and Sand and Gravel river terrace deposits run through the valley.

Biodiversity: The northern tributary of the River Way rises on the chalk at Alton and flows north east towards Farnham in Surrey. There are frequent gravel beds and riffles and a good diversity of stream/streamside flora and fauna particularly freshwater molluscs. Areas of rushy pasture & wet woodland occur in the Mill Court to Froyle Mill area.

Targets and opportunities:

- Lowland Meadow
- Wet Woodland
- Reedbed

03:18 Chichester/Langstone Harbours & Hayling Island

Landscape Character Area: South Hampshire Coast, partly South Hampshire Lowland and Heath to the north-east

Landscape Types: Harbours / Settled Coastal Plain

Geology: The bedrock is predominantly chalk in the northern half, with Sand and Clay, Silt and Sand in the southern half, with deposits of mainly Clay, Silt, Sand and Gravel.

Biodiversity: Chichester/Langstone Harbours and Hayling Island BOA contains the Chichester/Langstone Harbour SAC, SPA and Ramsar sites, and Chichester Harbour and Langstone Harbour SSSI's. The area is a large estuarine basin with extensive mud and sandflats exposed at low water, and abundant eelgrass beds. The site is of particular significance for wintering wildfowl and waders, and breeding birds within the harbour and surrounding permanent pasture and woodlands. There is a wide range of habitats and important plant communities. Tongues of land intrude into the harbour, giving a long and varied coastline, and producing a large volume of sheltered saline water. The extensive intertidal mudflats are feeding grounds for internationally important numbers of waders such as ringed plover, grey plover, and black-tailed godwit. The area is the overwintering site for 5% of the world population of dark-bellied brent geese, while the unimproved pastures behind the sea wall provide alternative feeding sites for the geese and major high tide roosts. Some of this pasture is floristically rich and species such as green winged orchid can occur. The lower saltmarsh habitat is dominated by cord grass, but includes species such as sea purslane and sea lavender. Langstone Harbour SSSI includes Farlington Marshes which is a vital high water roost and brent geese feeding ground. This area also includes the coastal shingle and grassland habitats around Hayling Island, including the Sinah Common SSSI, noted for the endangered childing pink, and an outstanding assemblage of nationally scarce plants.

Targets and opportunities:

- Coastal Grazing Marsh
- Purple Moor Grass and Rush Pastures
- Coastal Salt Marsh

03:19 Portsmouth Harbour

Landscape Character Area: South Hampshire Coast

Landscape Types: Harbours / Settled Coastal Plain

Geology: The bedrock is predominantly chalk in the northern half, with Sand and Clay, Silt and Sand in the southern half. There are deposits of Clay, Silt, Sand and Gravel in northern and central regions, Sand and Gravel to the south-west and north-east, and Sand, Silt and Clay to the north and eastern fringes.

Biodiversity: This area is centred on Portsmouth Harbour SSSI which is the westernmost of the three extensive and connected tidal basins - Portsmouth, Langstone and Chichester Harbours. The harbour receives some fresh water from springs arising in the intertidal zone, and from a number of small streams, the largest of which is the River Wallington, which flows into Fareham Creek, the westernmost channel of Portsmouth Harbour. The intertidal area of Portsmouth Harbour includes 776ha of mudflats & eelgrass beds and about 173ha of cord-grass *Spartina* marshes. At the uppermost levels of the *Spartina* marshes is replaced locally by saltmarsh which then grades into tussocky grassland dominated by sea couch. The biological richness and productivity of Portsmouth Harbour is reflected in the nationally important numbers of several wetland birds, including grey plover, black-tailed godwit, and dark-bellied Brent geese which overwinter there. The SSSI includes two brackish lagoons adjoining Haslar Lake in the south-west of the Harbour; Little Anglesey Lake and Cockle Pond. The SSSI also includes a small area of terrestrial habitat extending along the southern side of Horsea Island, where chalk spoil dumped early in the 20th century supports a rich chalk grassland flora. The BOA has been extended to include further coastal habitats (many SINCs) along the perimeter of the harbour where opportunities exist to enhance and expand certain habitats.

Targets and opportunities:

- Coastal Grazing Marsh
- Coastal Salt Marsh
- Purple Moor Grass and Rush Pastures

03:20 The Solent

Landscape Character Area: South Hampshire Coast

Landscape Types: Major Estuary and Solent / Settled Coastal Plain / Major River Valleys

Geology: A bedrock of Sand, Silt and Clay with just Clay to the north-west of the area. Clay and Silt and Clay, Silt, Sand and Gravel deposits run along the length of the coastal edges with Sand and Gravel river terrace deposits found further inland. Gravel deposits are found at the south-eastern end of the area and Peat occurs in the Alver valley.

Biodiversity: This area extends along the eastern shore of Southampton Water from Lee-on-the-Solent to the mid-Itchen estuary and includes the lower estuary of the River Hamble. The area comprises extensive intertidal muds with a littoral fringe of vegetated shingle, saltmarsh, reedbed, marshy grasslands, soft rock cliffs and deciduous woodland. The site is an integral part of Southampton Water which is of international importance for over-wintering dark-bellied brent geese, and of national importance for three species of wildfowl (great-crested grebe, teal and wigeon) and five species of wader (black-tailed godwit, dunlin, grey plover, ringed plover, redshank). The area also supports an outstanding assemblage of nationally scarce coastal plants. In addition, the cliffs at Brownwich and the foreshore at Lee-on-The Solent are of national geological importance. SSSIs include the Lee on Solent to Itchen Estuary, which includes Hamble Common, a mosaic of acidic grassland and wet heath, with neighbouring SINCs supporting species-rich grassland, secondary woodland with relic heath, also grazing marsh and a reed-fringed freshwater fleet at Hook Lake and ancient deciduous woodland extending inland along a former tidal re-entrant. Vegetated shingle, a nationally restricted habitat, is found fronting the reed bed at Hook Spit. Other SSSIs include Titchfield Haven which was formerly the estuary of the River Meon, and comprises an extensive freshwater marsh, supporting large reed beds, wet, unimproved meadows, pools and patches of fen. The area is important for surface-feeding ducks and possesses a rich wetland breeding bird community. Browndown Common SSSI, the Wild Grounds SSSI, other SINCs in the Alver Valley floodplain and at Gilkicker Point SINC are included, and include important areas of vegetated shingle/grass heath, acid oak woodland, wet woodland, swamp & reed beds and brackish grassland. Areas of less interesting vegetation are included where they are known to support over wintering Brent geese and other waders or are of high potential for re-creation of semi-natural coastal habitats.

Targets and opportunities:

- Coastal Grazing Marsh
- Coastal Salt Marsh

03:21 The Hamble Catchment

Landscape Character Area: South Hampshire Lowland and Heath / South Hampshire Coast / Avon, Test, Itchen and Meon Valleys

Landscape Types: Settled Lowland Mosaic Ancient Forest / Major River Valleys / Settled Coastal Plain

Geology: The bedrock for the area consists of Clay Silt and Sand in the south and north with Sand scattered throughout the area. There is Chalk bedrock at the far north-eastern and eastern fringes. Deposits of Silt and Clay, Sand Silt and Gravel and Clay run through the river valley.

Biodiversity: This area comprises the Upper Hamble Estuary and Woods SSSI, the Hamble river valley, its main tributaries and headwaters which extend to the Moors SSSI at Bishop's Waltham to the north and Botley Wood SSSI to the east. The upper section of the Hamble estuary supports a narrow zone of mudflats, saltmarsh, reedswamp and ancient semi-natural woodland. Twelve types of ancient broad-leaved woodland occur within the Upper Hamble SSSI. Of particular interest is the transition between zones of pedunculate oak/birch/hazel through sessile oak/birch/hazel to sessile oak/birch in response to changes from heavy London Clay soils to light, well-drained valley sands and gravels, and the gradation from ancient semi-natural woodland to estuarine saltmarsh. The Hamble woodlands are also notable for their stands of small-leaved lime. A number of small unimproved neutral/wet grassland SINCs occur further along the river valley & its tributaries, including complexes at Calcott Farm and Ford Lake. Unimproved wet meadows, draining into a central pool with associated mature alder can be found in the headwaters of a tributary of the River Hamble at the Moors SSSI which lies near the junction of the Chalk and Reading Beds. The meadows are fed by a series of springs which may yield water of differing base status since the vegetation exhibits both acid and basic elements. Another tributary of the Hamble drains from a dense concentration of ancient semi-natural & replanted woodland SINCs at Biddenfield, arising further along at Shedfield Common, an area of relic heath, valley mire and species rich grassland. A third tributary drains from Botley Wood SSSI though an area of species-rich rushy pasture & wet woodland SINCs at North Whiteley. Botley Wood SSSI itself comprises a large tract of ancient semi-natiral and replanted woodland in a poorly-drained low-lying hollow. Despite the coniferisation it is of exceptional importance for its rich insect populations which depend upon the woodland clearings, broad herb-rich rides and relict stands of semi-natural deciduous woodland. k. Where undisturbed, the semi-natural woodland cover consists largely of hazel coppice with oak/alder standards on the drier, acidic soils, grading to damp alder woodland on the poorly-drained clay. The alder is mostly grown from old coppice and supports a lush, species-rich ground flora. The ride vegetation is very varied and supports abundant herbs, sedges and rushes.

Targets and opportunities:

- Wet Woodland
- Lowland Meadow
- Lowland Mixed Deciduous Woodland
- Purple Moor Grass and Rush Pastures

03:22 St Catherine's Hill to Cheesefoot Head

Landscape Character Area: South Hampshire Downs / Mid Hampshire Downs / Avon, Test, Itchen and Meon Valleys (western fringe)

Landscape Types: Major River Valleys / Downland Mosaic and Assarts

Geology: A bedrock of chalk with some deposits of Clay, Silt, Sand and Gravel

Biodiversity: The St Catherine's Hill – Cheesefoot Head area lies just east of Winchester and comprises a series of steep chalk scarp slopes facing south, north, east and west. It supports the two SSSIs of Cheesefoot Head and St. Catherine's Hill. These sites comprise species rich turf dominated by fescues and bents and with a wide range of calcicole species such as dwarf thistle, small scabious and dropwort. A number of SINCs are scattered throughout area containing extensive remnants of unimproved chalk grassland. Some like Magdalen Hill and The Dongas contain high numbers of chalk grassland indicator species. Others are a mosaic of improved or semi-improved grassland with encroaching scrub. The whole area is important for a diverse range of butterfly species, farmland birds and rare arable plants.

Targets and opportunities:

- Lowland Calcareous Grassland
- Lowland Mixed Deciduous Woodland

03:23 Preshaw

Landscape Character Area: South Hampshire Downs / Avon, Test, Itchen and Meon Valleys

Landscape Types: Downland Mosaic and Assarts / Open Downland / Major River Valleys

Geology: A bedrock of Chalk with some deposits of Clay, Silt, Sand and Gravel

Biodiversity: The Preshaw BOA sits on the gently undulating chalk plateau in a highly arable setting but with an exceptional concentration of ancient semi-natural and replanted woods, secondary woodland and relict chalk downland offering high opportunity for woodland restoration and re-linking woodland and downland fragments. Beacon Hill (Warnford) SSSI occurs at the eastern end of the BOA on a chalk spur capped with clay-with-flints, overlooking the Meon valley. The steep north- and south-facing slopes of the SSSI support a herb-rich chalk grassland flora and beech/ash/hazel woodland.

Targets and opportunities:

- Lowland Calcareous Grassland
- Lowland Mixed Deciduous Woodland

03:24 Ampfield - Baddesley - Chilworth - Lordswood

Landscape Character Area: South Hampshire Lowland and Heath / Avon, Test, Itchen and Meon Valleys

Landscape Types: Settled Lowland Mosaic Ancient Forest / Major River Valleys

Geology: Bedrock predominantly Clay, Silt and Sand with Sand and Pebbly Sand scattered throughout the central regions. Deposits of Clay, Silt, Sand and Gravel, and Sand and Gravel, are scattered throught the area.

Biodiversity: This is an important complex of ancient semi-natural woodland, relic heathand and species-rich neutral grassland overlying the tertiaries. The area supports dense concentrations of SINCs and several notable SSSIs including Baddesley Common & Emer Bog SSSI/SAC, an incredibly important area of valley bog & associated damp acidic grassland, heathland and wet woodland with considerable invertebrate interest. Also Trodds Copse SSSI and many other ancient woodland SINCs such as Ampfield Wood which supports an important small leaved lime population, plus a number of woodland SINCs overlying relic heathland, extending down to Lord's Wood a large Forestry Commission conifer plantation on a former heath and common which retains significant semi-natural interest.

Targets and opportunities:

- Lowland Heath
- Lowland Mixed Deciduous Woodland
- Lowland Dry Acid Grassland
- Wet Woodland
- Lowland Meadow

03:25 Bere Ashley

Landscape Character Area: South Hampshire Downs / Avon, Test, Itchen and Meon Valleys

Landscape Types: Downland Mosaic and Assarts / Major River Valleys

Geology: Chalk bedrock with some deposits of Clay, Silt, Sand and Gravel.

Biodiversity: The Bere Ashley BOA lies on the Hampshire Upper Chalk plateau. It contains the Crab Wood SSSI in the east, and several ancient semi-natural woodland and relic downland SINCs. Crab Wood is dominated by oak standards over a hazel shrub layer, last coppiced about 20 years ago. The woodland ground flora is particularly rich and dominated by either bluebell or dog's mercury. The site is entomologically rich and includes species such as the purple emperor. The wood is thought to be of considerable antiquity. The SINCs are a mixture of relic downland and remnant ancient semi-natural woodland, and plantations on ancient woodland sites which retain a good ground flora.

Targets and opportunities:

- Lowland Mixed Deciduous Woodland
- Lowland Calcareous Grassland

03:26 Tytherley Woods

Landscape Character Area: South Hampshire Lowland and Heath / Avon, Test, Itchen and Meon Valleys

Landscape Types: Settled Lowland Mosaic Heath Plantation / Major River Valleys / Downland Mosaic and Assarts (tiny corner to the north)

Geology: A bedrock of Clay, Silt and Sand with deposits of Clay, Silt, Sand and Gravel, and Sand and Gravel, are scattered throught the area.

Biodiversity: The Tytherley Woods Area comprises a dense concentration of ancient semi-natural woodlands extending from the Wilts border to the grasslands of the Test Valley. At the extreme west lies Bentley Wood on the Hants/Wilts border, an SSSI notified for its exceptionally rich butterfly and moth fauna. The complex and neighbouring woods support one of the largest populations of Pearl-bordered Fritillary in England, making it a high priority for safeguarding the future of this species. To the east of the site is a network of smaller woodlands in conservation or private ownership which have the potential through restoration to form a more connected wooded landscape, in particular the Mottisfont Estate woods which contains a mix of woodland types including hazel coppice with standards, broadleaved plantation and coniferous plantation and are designated SSSI and SAC for the nationally rare Barbastelle Bat.

Targets and opportunities:

- Lowland Mixed Deciduous Woodland
- Wet Woodland
- Lowland Meadow

03:27 Somborne Woods

Landscape Character Area: Mid Hampshire Downs / Avon, Test, Itchen and Meon Valleys

Landscape Types: Major River Valleys

Geology: Chalk bedrock with some deposits of Clay, Silt, Sand and Gravel

Biodiversity: The Somborne Woods comprise the Windovers Farm Woodlands & the Heath House Estate Woods and sit adjacent to Stockbridge Down SSSI. Together these woods form the largest concentration of worked hazel coppice in south east England and have had a history of continuous coppice management for at least several centuries. Some areas have become derelict in recent years. The woodlands are all SINCs and are also important for Pearl-bordered fritillary, Duke of Burgundy and & Grizzled skipper. Relic areas of chalk grassland occur.

Targets and opportunities:

- Lowland Calcareous Grassland
- Lowland Mixed Deciduous Woodland

03:28 Dean Hill

Landscape Character Area: South Hampshire Downs / South Hampshire Lowland and Heath

Landscape Types: Major River Valleys / Downland Mosaic and Assarts

Geology: Chalk bedrock with some deposits of Clay, Silt, Sand and Gravel

Biodiversity: This area comprises part of Brickworth Down and Dean Hill SSSI which occupies a long north facing scarp of Upper Chalk in the extreme west of the county, bordering Wiltshire. The SSSI comprises high quality chalk grassland with nationally restricted plant and invertebrate species, extensive and healthily regenerating juniper scrub, and the largest yew wood in Wiltshire and Hampshire. The site has long been recognised as important for insect populations. Butterflies occurring include chalkhill blue, grizzled skipper, Duke of Burgundy and green hairstreak. The BOA extends around the northern slopes of Dean Hill to include relic downland on the old MOD railway sidings and unimproved downland further along at Curlew Farm Down, all Site of Importance for Nature Conservation.

Targets and opportunities:

- Lowland Calcareous Grassland
- Lowland Mixed Deciduous Woodland

03:29 Salisbury Plain (Hants)

Landscape Character Area: Hampshire Downs

Landscape Types: Open Downland

Geology: Chalk bedrock with no notable superficial deposits.

Biodiversity: Salisbury Plain occupies a plateau of Upper and Middle Chalk which rises in the heart of Wiltshire, and extends only marginally into Hampshire. It supports the largest known expanse of unimproved chalk downland in north west Europe, and represents 41% of Britain's remaining area of this rich wildlife habitat. Salisbury Plain was acquired by the Ministry of Defence for military training early this century, and this large expanse of lowland grassland has not been subject to intensive farming methods. As a result, 12933 ha. of chalk downland remains which supports 13 species of nationally rare and scarce plants, 67 species of rare and scarce invertebrates and forms a site of international importance for birds. In addition to chalk downland, this site supports scrub and woodland habitats, and temporary and permanent pools and the Nine Mile River winterbourne. The BOA in Hampshire includes opportunity to extend this habitat where there is high suitability.

Targets and opportunities:

- Lowland Calcareous Grassland

03:30 Martin Down - Boulsbury - Toyd Down

Landscape Character Area: Cranborne Chase

Landscape Types: Open Downland

Geology: Predominantly Chalk bedrock with some Pebbly Sand towards the south. Deposits of Silty Clay and Clay, Silt, Sand and Gravel.

Biodiversity: Martin Down –Boulsbury – Toyd Down form an extensive tract of chalk downland, chalk heath and chalk scrub on the Hampshire/Wiltshire Border. The area includes the SSSI site of Martin and Tidpit Down where the chalk flora is exceptionally rich and includes species such as bastart toadflax, field fleawort, early gentian and at least eight local orchid species including Burnt Orchid. The downland comprises grassland of varying ages from ancient herb-rich swards to recent turf ploughed in the 1940's and now reverting. Superficial Eocene deposits have resulted in less alkaline conditions, and unusual associations of calcicole and calcifuge species regarded as the best of their type in England. The open grassland is used for feeding by several birds of prey including hen harrier, hobby and barn owl. There is an outstanding assemblage of butterflies with 36 species recorded including adonis blue, marsh fritillary and Duke of Burgundy. To the east is Toyd Down and Quarry SSSI with a good range of chalk turf plants, and considerable entomological interest including a relic population of the grayling butterfly in it's chalk form. Also to the east are scattered remnants of chalk grassland, now designated SINCs, that have a good range of chalk grassland species. To the south are the woodland complexes around Boulsbury Wood SSSI and associated SINCs which straddle the Hampshire/Dorset boundary. These are characteristically oak standards with hazel coppice, but rarer wych elm or small-leaved lime also occur. At least 60 woodland vascular plants occur in Boulsbury Wood, making it the single most species rich wood in Hampshire. It is also the only known Hampshire locality for meadow saffron and wood vetch.

Targets and opportunities:

- Lowland Calcareous Grassland
- Lowland Mixed Deciduous Woodland

03:31 New Forest

Landscape Character Area: New Forest Lowland and Heath / Avon, Test, Itchen and Meon Valleys / New Forest Coast

Landscape Types: Lowland Heath and Ancient Forest / Settled Lowland Mosaic Heath Plantation / Major River Valleys / Settled Coastal Plain

Geology: Bedrock made up of a mosaic of Clay, Sand, Clay Silt and Sand, and Sand Silt and Clay. Some Chalk bedrock occurs in a tiny corner in the north-west of the area. Deposits of Sand and Gravel dominate much of the area but are less frequent in north-eastern corner. Clay and Silt deposits run down the eastern side, and Clay, Silt, Sand and Gravel river terrace deposits occur along the valleys. Silty Clay deposits are found in the north-western river valleys, and a large area of Gravelly Sand occurs in the central-western area.

Biodiversity: The New Forest embraces the largest area of 'unsown' vegetation in lowland England including lowland heath, valley and seepage step mire, or fen, and ancient pasture woodland, including riparian and bog woodland. Nowhere else do these habitats occur in combination and on so large a scale. There are about 4,600 hectares of pasture woodland and scrub dominated by oak, beech and holly; 11,800 hectares of heathland and associated grassland; 3,300 hectares of wet heath and valley mire-fen and also 8,400 hectares of plantations dating from various periods since the early 18th century. Within this matrix of habitats are a range of acid to neutral grasslands where the vegetation owes much to the local geology and continuous grazing, a situation which is uncommon in lowland England. A network of small streams draining the Forest and a series of ponds of varying sizes and water chemistry including several ephemeral ponds add to the wide range of habitats which support an outstanding assemblage of nationally rare and scarce plants, bryophytes, lichens, fungi and rare and scarce invertebrates. The area also supports internationally important breeding populations of certain bird species and the wintering population of another as well as an assemblage of birds associated with specific habitats such as old woodland or wetlands. Scattered around the New Forest within the BOA are areas of enclosed farmland which support many unimproved meadows, both SSSsI and SINCs which form valuable backup grazing for New Forest livestock. The area delineated within the BOA also indicates high opportunity for restoring/linking heathland, grassland and woodland habitats and linking to the coastal habitats.

Targets and opportunities:

- Lowland Heath
- Lowland Dry Acid Grassland
- Lowland Mixed Deciduous Woodland
- Purple Moor Grass and Rush Pastures
- Lowland Meadow
- Wet Woodland

03:32 New Forest Coast

Landscape Character Area: New Forest Coast / New Forest Lowland and Heath

Landscape Types: Settled Coastal Plain / Major Estuary and Solent

Geology: Bedrock made up of a mosaic of Clay, Sand, Clay Silt and Sand, and Sand Silt and Clay. Tidal flat and river terrace deposits of Clay and Silt occur in the western corner, the central southern coastline and along the eastern edge. Sand and Gravel deposits occur along the south-western stretch of coast running up to Hurst Spit, and also further inland for much of the rest of the area. Clay, Silt, Sand and Gravel deposits occur at the south-eastern edge.

Biodiversity: The New Forest Coast BOA possesses a remarkable diversity of habitat ranging from coastal mudflats and saltmarshes, shingle beaches and spits, soft rock cliffs, fresh and brackish marshland and pools, maritime grassland, species rich neutral and acidic grassland, valley mire, heathland and a range of ancient semi-natural woodlands. This wide range of habitats support a rich flora and an equally rich and diverse insect fauna and many areas are of international importance for populations of overwintering and migratory wildfowl and wading birds and of national importance for populations of breeding gulls, terns and waders. Many of the rivers draining from the New Forest support extensive areas of reedbed and alder woodland developed on fen peat. The following SSSIs are present within the coastal BOA; North Solent SSSI, Lymington River Estuary SSSI, Highcliffe to Milford Cliffs SSSI, Sowley Pond SSSI, Hythe to Calshot Marshes SSSI and Dibden Bay SSSI, along with numerous SINCs representing ancient woodland, unimproved grassland, ponds and relic areas of mudflat and saltmarsh outside the SSSI series.

Targets and opportunities:

- Coastal Grazing Marsh
- Coastal Salt Marsh
- Purple Moor Grass and Rush Pastures

03:33 Avon Valley

Landscape Character Area: Avon, Test, Itchen and Meon Valleys / New Forest Lowland and Heath / Cranborne Chase

Landscape Types: Major River Valleys / Settled Lowland Mosaic Heath Plantation / Open Downland

Geology: Sand bedrock occurs in the southern half and eastern and northern reaches of the area. Sand, Silt and Clay bedrock dominates the central region, and Clay, Silt, Sand and Grvael runs south-west in a band across the northern half of the area. Chalk bedrock occurs in the north and north-western corner. Clay, Silt, Sand and Gravel river terrace deposits run down through the valley. Silty Clay deposits are found around the river valley in the north-western and eastern reaches of the area, with Sand and Gravel occuring in the rest of the area.

Biodiversity: The River Avon is a classic chalk stream of European importance (SAC/SPA/SSSI) meandering across a broad flood plain between North Charford in the north and Christchurch Harbour in the south. The river is dissected by numerous dykes and rivulets, and forms part of the County boundary for some of its length. To either side of the flood plain the land rises in a series of river terraces to the extensive heathlands of southeast Dorset and the New Forest. To the north of Ringwood lies Blashford Lakes, a series of lakes created by gravel excavation from the river terraces. The Avon valley shows a greater range of habitats and a more diverse flora and fauna than any other chalk river valley in Britain. The habitats range from extensive areas of unimproved grasslands, through a range of fens and mires to riparian woods, and heathland. The grasslands support internationally important assemblages of breeding and wintering birds including large flocks of European white-fronted geese, Bewick's swans, wigeon, teal, shoveler, golden plover and black-tailed godwits. The river has a very diverse fish fauna including important populations of Atlantic salmon and brown trout. Molluscs are particularly abundant including the rare water snail *Valvata macrostoma* and the pea mussel *Pisidium tenuilineatum*. The River Avon also supports a small population of otters.

Targets and opportunities:

- Wet Woodland
- Lowland Meadow
- Purple Moor Grass and Rush Pastures
- Floodplain Grazing Marsh

03:34 Test Valley

Landscape Character Area: Avon, Test, Itchen and Meon Valleys / Mid Hampshire Downs / South Hampshire Lowland and Heath

Landscape Types: Major River Valleys / Settled Lowland Mosaic Heath Plantation / Settled Lowland Mosaic Ancient Forest

Geology: Chalk bedrock dominates the northern two-thirds of the area; Clay, Silt and Sand and Sand bedrock around the southern regions. River terrace deposits of Clay, Silt, Sand and Gravel occur all the way down the valley. Sand and Gravel deposits occur mainly in the northern regions, and small deposits of Calcareous Tufa and Peat occur in the central region.

Biodiversity: The Test Valley supports a complex system of chalk streams (mostly SSSI) , with several major contributaries; the Anton, Dever, Wallop and Blackwater. Soils in the valley derive from alluvium, peat and 'tufa' (calcareous marl). These, combined with the networks of ridges and drains, result in complex mosaics of dry grassland, rush pasture, fen-meadow, flood pasture and swamp communities. The floristic diversity of these unimproved meadows is high and species-rich communities typical of wet, calcareous, pastures are well represented at the following SSSIs at Bere Mill Meadows, Bransbury Common, East Aston Common, Chilbolton Common, Stockbridge Fen and Stockbridge Common Marsh. Numerous SINCs supporting fen meadow, wet woodland and further stretches of chalk stream add to the interest of the BOA.

Targets and opportunities:

- Wet Woodland
- Purple Moor Grass and Rush Pastures
- Floodplain Grazing Marsh
- Lowland Meadow
- Reedbed

03:35 Meon Valley

Landscape Character Area: Avon, Test, Itchen and Meon Valleys / South Hampshire Downs

Landscape Types: Major River Valleys

Geology: Chalk bedrock occurs in the north-western half of the area, the south-eastern half made up of Clay Silt and Sand, Sand Silt and Clay, and Sand bedrock. Deposits of Clay, Silt, Sand and Gravel run through the river valley, with Gravel, Silt and Sand deposits occuring in some central and northern areas.

Biodiversity: The River Meon arises on the chalk and supports a classic chalk stream flora. From its source south of the village of East Meon the River Meon forms a narrow, visually enclosed valley with only one principal water course and few meanders. Whilst much of the upper floodplain has been agriculturally improved there are a few fragmentary areas of ecological value, particularly at the lower end where there are several unimproved wet SINC meadows between Titchfield and Fareham. Titchfield Haven SSSI lies at the southern end of the river and comprises freshwater marsh with reedbeds, unimproved wet meadow and fen.

Targets and opportunities:

- Purple Moor Grass and Rush Pastures
- Wet Woodland
- Lowland Meadow
- Reedbed
- Lowland Fen

03:36 Ringwood Forest (Hants)

Landscape Character Area: New Forest Lowland and Heath, Avon / Test, Itchen and Meon Valleys

Landscape Types: Settled Lowland Mosaic Heath Plantation / Major River Valleys

Geology: Sand bedrock with mainly Sand and Gravel deposits

Biodiversity: Ringwood Forest is an extension of the Dorset Heaths and is a block of coniferised heathland situated on the Hampshire/Dorset border. The underlying geology of plateau gravel, bagshot sands and bracklesham beds leads to acid soils. The site displays an excellent diversity of habitats, species and structure, and is designated a SINC because of this. Unplanted areas of clearfell support important bird populations including sand martins. The extensive network of forestry rides are extremely diverse in species, including silver-studded blue butterfly, annual knawel, southern wood ant, wood lark, common cudweed, coral necklace and smooth snake.

Targets and opportunities:

- Lowland Heath
- Lowland Dry Acid Grassland
- Lowland Mixed Deciduous Woodland

03:37 Thames Basin Heaths

Landscape Character Area: North Hampshire Lowland and Heath / Hampshire Downs (in extreme south of area)

Landscape Types: Settled Lowland Mosaic Heath Plantation

Geology: Sand bedrock dominates most of the area, with Clay, Silt and Sand occuring in western and southern regions. A thin band of Clay bedrock runs through the south-eastern corner and Chalk occurs at the extreme south. Sand and gravel deposits occur frequently throughout the area, with Clay, Silt, Sand and Gravel deposits occuring in the river valleys.

Biodiversity: This area of the Thames Basin Heaths was originally a Royal Hunting Forest with a legally defined boundary within which the king had the right to hunt deer and other animals. It was by no means all woodland and would have included large tracks of heathland many of which exist today amongst the conifer plantations; including Castle Bottom to Yateley & Hawley Commons SSSI, Hazeley Heath SSSI and Bourley & Long Valley SSSI, three of the largest remnants of lowland heathland in the Thames Basin today, situated on gently undulating plateau gravels and sands and supporting internationally important populations of Dartford warbler woodlark and nightjar. The BOA in general comprises a diverse mosaic of heathland, woodland, mire, scrub and grassland habitats supporting a diversity flora and fauna including nationally scarce plants, nationally rare insects and the three bird species mentioned above.

Targets and opportunities:

- Lowland Dry Acid Grassland
- Lowland Heath
- Purple Moor Grass and Rush Pastures
- Lowland Meadow

03:38 Tidworth (Hants)

Landscape Character Area: Hampshire Downs / Mid Hampshire Downs

Landscape Types: Open Downland

Geology: Chalk bedrock with a small area of Sand and Gravel deposits to the north-east.

Biodiversity: Tidworth Extension is located in the north-west of Hampshire to the east of Salisbury Plain, on the Hampshire/Wiltshire border. This chalk downland area contains several small unimproved chalk grassland and scrub SINCs. Notable species such as juniper, frog orchid and purple milk vetch occur. More sheltered sites have good butterfly assemblages. Woodlands within this area are species rich with oak, ash and field maple canopy and hazel understorey.

Targets and opportunities:

- Lowland Calcareous Grassland

03:39 Porton Down (Hants)

Landscape Character Area: Hampshire Downs / Mid Hampshire Downs

Landscape Types: Open Downland

Geology: Chalk bedrock with some deposits of Clay, Silt, Sand and Gravel

Biodiversity: Porton Down extends into Wiltshire on a gently undulating plateau of Upper Chalk incorporating several shallow dry valley. It comprises an extensive area of grassland, scrub and woodland and constitutes one of the largest uninterrupted tracts of semi-natural chalk grassland in Britain. It supports rare grassland and scrub communities, together with significant populations of uncommon plants, invertebrates and birds including the Stone curlew.

Targets and opportunities:

- Lowland Calcareous Grassland

03:40 Broughton Down (Hants)

Landscape Character Area: Mid Hampshire Downs / South Hampshire Downs / Avon, Test, Itchen and Meon Valleys

Landscape Types: Open Downland / Downland Mosaic and Assarts / Major River Valleys

Geology: Chalk bedrock with some deposits of Clay, Silt, Sand and Gravel

Biodiversity: Broughton Down SSSI is situated on a mainly north-east-facing chalk escarpment exhibiting a succession of chalk vegetation stages from open, grazed chalk grassland, through scrub of hawthorn, elder, buckthorn and dogwood, to mature beech, ash and yew woodland. Although the chalk grassland flora is not consistently rich in species, the site as a whole includes a large assemblage of plants characteristic of thin chalk soils, including a population of rare field fleawort. The insect fauna includes colonies of chalk carpet moth, silver spotted skipper, the Essex skipper, and Duke of Burgundy fritillary. The site includes important examples of almost the complete range of chalk habitats, with the exception of juniper scrub, which is represented by only a few bushes. The BOA has been drawn to include other relic areas of chalk grassland and numerous ancient woodlands which link back to Bentley Wood in the north and hence back into Wilts.

Targets and opportunities:

- Lowland Calcareous Grassland
- Lowland Mixed Deciduous Woodland

03:41 Harewood Forest

Landscape Character Area: Hampshire Downs

Landscape Types: Open Downland Major River Valleys

Geology: Clay-with-flints & River terrace deposits

Biodiversity: Much of the BOA is covered by Harewood Forest (SINC), lying south-east of Andover and directly adjoining the Test Balley BOA. Harewood Forest covers 670 hectares of mainly ancient semi-natural woodland with extensive areas of (now derelict) oak coppice. The Forest is of great antiquity, being referred to in Saxon Chronicles of the 10th Century when it was part of the Forest of Chute. It has been managed as traditional coppice since at least the 13th Century. Despite about 20 percent coniferization, Harewood is probably the second largest block of ancient woodland left in Southern England and is of outstanding ecological value for its semi-natural distribution of tree species reflecting the diverse mix of soils within the Forest. It is also one of the richest woodlands in the country for several groups of invertebrates including butterflies & moths. Outside of the woodland the area has a strong hedgerow and tree structure, which gives it an enclosed character. The area drains to the River Test but has an absence of streams and waterbodies. There are a small number of relic downland SINCs and one very important rare arable plants SINC

Targets and opportunities:

- Lowland Calcareous Grassland
- Lowland Mixed Deciduous Woodland
- Rare arable plants

03:42 Longparish Important Arable Plants Area

Landscape Character Area: Hampshire Downs / Avon, Test, Itchen and Meon Valleys

Landscape Types: Open Downland

Geology: Mainly chalk bedrock with some Clay-with-flints

Biodiversity:. This area has been identified by Plantlife as an Important Area for Arable Plants (IAPA) of European Importance. The western half of the area is also exceptionally important for farmland birds whilst the eastern half supports a number of important ancient woodland SINCs many with in-cycle coppice.

Targets and opportunities:

- Lowland Calcareous Grassland
- Lowland Mixed Deciduous Woodland
- Rare arable plants

03:43 Herriard Wooded Downland Plateau

Landscape Character Area: Mid Hampshire Downs

Landscape Types: Wooded downland plateau

Geology: Clay-with-flints

Biodiversity: The BOA comprises an exceptional dense concentration of ancient semi-natural and replanted woodland SINCs on the clay cap, supporting important rare plant populations. Several of the woods have in-cycle coppice.

Targets and opportunities:

- Lowland Calcareous Grassland
- Lowland Meadow
- Lowland Mixed Deciduous Woodland

South East England Biodiversity Forum

Isle of Wight

04:01 Western Yar

The Western Yar valley, from source to mouth of the Western Yar, with the tributary of the Thorley Brook and the coastal strip to the west as far as Fort Albert

Joint Character Area: IW Joint Character Area: Harbours and Creeks, Intensive Agriculture, Landscape Improvement Zone, Northern Coastal Cliffs

Landscape types: A wide shallow valley with estuarine habitats, including saltmarsh, mudflats, reedbeds. Arable fields. The northern cliffs are wooded

Geology: Hamstead beds, Bembridge Limestone, Bembridge Marls
Geology (superficial): Alluvium, river terraces and tidal flat deposits

Topography: The Western Yar flows south –north, and it is tidal from Freshwater Causeway. The Thorley Brook flows east - west to join the estuary 200m south of the mouth of the river. A creek to the west of the main channel has a small sand dune system. The slumping low clay cliffs further to the west have secondary woodland.

Biodiversity:
SSSIs Western Yar, Freshwater Marshes, Colwell Bay
SINCs Mill Copse, Saltern Wood, Wilmingham Plantation, Backet's Plantation, Backet's Spinney, Backet's Copse, Thorley Meadows, Thorley Copse, Fort Victoria, Tapnell Furze

BAP habitat:
Saltmarsh
Mudflats
Saline lagoons
Coastal Grazing marsh
Sand dunes
Reedbed
Lowland mixed deciduous woodland

UK BAP Species:
Starlet sea anemone; Adder; Water vole; Divided sedge; Reed bunting; Brown Hare; Black-tailed godwit (wintering); Curlew (wintering); Borrer's saltmarsh grass; Red squirrel; Dormouse; Lapwing (wintering); Desmoulin's whorl-snail

Access: There is a footpath along the eastern side of the Western Yar. From Freshwater Causeway it becomes a cycleway. There is a circular walk around the estuary from Yarmouth. Fort Victoria has been designated as a country park.

Targets:
- Managed retreat of estuarine habitats
- High tide roosts for estuary birds
- Reedbed management and enhancement
- Neutral grassland management and enhancement

04:02 & 04:03 Western Central Ridge (2 sub sites)

The Needles headland and Headon Warren as far east as Freshwater Bay, where the chalk is breached by the Western Yar valley. Afton Down eastwards to Carisbrooke Castle, including Compton, Brook and Mottistone Downs and Brighstone Forest, an area of secondary woodland.

Joint Character Area: IW Joint Character Area: principally Chalk downs but some elements of Sandstone Hill Gravel ridges, and Northern Coastal Cliffs

Landscape types: Rolling chalk downland with northern slopes well-wooded, giving way to pasture land. Lower sandstone hills giving way to arable fields to the south.

Geology (bedrock): Chalk with some areas of ferruginous sands to the south, and clay silt and sand to the north at the base of the slopes
Geology (superficial): Clay with flints on the chalk

Topography: Stacks at The Needles and sheer chalk cliffs west of Freshwater Bay. The ridge runs west –east across the Island with shallow valleys (Western Yar, Chessell, Rowridge, and Bowcombe) running north south.

Biodiversity
SSSIs Headon Warren and West High Down, Compton Down, Mottistone Down, Calbourne Down, Rowridge Valley, Garston's Down
SINCs Moon's Hill, Freshwater Bay Cliffs, Shalcombe Down, Brook House Wood, Brighstone Forest, Grammar's Common, Row Down, Buddle Brook, Limerstone Down, Calbourne Pumping Station, Newbarn Down, Westover Copse, Little Down, High Wood, Round Copse, Apsedown Copse, Top Barn Copse, Idlecombe Down, Idlecombe Farm Down, Bowcombe Wood, Dukem Copse, Westridge Copse, Lorden Copse, Mount Ararat, Barcham's Copse, Plaish Copse, Plaish Meadows, Carisbrooke Castle, Mount Joy.

BAP habitat:
Chalk downland: extensive area of unimproved maritime influenced chalk grassland. Chalk heath on West High Down where superficial deposits overlie the chalk.
Heathland: on Headon Warren. Small areas of heathland also on Brighstone Down
Lowland mixed deciduous woodland

UK BAP Species: Early gentian; Wood calamint; Scrambled egg lichen; Duke of Burgundy fritillary; Grayling; Small blue; Grizzled Skipper; Dingy Skipper; Juniper; woodland bats; Red squirrel; Greater horseshoe bat; Frog orchid; Oxtongue broomrape.

Access: Tennyson Trail runs along the length of this area

Targets:
- Restoration and re-creation of chalk grassland
- Acid grassland/Heathland mosaic re-creation in Brighstone Forest
- Habitat management for butterflies

04:04 Medina Estuary

The rural areas of the Medina estuary between Newport and Cowes.

Joint Character Area: IW Joint Character Area: Harbours and Creeks, Traditional enclosed pasture, Landscape improvement area

Landscape types: Tidal estuary surrounded by farmland, predominantly arable with some pasture, and scattered ancient and secondary woodlands joined by hedgerows.

Geology (bedrock): Hamstead beds
Geology (superficial) Alluvium

Topography: Shallow valley with tidal estuary, saltmarsh and mudflats. Small streams draining into the estuary.

Biodiversity
SSSIs Medina Estuary
SINC Cowes Cemetery & Woods, Calvingclose Copse, Simmington Copse, Waterclose Copse, Great Werrar Wood, Little Werrar Wood, Werrar Meadow, Stag Copse, Stag Lane Pond, Dodnor Creek, Blackbush Copse, Heathfield Farm, Heathfield Copse

BAP habitat
Saltmarsh
Mudflat
Reedbeds
Lowland mixed deciduous woodland

UK BAP Species
Curlew (wintering); Black-tailed godwit (wintering), Lapwing (wintering); Brent goose (wintering); Red squirrel; Dormouse; White Admiral; Reed bunting; Herring Gull; Starling (winter roost).

Access: Cycleway on western side, footpaths on eastern side, linking to make a circular walk

Targets:
- High tide roosts for waterbirds
- Managed retreat at coastal sites
- Woodland management for mammals

04:05 North-Western Woods

The wooded north-western area of the Island from east of Yarmouth, through to Thorness Bay and Parkhurst Forest, and including the more open area around Newtown National Nature Reserve.

Joint Character Area: Isle of Wight Joint Character Area: Northern woodlands, Traditional Enclosed Pasture, Harbours and creeks

Landscape types: A well wooded landscape extending from Parkhurst Forest in the east, linked by hedgerows to the woodlands around the Newtown estuary the woodlands at Bouldnor. Also the lower parts of the river valleys of the Caulbourne, Newtown river, Clamerkin, Western Haven and Thorness. The land use is predominantly small fields down to pasture on heavy clays.

Geology (bedrock): Hamstead beds, Bembridge Marls, Bembridge Limestone, Headon and Osborne Beds and partly extending on to the Bracklesham beds.

Geology (superficial): Alluvium in the river valleys with some river terrace deposits in Parkhurst and Bouldnor Forests.
Tidal flat deposits in Newtown Harbour.

Topography: Gently undulating landscape crossed by a series of small streams flowing south –north through shallow valleys. Low slumping clay cliffs in the vicinity of Bouldnor.

Biodiversity
SSSIs Bouldnor & Hamstead Cliffs, Newtown Harbour, North Park Copse, Thorness Bay, Parkhurst Forest, Cranmore
SINCs Bouldnor Copse, Ningwood Common, Upper Hamstead Plantation, Creek Farm Wood, Shalfleet Farm Wood West, Nunney's Wood, Woodslade Coppice, Shalfleet Mill, Shishford Copse, Calbourne Meadows, Causeway Lake Scrubs, Harts Farm Meadows, Three Gates West, Guyer's Heath, Rushcroft Copse, Woodwax Copse, Yatland Copse, Fleetlands Copse, Harelane Plantation, Long Copse, Bulls Wood, Three Gates East, Locks Farm, Hummet Wood, Burnt Wood, Thorness Wood, Rolls Bridge Copse, Rolls Farm Wood, Whitehouse Copse, Chalkclose Copse, Parkhurst Forest, Ridge Copse, Noke Plantation

BAP habitats
Lowland mixed deciduous woodland
Heathland/acid grassland
Ancient/Species rich hedgerows
Saltmarsh
Mudflats
Vegetated shingle
Coastal grazing marsh
Saline lagoons
Maritime cliffs and slopes

UK BAP Species

Red Squirrel; Dormouse; Woodland bats; Curlew (wintering); Black-tailed godwit (wintering); Lapwing (wintering); Brent goose (wintering); White admiral; Small pearl-bordered fritillary; Pearl-bordered fritillary; Brown Hairstreak; Reddish buff moth; Small cord grass; Pale dog violet; Nightjar; Great crested newt; White letter hairstreak; Pillwort; *Lobularia pulmonia*; Brown hare; Lagoon sand shrimp; Yellowhammer; Reed bunting; Slender Hare's ear; Divided sedge; Adder; Skylark.

Access: Public rights of way network crosses the area as a whole. Open access in Parkhurst Forest and Bouldnor Forest; No access to MOD land.

Targets

- Woodland management for mammals, birds and butterflies
- Hedgerow management
- High tide roosts for waterbirds
- Managed retreat at coastal sites
- Heathland/acid grassland restoration

04:06 Southern Uplands

The high ground to the north of Ventnor and south west of Shanklin, extending as far north as the Appuldurcombe estate and including the coast from Ventnor to Shanklin Chine.

Joint Character Area: Isle of Wight Joint Character Area: Chalk downs, The Undercliff, Traditional enclosed pasture

Landscape types: Rolling chalk downs with some heathland, sandstone hills and wooded slopes. Extensive holm oak woodland above Ventnor on the Undercliff.

Geology (bedrock): Chalk overlying sandstones, which are exposed on the northern edges. Landslip

Geology (superficial): Clay with flints. River gravels

Topography (landform): Steep south facing slopes

Biodiversity (BAP habitat, Designated sites, UK BAP Species)
SSSIs Rew Down, Ventnor Dows, Greatwood & Cliff Copses, Bonchurch Landslips
SINCs Appuldurcombe Down, Rew Copse, Watcombe Bottom, Pitts Farm Down, Wroxall Copse, Ventnor Radio Station, St Martin's Down, Hungerberry Copse, Lynch Copse, Luccombe Chine, Monk's Bay, Bonchurch Undercliff

BAP Habitat
Lowland calcareous grassland
Heathland
Lowland mixed deciduous woodland
Maritime cliffs and slopes

UK BAP species
Woodland bats; Early gentian; Adder; Red squirrel; Small blue; Grizzled skipper; Suite of soft cliff invertebrates including Chestnut click beetle and Glanville fritillary; White helleborine.

Access: Open access over part of the area

Targets
- Restoration and recreation of chalk grassland
- Coastal scrub management

04:07 Eastern Yar Valley

The valley of the Eastern Yar from north of Whitwell to the mouth at Bembridge Harbour, and the Scotchell's Brook which flows south north to the west of Shanklin and Sandown. The Eastern Yar flows through a gap in the chalk ridge at Brading.

Joint Character Area: Isle of Wight Joint Character Area: Harbours and creeks; traditional enclosed pasture; Sandstone hills and gravel ridges

Landscape types: Predominantly an open landscape with both arable and pasture land.

Geology (bedrock); Calcareous mud, ferruginous sand

Geology (superficial): Extensive areas of Alluvium, Peat, River terrace deposits over-lie the solid geology throughout.

Topography: The northern part of the area is relatively flat and low lying land; above Godshill it is mostly below the 30m contour. Below Godshill, the valley narrows and there is a sandstone ridge at the western side rising to 80m. In the south of the area, St Catherine's Hill rises to 100m

Biodiversity:
SSSIs Alverstone Marshes, Brading Marshes to St Helen's Ledges
SINCs Brading Marshes North, Centurion's Copse, Steyne Wood, Morton Marsh, Sandown Levels, Sandown Golf Course, Alverstone Marshes East, Youngwood's Copse, Pope's Farm Marsh, Lynch Copse, Newchurch Marshes, Horringford Withybed, Perreton Down & Marsh, Redway Farm, Moor Farm, Great Budbridge, Upper Yar Valley, Bohemia Bog, Bleak Down, Upper Dolcoppice, Wydcombe Estate

BAP Habitat
Coastal and flood plain grazing marsh
Saline lagoons
Acid grassland
Lowland mixed deciduous woodland
Wet woodland

UK BAP species
Water vole; Lapwing (wintering/breeding); Skylark; *Asilus crabriformis* (robber fly); Brent goose (wintering); Divided sedge; Reed bunting; *Paracymus aeneus* (water beetle); foxtail stonewort; Black-tailed godwit (wintering); Curlew (wintering); Prickly saltwort; Small flowered catchfly;

Access: RSPB reserve at Brading Marshes has footpaths crossing it. There is a 'Source to Sea' Eastern Yar way-marked walk.

Targets
- High tide roosts

- Breeding waders and wetland birds
- Water vole habitat
- Water level management and wetland habitat restoration
- Saline lagoon creation
- Neutral grassland restoration

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04:08 Upper Medina Valley

River valley south of Newport as far as Chale Green

Joint Character Area: Isle of Wight Joint Character Area: Intensive arable land, Sandstone Hill and gravel ridges

Landscape types; Rolling arable farmland, with scattered woodland in a wide valley

Geology (bedrock); Mudstone, Sandstone, and Ferruginous sands

Geology (superficial): Extensive alluvium and peat deposits

Topography: Narrow stream heavily modified by river engineering crosses a wide sandstone vale. Irrigation storage reservoirs have been constructed in several places.

Biodiversity:
SSSIs The Wilderness, Cridmore Bay
SINCs Billingham Manor Farm, Sibdown Farm Copse, Gatcombe Withybed, River Medina: Shide to Blackwater

BAP habitat
Lowland mixed deciduous woodland
Wet woodland
Cereal field margins
Purple moor grass and rush pasture

UK BAP species
Water vole; Cornflower; Skylark; Yellowhammer; Linnet; Woodland Bats

Access: Footpaths cross the area, but no access along the length of the river

Targets
- Wetland water control and management to benefit water vole and wetland BAP habitats
- Arable plants
- Farmland birds

04:09 & 04:10 Eastern Central Ridge (2 subsites)

A ridge running between Newport in the west and Culver Cliffs in the east, breached by the Eastern Yar valley at Brading.

Joint Character Area: IW Joint Character Area: principally Chalk downs but some elements of Sandstone Hill Gravel ridges, and intensive agriculture.

Landscape types: Rolling chalk downland with northern slopes well-wooded, giving way to pasture land. Lower sandstone hills giving way to arable fields to the south. Quarrying at the western end, and in the vicinity of Knighton.

Geology (bedrock) ;Chalk with areas of ferruginous sands to the south, and clay silt and sand to the north at the base of the slopes. At the western end it includes a sandstone outcrop.

Geology (superficial): Some small areas of Clay with flints on the chalk. Extensive areas of River terrace deposits on both chalk and ferruginous sand at the western end.

Topography: Sheer chalk cliffs at Culver Down. The ridge runs west –east across the Island breached by the Eastern Yar running north-east /south-west .

Biodiversity
SSSIs Eaglehead & Bloodstone Copses, Arreton Down, Shide Quarry, Bembridge Down
SINCs Wroxall Bottom Copse, St George's Down, St George's Scarp, Standen Copse, Arreton Down North, Mersley Down North, Mersley Chalk Pit, Knighton West Wood, Knighton Down, Knighton East Wood, Kern Down Chalkpit, Ashey Down, Brading Down West, Rowdown Copse, Nunwell Park, Brading Down, Bembridge Down

BAP habitat
Chalk downland:
Acid grassland/heathland mosaic
Lowland mixed deciduous woodland
Maritime cliffs and slopes

UK BAP Species
Early gentian, Chalk eyebright, Red squirrel, Grizzled skipper; Dingy Skipper; Adder; *Osmia xanthomelana*; Glanville Fritillary

Access: Bembridge Trail runs along the Downs between Bembridge and Newport

Targets
- Restoration and recreation of chalk grassland
- Acid grassland/Heathland mosaic recreation on St George's Down
- Quarry restoration
- Habitat management for butterflies

04:11 South-West Coast

Coastal strip between Compton Chine and St Catherine's Point, including the higher ground at Southdown and St Catherine's Hill.

Joint Character Area: Isle of Wight Joint Character Area: Southern Coastal Farmland, Intensive agriculture, Chalk downs, Sandstone Hills

Landscape types : Predominantly arable farmland, with low sea cliffs, rising to the south to low sandstone hills and rolling chalk downland. Coastal scrub on the sandstone hills and landslip

Geology (bedrock): Mustones sandstones and clays of the Wealden and Atherfield series; ferruginous sands, and chalk

Geology (superficial): Extensive river terrace deposits between Small Chine and Grange Chine; some blown sand in the vicinity of Ladder Chine

Topography: Coastal strip with slumping soft cliffs, incised by small streams which form chines, with arable fields landward. At the southern end, outcrops of sandstone and chalk rise above the plain.

Biodiversity
SSSIs Compton Chine to Steephill Cove
SINCs Compton Marsh, Compton Grange, Sudmoor Dyke, Chilton Chine, Grange Chine, Windmill Copse, South Down, St Catherine's Down, St Catherine's Hill, The Undercliff

BAP habitat
Maritime cliffs and slopes
Chalk grassland

UK BAP species
Suite of RBD soft cliff invertebrates including Chestnut click beetle, Cliff tiger beetle and Glanville fritillary; Triangular pigmy moss; Green blackwort; Skylark; Yellowhammer; Linnet; Grey partridge; Water vole; Adder.

Access: Coastal footpath along cliff edge; access to beach at some points but cliff movement makes this difficult in places. Palaeontological interest.

Targets
- Habitat improvement for farmland birds
- Maintenance of slumping cliff as habitat for invertebrates
- Creation and maintenance of a buffer strip along the cliff top
- Scrub control and grazing of slumping cliffs around St Catherine's

04:12 North-Eastern Woods

The complex of woods in the Briddlesford area, which are linked by hedgerows to the wooded area of the Osborne estate.

Joint Character Area: Isle of Wight Joint Character Area: Northern woodlands, Traditional Enclosed Pasture, Osborne Coast, Landscape Improvement Area

Landscape types: A well wooded landscape in the vicinity of Wootton and the Osborne Estate, linked by hedgerows in the more open area to the west of Wootton. Predominantly pasture, but with some large arable fields.

Geology (bedrock): Hamstead beds, Bembridge Marls, Headon and Osborne Beds with a thin band of Bembridge Limestone

Geology (superficial): Alluvium in the river valleys with some river terrace deposits

Topography: Gently undulating landscape crossed by a series of small streams flowing south –north through shallow valleys. The Palmers Brook flows into an estuarine environment at King's Quay and the Blackbridge Brook flows into Wootton Creek, which is heavily used by recreational sailors and a cross-Solent ferry

Biodiversity:
SSSIs King's Quay Shore, Ryde Sands & Wootton Creek, Briddlesford Copses
SINCs Springhill/Western Wood, Osborne Estate, Clavell's Copse, Woodhouse Copse, Lushington Copse, Fattingpark Copse, Quarrel's Copse, Wallishill Copse, Horseground Copse, Aldeen's Copse, Woodside Copse, Fernhill Wood, The Old Mill Pond Wootton, New Copse, Quarr Old Abbey, Quarr Wood, Pucker's Copse, Firestone Copse, Steyne's Copse, The Keys Wood, Rowlands Wood, Kittenocks, Walkershill Copse, Combley Great Wood, Staplers Heath

BAP Habitat
Lowland mixed deciduous woodland
Ancient/Species rich hedgerows
Saltmarsh
Mudflats
Vegetated shingle
Reedbed

UK BAP Species
Woodland Bats; Red Squirrel; Dormouse; Curlew (wintering); Black-tailed godwit (wintering); Lapwing (wintering); Brent goose (wintering); Water vole; White admiral; Dingy Skipper; Marsh tit; Prickly saltwort.

Access: Limited public access at present. Public rights of way network crosses many of the woodlands but this does not extend across the Osborne Estate.

South East England Biodiversity Forum

Targets

- Woodland management for mammals and butterflies
- Hedgerow management
- High tide roosts for waterbirds

South East England Biodiversity Forum

Kent

05:01 Lower Stour wetlands

The Lower Stour wetlands opportunity area contains some of Kent's most extensive water and wetland habitats. The area includes a very high number of designated sites such as Stodmarsh, Westbere Marshes, the Lydden Valley and Hacklinge Marshes. Along the coast, the mudflats and sand dunes which lie between the marshes and the sea form part of the Sandwich & Pegwell Bay SSSI, a site of international importance for bird life.

Joint Character Area(s): North Kent plain

Landscape Types: The Lower Stour wetlands extend from the mouth of the old Wantsum channel across reclaimed marshland to the former mouth of the river Stour, and then continue around the coast to the Sandwich mudflats and sand dunes and the Lydden valley. The present field pattern is fairly small and regular, described by a network of drainage ditches, dykes and flood control banks. Old drove roads are a feature of the marshland landscape, and may support typical grazing marsh vegetation. Gravel extraction has been a major influence on the valley landscape, while mining subsidence produced much of the wetland at Stodmarsh. This landscape incorporates the Stour Valley and Wantsum and Lower Stour Marshes Landscape Character Areas.

Geology: Thanet beds with deposits of marine and estuarine alluvium; small amounts of London clay with deposits of head gravel and head brickearth are found around Upstreet and Upper chalk with alluvium around St Nicolas at Wade.

Biodiversity:

- Internationally important coastal habitats, including cliffs and intertidal habitats.
- Important dunes and grazing marsh.
- Internationally important freshwater wetlands and reedbed associated with the tidal Great Stour.
- Upstream from Chilham, the River Great Stour is a chalk-influenced river, supporting a number of species associated with chalk river habitat.
- Close to Canterbury, there are important acid woodland and grassland habitats at Old Park and Trenley Park Wood, with a localized population of adder.
- Key species include breeding and wintering birds associated with wetland habitats, including intertidal habitats; areas of scrub support nightingale and Cetti's warbler. Farmland birds include corn bunting, grey partridge and tree sparrow, and brown hare is widespread. Wetland, dune and cliff habitats support a number of rare plant species. This is an important area for water voles, and provides important foraging areas for declining bat species including serotine and noctule; another key wetland species is the shining ram's-horn snail *Segmentina nitida*. The cliffs at Pegwell Bay support an important assemblage of bees and wasps, including one of the UK's largest populations of *Cerceris quadricincta*.

Targets:

- Protect and enhance existing BAP priority habitats and designated sites. There should be no net loss of intertidal mudflats and saltmarsh, and no net loss of sand dunes, in line with UK BAP targets.

- Existing natural coastal processes should be maintained, and opportunities taken for managed realignment to maintain/enhance intertidal habitats.
- Pursue opportunities to restore and/or recreate intertidal habitats, grazing marsh, fen and reedbed (including for bittern) as part of a matrix of natural wetland and coastal habitats. Further upstream, there are opportunities to enhance the floodplain of the Great Stour. At least 200ha of grazing marsh should be restored or recreated around Sandwich and in the Lower Stour Valley, adjoining the Sandwich Bay to Hacklinge Marshes SSSI and/or within the Ash Level and South Richborough Pasture Local Wildlife Site.
- Pursue opportunities for the establishment of a new, landscape-scale, freshwater wetland complex, including fen, reedbed and grazing marsh, in which successional processes are allowed to proceed. In this context, a 'landscape-scale' complex should be considered as extending over at least 1000 hectares.
- Pursue opportunities for creation of acid grassland and heathland where this would contribute to the county-wide target of creating up to 145ha in blocks of at least 1ha and no more than 500m from other existing or new semi-natural habitat.
- Achieve a quantifiable improvement in habitat quality of the Nailbourne and the chalk river stretch of the River Stour (upstream of Chilham), as judged by appropriate EA quality indicators.
- Enhance or reinstate management of Local Wildlife Site woodlands.

05:02 Low Weald Woodlands

A concentration of often extensive woodlands, including some nationally important sites, on a relatively flat, clay landscape. Hedgerows bound the small fields, and the clay soils support a high concentration of ponds.

Joint Character Area(s): Low Weald and Pevensey

Landscape Types: This target area lies within the Old Romney Shoreline Wooded Farmlands Landscape Character Area, which is characterised by extensive coppiced broadleaf and mixed plantation woodlands, between which are small to medium sized fields and paddocks. The land rises towards the south and south east, where it begins to divide into a distinct pattern of ridges and valleys which eventually open out at the top of the old sea cliff which forms the landward edge of Romney Marsh.

Geology: Weald clay, giving slowly permeable and seasonally wet, acid loamy and clayey soils.

Biodiversity:

- Extensive areas of woodland, some of national importance.
- Associated habitats include neutral grassland and numerous small ponds, which support an important population of great crested newt.
- The woods are well-known for their important invertebrate assemblages, particularly moths and beetles, including rare water beetles associated with woodland ponds. The area is also important for woodland birds, including nightingale.

Targets:

- Enhance or reinstate woodland management, including restoration of rides and glades, and restore plantations on ancient woodland sites to native woodland;
- Extend and reconnect fragmented woodlands where this would not conflict with grassland conservation and enhancement
- Pursue opportunities to create new species-rich neutral grassland where this will contribute to meeting the target 100ha should be in the Low Weald and High Weald, in blocks of 2ha or more.
- Maintain, restore, recreate and buffer ponds, particularly to establish networks of sites to support great crested newt, and to create new woodland ponds.
- Recreational opportunities (particularly in association with Ashford's regeneration) should be exploited where they will not conflict with nature conservation objectives.

05:03 Greensand Heaths and Commons

A concentration of woodlands, some of significant extent, run along the Greensand Ridge from Maidstone to Westerham and the county boundary. A number have developed on old commons and wood pastures, and areas of heathy vegetation and acid grassland are a significant feature, particularly at Knole Park.

Joint Character Area(s): Wealden greensand

Landscape Types: The Greensand Ridge rises steeply from the clay vale of the Low Weald, and are characterised by thick woodland and heathy commons, within which are small pockets of farmland. This target area includes the ridge-top and the steep, south-facing scarp slope around Sevenoaks, as well as the enclosed, wooded landscape around Mereworth to the east. It includes the following Landscape Character Areas: Mereworth Woodlands; Ightham Greensand-Sevenoaks Ridge; and Westerham Greensand-Sevenoaks Ridge.

Geology: Lower greensand.

Biodiversity:

- Large and important blocks of woodland and wood pasture on acid soils.
- Important acid grassland sites.
- Important for species of acid woodland and heathland which are otherwise scarce in Kent. Woodlands and woodpasture are noted for their veteran trees, fungus flora and invertebrate assemblages. The area is important for bats, adder and RDB bird species, and could be important in the future for woodlark.

Targets:

- Pursue opportunities for creation of acid grassland and heathland where this would contribute to the county-wide target of creating up to 145ha in blocks of at least 1ha and no more than 500m from other existing or new semi-natural habitat.
- Enhance or reinstate woodland management – including wood pasture management where appropriate – and restore plantations on ancient woodland sites to native woodland; extend and reconnect fragmented woodlands where this would not conflict with grassland conservation and enhancement.
- Pursue opportunities for quarries to be restored to maximize their biodiversity potential. Where appropriate, seek restoration to heathland and/or acid grassland as a condition of permissions for aggregates extraction
- Engage communities within target areas by raising awareness of biodiversity and encouraging them to get involved in biodiversity action

05:04 East Kent Woodlands & Downs

A complex of woodland and grassland habitats, including a number of nationally and locally important sites, which includes some large blocks of woodland of importance for threatened butterflies. Acid grassland and more heathy habitats occur on the gravel exposures.

Joint Character Area(s): North Downs/Wealden Greensand

Landscape Types: This area grades from an intimate, remote landscape of long, rolling valleys to the east of the Stour Valley towards a more severe and exposed landscape further east. Blocks of deciduous woodland cover the ridge and plateaux. Hedgerows remain a strong feature, many overgrown or containing significant numbers of hedgerow trees. The target area includes the Elham-East Kent Downs and Petham-East Kent Downs Landscape Character Areas.

Geology: Chalk, capped with clay-with-flints and gravel head on the ridges and plateaux.

Biodiversity:

- A complex of fragmented woodland and chalk grassland, including nationally important sites for both these habitats, and internationally important chalk grassland.
- Important woodland includes wood pasture and beech and yew woodland, as well as much ancient woodland.
- Key species include woodland butterflies including Duke of Burgundy, as well as black-veined moth, adder and lady orchid.

Targets:

- At least 20ha of chalk grassland should be restored in the Wye/Crundale area, and opportunities pursued for:
  - Chalk grassland creation where this would contribute to the county-wide target of 250ha; and
  - Additional chalk grassland restoration to meet the county-wide target of 150ha.
- Enhance or reinstate woodland management, and restore plantations on ancient woodland sites to native woodland, particularly where this would contribute to conservation of woodland butterflies. Extend and reconnect fragmented woodlands where this would not conflict with grassland conservation and enhancement.
- Pursue opportunities for creation of species-rich neutral grassland where this would contribute to the county-wide target of creating 50ha on new lowland meadow in blocks of at least 2ha.
- Pursue opportunities for creation of acid grassland where this would contribute to the county-wide target of creating up to 145ha in blocks of at least 1ha and no more than 500m from other existing or new semi-natural habitat.

05:05 Dover & Folkestone Cliffs & Downs

This target area encompasses a series of valleys around Dover, cliffs and cliff-top grassland, intertidal and subtidal chalk and the steep scarp slope of the North Downs at Dover. Much of the grassland is nationally or internationally important, and there are areas of locally or nationally important woodland.

Joint Character Area(s): North Downs

Landscape Types: This target area is characterised by steep slopes on the Dour Valley and of a series of long, parallel valleys running towards Dover, the steep scarp of Postling Vale, and the open landscape of the clifftops each side of Dover. At the foot of the cliffs lie extensive areas of marine chalk. It incorporates parts of the following Landscape Character Areas: Folkestone Outskirts-Postling Vale; Alkham-East Kent Downs; East Kent Arable Belt; South Foreland.

Geology: Chalk, with clay with flint on the ridge tops.

Biodiversity:

1 Nationally important chalk grassland in dry valleys and on cliff tops.
2 Coastal cliffs and slope including chalk cliff and soft cliffs, both with important, associated foreshore and marine habitats, including nationally and internationally important areas of marine chalk.
3 Sabellaria reefs offshore which provide an important habitat for a wide range of associated species.
4 Important woodlands on chalk and on ragstone.
5 Some vegetated shingle, wet woodland and fen habitats.
6 Key species include plants and invertebrates associated with chalk cliff and chalk grassland habitats, including adder, silver-spotted skipper, small blue, Adonis blue, wild cabbage, and ox-tongue broomrape. Brown hare is also an important species. Species associated with inshore waters include short-snouted seahorse.

Targets:

- Conserve and enhance important cliff, intertidal and marine habitats, and investigate the extent and quality of intertidal and subtidal chalk.
- Maintain and enhance the quality of existing littoral and sub-littoral chalk by:
  - As far as possible, allowing natural coastal processes to determine the geomorphology of the littoral and sub-littoral environment;
  - Developing an action plan for managing the impact of non-native species of concern; and
  - Securing a noticeable decrease in detrimental effects of human activities on littoral and sub-littoral chalk habitats.
- Extend, reconnect, restore and enhance areas chalk grassland, to include restoration of at least 30ha and creation of an additional 75ha. Pursue opportunities for:
  - Additional chalk grassland creation where this would contribute to the county-wide target of 250ha; and
  - Additional chalk grassland restoration to meet the county-wide target of 150ha.

- Enhance or reinstate woodland management, and restore plantations on ancient woodland sites to native woodland; extend and reconnect fragmented woodlands where this would not conflict with grassland conservation and enhancement.
- Pursue opportunities for creation of species-rich neutral grassland where this would contribute to the county-wide target of creating 145ha on new lowland meadow in blocks of at least 2ha.

05:06 Thanet Cliffs and Shore

The whole opportunity area is designated as SSSI, SPA and Ramsar and the clifftop chalk grassland in the eastern part is designated as an SAC. The area also includes sites such as the golf course at Kingsgate (a LWS), Bishops Cliffs LNR and the cliffs and shingle beach at Reculver (home to the biggest sand martin colony in Kent). However, along much of the coast; high rise development, main roads and lighting hug the coast line and dominate the landscape.

Joint Character Area(s): North Kent Plain.

Landscape Types: This landscape mainly falls within the Thanet and Wantsum and Lower Stour Marshes Landscape Character Areas. Chalk cliffs rise sharply from the sea, exposing a rocky coastline and isolated sandy beaches at low tide. Towards the west, the gradient between land and sea drops and inland marshes give way to intertidal mud flats.

Geology: London Clay from Herne Bay to Reculver, then Alluvium to Minnis Bay (old Wantsum channel), then Upper chalk all along the coast to Ramsgate.

Biodiversity:

- Chalk cliffs, together with intertidal and subtidal habitats, are of international importance.
- Nationally significant soft cliffs and important foreshore.
- A saline lagoon is present at Coldharbour on the Wantsum.
- Cliff-top grassland is fragmented but significant.
- The cliffs are particularly important for marine algae, and also support scarce cliff species, such as sea-stock. Wintering waders use the shores around the coast, with several species being present in nationally important numbers. The soft cliffs at Bishopstone are known for the breeding population of sand martins; cliff-top grassland also supports the mining bee *Colletes halophilus* and the shrill carder bumblebee *Bombus sylvarum*.

Targets:

- Conserve and enhance important cliff, intertidal and marine habitats, and investigate the extent and quality of intertidal and subtidal chalk.
    - Maintain and enhance the quality of existing littoral and sub-littoral chalk by:
    - As far as possible, allowing natural coastal processes to determine the geomorphology of the littoral and sub-littoral environment;
- Developing an action plan for managing the impact of non-native species of concern;
- Securing a noticeable decrease in detrimental effects of human activities on littoral and sub-littoral chalk habitats; and

- Careful planning of any coastal defence work in order to maintain these naturally dynamic habitats.
- Restore, improve management of, and extend or create areas of cliff-top grassland.
- Maintain and enhance saline lagoon habitats, ensuring no net loss.

05:07 Central North Downs

The Central North Downs encompass the rolling downlands from Knockholt to Stansted, and stretch up to Farningham. There are several notable sites in the area, including the KWT reserves at Kemsing, Fackenden and Polhill Bank, and SSSI woodland at Farningham Wood and along the Pilgrims way near Wrotham Hill Park. LWSs include the Chevening Estate, Knatts Valley, Wrotham Downs and Lullingstone Park.

Joint Character Area(s): North Downs

Landscape Types: This landscape consists of distinctive chalk downland with steep wooded scarps giving extensive views across Kent. The area is mostly contained within the triangle of land formed by the intersections of the M20, M26 and M25; it includes the mid stretch of the Darent valley, some intensive arable cultivation on the plateaus and more enclosed, irregular pastures in the valleys. The following Landscape Character Areas are represented: Knockholt: Darent Valley; Knockholt Downs; North Darent: Darent Valley; Kingdown: West Kent Downs; Ash Downs.

Geology: Upper Chalk capped with clay-with-flints.

Biodiversity:

- Important chalk grassland sites on the scarp on the North Downs and on the sides of the Darent Gap.
- Nationally important woodland and wood pasture, as well as many small ancient woodlands, and veteran trees in a variety of habitats across the landscape.
- The River Darent and its floodplain form an important landscape element.
- Key species include otter, crayfish, adder, dark green fritillary, chalk hill blue, early gentian, Deptford pink and juniper.

Targets:

- Restore, extend and reconnect chalk grassland. Restore at least 10ha of chalk grassland in the Darenth Valley area, and pursue opportunities for:
    - Chalk grassland creation where this would contribute to the county-wide target of 250ha; and
    - Additional chalk grassland restoration to meet the county-wide target of 150ha.
- Enhance or reinstate woodland management, and restore plantations on ancient woodland sites to native woodland; extend and reconnect fragmented woodlands where this would not conflict with grassland conservation and enhancement.
- Restore natural floodplain habitats, and restore/create flower-rich neutral grassland on suitable soils. Pursue opportunities for creation of species-rich neutral grassland where this would contribute to the county-wide target of creating 50ha on new lowland meadow in blocks of at least 2ha.

- Achieve a quantifiable improvement in habitat quality of the River Darent (as judged by appropriate EA quality indicators).
- Implement conservation grazing management on grassland and wood pasture habitats.
- Encourage appropriate physical and intellectual access to the landscape and wildlife of the area.

05:08 The Blean

The Blean is one of the biggest complexes of ancient semi-natural woodland in England, with much of it designated as NNR, SSSI and LWS. It is of particular importance for birds and several threatened butterfly species, and harbours Kent's last few colonies of the rare Heath Fritillary. Much of this interest has been created and maintained by a long history of coppice management.

Joint Character Area(s): North Kent Plain

Landscape Types: The area known as 'The Blean' is dominated by ancient woodland or ancient replanted woodland. The most densely wooded landscapes correspond to poorer soil, although the perimeter areas have been cleared for agriculture. The acid soil conditions support a significant area of dense heathy woodland, much of which is managed as hornbeam and chestnut coppice. Other landscape features include small pastures within the woodland, wet-fenced pastures on the coastal strip and hedged farmland on the lower slopes. The landscape fits to a great extent within the Blean Landscape Character Area, although the outermost edges fall within the Eastern Fruit Belt LCA to the west and the East Kent Horticultural Belt LCA to the east.

Geology: Thanet beds and London Clay; some overlying drift deposits of Head gravel and Head brickearth.

Biodiversity:

- One of Kent's most significant woodland areas, with substantial blocks of national and international importance.
- Within the woodland matrix are important areas of heathland, acid grassland and bog, as well as small areas of neutral grassland.
- The best known species is the heath fritillary butterfly, but the woods support a large assemblage of rare invertebrates, and are well known for their woodland bird populations. Bat populations are also important.

Targets:

- Enhance and reconnect woodland to create a very extensive block of habitat, particularly through the maintenance and restoration of coppice management.
- Restore conifer plantations on ancient woodland sites to suitable, wooded habitat.
- At least 50ha of heath and acid grassland (including grazed wooded heath) should be restored as part of the woodland matrix, in blocks of at least 2ha in extent. Additional opportunities should be pursued for creation of acid grassland and heathland where this would contribute to the county-wide target of creating up to 145ha.
- Pursue opportunities for creation of species-rich neutral grassland where this would contribute to the county-wide target of creating 250ha of new lowland meadow in blocks of at least 2ha.

05:09 Thames-side Green Corridors

The Thames-side Green Corridors area presents very varied but fragmented wildlife sites, including Darenth Woods (an exceptional example of ancient semi-natural woodland SSSI), Shorne Wood Country Park SSSI, several LWS such as Dartford Marshes, Ebbsfleet Marshes, Sutton at Hone Lakes and Dartford Heath, and a number of brownfield sites of known importance for invertebrates.

Joint Character Area(s): Greater Thames Estuary and North Kent Plain

Landscape Types: This is a fragmented landscape of grazing marsh, river valley, woodland, heathland and former chalk quarries fragmented by urban development and transport corridors. The floodplain of the Darenth valley runs northwards from the North Downs, forming a wet landscape of alluvial floodplain gravels and water-filled gravel pits. Several Landscape Character Areas are present, including the Western Thames Marshes, Lower Darent Valley, Dartford and Gravesend Fringes, Swanley Fringe, Darenth Downs, Southfleet Arable Lands and Shorne.

Geology: Thanet Beds, Woolwich and Blackheath Beds, London Clay, Upper Chalk with alluvial deposits. Occasional deposits of Boyn Hill Gravel (Dartford Heath).

Biodiversity:

- Intertidal habitats and coastal grazing marsh, forming a significant part of the wildlife corridor formed by the River Thames.
- One of the most extensive heathland and acid grassland sites in Kent, at Dartford Heath.
- Nationally important, though not extensive ancient woodland.
- Some chalk grassland, and important brownfield sites.
- Key species include brown hare, water vole, reed bunting, adder, shrill carder bumblebee Bombus sylvarum, the brown-banded carder bee Bombus humilis, the picture-winged fly Dorycera graminum, and the weevil-hunting wasp Cerceris quinquefasciata.

Targets:

- Protect, restore and enhance grazing marsh and coastal habitats, including saltmarsh. Restore of recreate 50ha of grazing marsh at Dartford Marshes, within the Dartford marshes Local Wildlife Site.
- Improve woodland management, and reconnect important woodlands.
- Restore, enhance and recreate heathland and grassland both in and around built-up areas, including restoring at least 12ha of heathland at Dartford Heath, and 40ha of acid grassland and heath adjacent to Darenth Woods. Additional opportunities should be pursued for creation of acid grassland and heathland where this would contribute to the county-wide target of creating up to 145.
- Protect and manage the most significant brownfield sites, and ensure the long-term survival of their important wildlife, including UK BAP Priority invertebrates. Incorporate and seek to deliver the relevant targets in the national Habitat Action

Plan for Open Mosaic Habitats on Previously Developed Land, as these are developed.

- Create 100ha of species-rich neutral grassland, in blocks of 2ha or more adjacent to existing species-rich grassland or other semi-natural habitat.
- Use biodiversity projects to improve the engagement of local people with the natural environment.
- Ensure that development contributes to delivery of biodiversity targets.

05:10 North Kent Marshes

The North Kent Marshes are designated, almost in their entirety, as SSSI, SPA and/or Ramsar, and are of national and international importance for breeding and overwintering bird populations. The opportunity area also includes a few LWSs such as the Diggs and Sheppey Court Marshes near Queenborough, Graveney Dykes and Pasture, Minster Marshes and Minster Cliffs.

Joint Character Area(s): Greater Thames Estuary

Landscape Types: A flat open landscape of grazing marsh and intertidal mudflats stretching from the River Thames estuary in the west to the Swale Estuary in the east. Saltmarsh extends inland along creeks and drainage dykes and in places grazing marsh has been converted to arable cultivation. The area includes the following Landscape Character Areas: Eastern Thames Marshes, Hoo Peninsula, Medway Marshes, Swale Marshes, North Sheppey and Eastern Swale Marshes.

Geology: Thanet beds and London Clay, with alluvial deposits.

Biodiversity:

- Internationally important grazing marsh, saltmarsh and mudflats.
- Coastal habitats, freshwater wetlands and flower-rich grassland, as well as less common shingle, saline lagoon and soft-cliff habitats.
- Nationally important woodlands occur at Chattenden and Northward Hill.
- The area is important for a large number of breeding and wintering birds, including marsh harrier, redshank, reed bunting, grey plover, dunlin, avocet and brent goose. Other key species include least lettuce, brown hare, water vole, great crested newt, shrill carder bumblebee, and important assemblages of water beetles. The Hoo Peninsula is an important area for serotine bats, and there is a localized population of adders at Riverside Country Park.

Targets:

- Protect and enhance existing habitats. Coastal defence projects and managed realignment should contribute to maintenance, enhancement, or extension of coastal habitats, with no net loss of habitats of existing importance.
- Recreate grazing marsh on arable land and improved grassland in order to extend and connect existing habitats. This should include restoration or recreation of at least 200ha of grazing marsh on the Hoo Peninsula, adjoining the South Thames estuary and Marshes SSSI, and restoration or recreation of at least 100ha of grazing marsh on the Swale, adjoining The Swale SSSI.
- Create new intertidal mudflat and saltmarsh to help offset historical losses across the UK, this should include making a significant contribution to the UK target of creating 3,600 ha of intertidal sediment habitat by 2015; a more precise target is to be developed by the Kent Biodiversity Partnership.

- Maintain total extent of coastal vegetated shingle habitat, in line with the UK target. This is a 'no net loss' target to take account of the dynamic nature of shingle, and includes the maintenance of transitions to other habitats landward and seaward.
- Improve and manage access and environmental tourism from the Medway Towns and Swale

05:11 Mid Kent Downs, Woods and Scarp

The Mid Kent Downs Woods and Scarp opportunity area stretches from Detling Hill through to Sheldwich and Charing. The area is within the Kent Downs AONB and contains over a high number of LWSs such as Gorham Woods and Wichling Wood and several SSSIs.

Joint Character Area(s): North Downs

Landscape Types: This landscape has a pattern of wide fields contained by dense belts of woodland, which run along the upper slopes of steep-sided dry valleys. The continual down-wash of soil from the scarp, combined with the sheltered aspect of the resulting fields, produces a belt of very productive agricultural land at the foot of the scarp. Most of the area is within the Bicknor: Mid Kent Downs Landscape Character Area, but a small amount falls within the Hollingbourne Vale LCA to the south and the Challock: Mid Kent Downs LCA to the east.

Geology: Chalk, capped with clay-with-flints and gravel head on the ridges.

Biodiversity:

- Important chalk grassland sites on the scarp and on the sides of dip slope valleys.
- Important woodlands occur both on the chalk soils of the scarp and the deeper clay soils of the dip slope. There are some wood pasture sites, as at Belmont.
- The dip slope woodlands support important bryophyte assemblages and remain important for woodland birds, including hawfinch. This is the only part of Kent known to support Bechstein's bat, a species closely associated with woodland.

Targets:

- Protect, manage and enhance existing habitats.
- Restore and recreate chalk grassland to create large, continuous blocks on the scarp and on suitable soils in dip slope valleys. Pursue opportunities for:
    - Chalk grassland creation where this would contribute to the county-wide target of 250ha; and
    - Additional chalk grassland restoration to meet the county-wide target of 150ha.
- Enhance or reinstate woodland management, and restore plantations on ancient woodland sites to native woodland; extend and reconnect fragmented, dip-slope woodlands where this would not conflict with grassland conservation and enhancement. Ensure woodland management takes account of the needs of woodland bats.
- Complement dip-slope woodlands by buffering with semi-natural habitats (e.g. woodland edge, semi-natural grassland).

05:12 Mid Kent Greensand and Gault

The Mid Kent Greensand and Gault opportunity area contains a very high number of LWSs, including Honeyhills and Horish Woods. There are also several SSSIs including Burham Marsh, Lympne Escarpment and Hothfield Common, which is one of the last remaining heathland sites in Kent.

Joint Character Area(s): Predominantly Wealden Greensand with North Downs at the northern boundary.

Landscape Types: The landscape in this opportunity area is mainly mixed farmland, with small woodlands and hedged fields of both grassland and arable, although the quality of the land is not particularly good.The area is marked by development with the presence of major towns and communication corridors such as the M20, A20 and railway lines. There are numerous Landscape Character Areas in the opportunity area.

Geology: Mainly Lower Greensand, Gault and Weald Clay, with some deposits of alluvium and head gravel around the Medway near Burham and head gravel around Langley and Fairbourne heaths.

Biodiversity:

- Includes the River Len, the River Great Stour, The River East Stour and a number of their tributaries (including a series of small springs arising at the foot of the Downs). Associated habitats include lakes, areas of wet woodland, and some very small areas of fen.
- There are nationally important acid grassland and heathland sites, as well as many smaller acid grassland fragments.
- Blocks of wood pasture are scattered through this area, and there are small, isolated woodlands on the Gault clay and on the Greensand.
- Key species include water vole, white-clawed crayfish and Desmoulin's whorl snail *Vertigo moulinsiana*, associated with river corridors, as well as wintering bittern along the Medway. The shrill carder bee *Bombus sylvarum* has been recorded at Leybourne Lakes Country Park, together with other important invertebrate species. Few nationally important species are associated with acid grassland and heath habitats, though many species of these habitats are scarce or unknown elsewhere in Kent, such as the keeled skimmer dragonfly at Hothfield or the assemblages of scarce invertebrates recorded from around Maidstone.

Targets:

- Major opportunities exist to recreate and restore acid grassland and heath. This should include restoration of at least 3ha at Hothfield; and creation of at least 30ha of acid grassland and heath in the heathland corridor from Lenham to Brabourne Lees, plus at least 10ha of acid grassland around the northern edge of Maidstone. Habitat blocks should be no smaller than 1 ha if no more than 500m from other existing or new acid grassland, and no smaller than 6ha if more isolated. Additional

opportunities should be pursued for creation of acid grassland and heathland where this would contribute to the county-wide target of creating up to 145ha.

- Enhance or reinstate woodland management – including wood pasture management where appropriate – and restore plantations on ancient woodland sites to native woodland; extend and reconnect fragmented woodlands where this would not conflict with grassland conservation and enhancement.
- Pursue opportunities to restore or recreate wetland habitats along the Rivers Medway, Stour and Len and their tributaries, particularly where this may
    - Provide opportunities for flood risk management and for recreation;
    - Contribute to the conservation of priority species; or
    - Extend and buffer Local Wildlife Sites.
- Secure and maintain appropriate management of key brownfield sites, particularly where these support priority species in the UK BAP.
- Infrastructure and other development should avoid further fragmentation, particularly of wetland habitats and woodlands.

05:13 Medway Gap and North Kent Downs

This area stretches from the Ash Downs near Meopham, across the lower Medway Valley, to the downland between Medway and Maidstone as far as Queendown Warren. It includes extensive patches of woodland such as Whitehorse Wood, Great Wood (both SSSIs), Walderslade and Bredhurst Woods (LWSs), various historic parklands including Cobham, and chalk grassland sites such as Burham Down, Boxley Warren, Queendown Warren and Wouldham.

Joint Character Area(s): North Downs

Landscape Types: It encompasses a large-scale, open, intensively farmed landscape with sparse remnant hedges leading up the steep chalk scarps to wooded ridges. It includes large areas of mixed woodland and historic parkland and some small pastures and scrub. The river itself is tidal with well-developed meanders, riverside marshes and reedbeds. Chalk soils on the scarp, at the base and in the dry valleys, support areas of high-quality unimproved chalk grassland. The following Landscape Character Areas are present: Ash Downs, Luddesdown: West Kent Downs; Cobham: West Kent Downs; Medway Valley Lower; Nashenden Valley: Mid Kent Downs; Chatham Outskirts: Mid Kent Downs.

Geology: mainly Upper Chalk capped with clay-with-flints or deposits of Head gravel; some areas of Thanet Beds; alluvial deposits along the Medway.

Biodiversity:

- The area includes some very significant blocks of nationally and internationally important woodlands on a range of geologies from gravel to chalk, including areas of Lowland Beech and Yew Woodland.
- The tidal Medway includes areas of intertidal mudflat, and there are associated areas of grazing marsh, reedbed and fen.
- Chalk grassland exists as isolated fragments
- There are a number of important brownfield sites, including disused quarries
- This target area includes the county's most important site for arable weeds.
- Key species include a number of important arable weed species, including corncockle, rough mallow and broad-leaved cudweed; chalk downland species including groundpine, man orchid, Kentish milkwort, meadow clary, and adonis blue butterfly.

Targets:

- Maintain and enhance existing chalk grassland. Important opportunities exist to substantially extend areas of chalk grassland: within this target area, at least 10 hectares should be restored and 75ha created. Pursue opportunities for:
    - Additional chalk grassland creation where this would contribute to the county-wide target of 250ha; and

  - Additional chalk grassland restoration to meet the county-wide target of 150ha.

- Enhance or reinstate woodland management, and restore plantations on ancient woodland sites to native woodland; extend and reconnect fragmented woodlands where this would not conflict with grassland conservation and enhancement.
- Pursue opportunities for the restoration of creation of grazing marsh, fen and reedbed habitats within the floodplain of the River Medway, including restoration of at least 50ha of grazing marsh in the Medway Valley between Rochester and New Hythe.
- Secure and maintain appropriate management of key brownfield sites, particularly where these support priority species in the UK BAP.
- Continue to conserve and enhance key populations of arable weeds, and maintain, enhance and extend the area of cereal field margins being positively managed for arable weeds.
- Pursue opportunities for creation of species-rich neutral grassland where this would contribute to the county-wide target of creating 50ha on new lowland meadow in blocks of at least 2ha.
- Where appropriate, encourage and enhance public access, particularly from the Medway Towns.

05:14 Medway and Low Weald Wetlands and Grasslands

The opportunity area includes long stretches of several of Kent's rivers and this is reflected in the presence of several designated sites such as the River Eden, River Medway and River Sherway LWSs. To the west is the Bough Beech reservoir, particularly important for wildfowl, and to the east is the LWS at Dering Wood, near Pluckley.

Joint Character Area(s): The Low Weald

Landscape Types: Dominated by the floodplains of the River Medway and its tributaries, this flat, undulating landscape of clay vales supports a mixed agricultural landscape of wet meadow and arable fields, small woodlands, historic hop gardens and orchards. The following Landscape Character Areas are present: Western Wooded Farmlands; Eden Valley; Western Low Weald: the Low Weald; Penshurst: Central High Weald; Kent Water: Upper Medway; Medway Valley; Greensand Ridge – Plaxtol; Low Weald Fruit Belt; Teise Valley; Beult Valley; Biddenden – High Halden Wooded Farmlands.

Geology: Weald clay with deposits of alluvium, head gravel, river brickearth and river gravel along the river valleys.

Biodiversity:

- The most significant features are the courses, tributaries and floodplains of the Medway, Beult and Teise. The floodplains support species rich meadows or floodplain grassland and grazing is a significant landscape feature and management practice.
- Associated habitats include ponds, small areas of woodland, including mature ancient woodland, and fen.
- Key species include otter, depressed river mussel, white clawed crayfish and river lamprey.

Targets:

- Pursue opportunities for creation of wider river floodplains with riparian corridors around natural drainage channels.
- Pursue opportunities for the establishment of a new, landscape-scale, freshwater wetland complex, including fen, wet woodland, reedbed and wet grassland, in which successional processes are allowed to proceed. In this context, a 'landscape-scale' complex should be considered as extending over at least 1000 hectares.
- Secure the appropriate conservation management of all existing Lowland Meadows.
- Pursue opportunities to create new species-rich neutral grassland, particularly close the Marden Meadows SSSI and south of Sevenoaks, where this will contribute to meeting the target of 100ha should in the Low Weald and High Weald, in blocks of 2ha or more.
- Enhance or reinstate woodland management, and extend and reconnect

fragmented woodlands where this would not conflict with grassland conservation and enhancement.

- Continue to encourage the positive management, restoration and re-creation of hedgerows, particularly where this would reconnect other habitats or enhance the landscape, in particular where these have been removed due to agricultural intensification.
- Improve the management of invasive species in and alongside water courses.
- Maintain, restore, recreate and buffer ponds, particularly to establish networks of sites to support great crested newt.

05:15 Romney Marsh and Rye Bay

The Romney Marshes and Rye Bay area is one of the biggest opportunity areas in Kent and extends from Hythe through Rye and beyond into Sussex; it also extends up river valleys such as the Rother. The area is mainly highly productive arable land and pasture, but there is an important proportion of designated land, including SSSIs which extend from the internationally rare vegetated shingle at Dungeness through Walland Marsh up towards Appledore.

Joint Character Area(s): Romney Marshes

Landscape Types: A flat, open and agricultural landscape, with distinctive drainage dykes, marshes and open skies. The treeless, low-lying, reclaimed marshland is now maintained by man-made drainage and river floodplain improvements. Several Landscape Character Areas are represented, including Oxney Lower Rother Valley, Romney Marsh Settlements, Brookland Farmlands, Highknock Channel and Dowels, Walland Marsh Farmlands, Dungeness Shingle, Romney Marsh Mixed Farmlands.

Geology: The geology of the area is principally alluvium, some of it marine, although there are also Wadhurst clay and Ashdown beds on the Isle of Oxney and, of course, the Dungeness shingle point.

Biodiversity:

- Internationally important wetland and shingle habitats, most notably the vegetated shingle at Dungeness, which is important for biodiversity and geodiversity.
- Grazing marsh, and wet ditches and other water courses.
- Key species include brown hare, water vole, amphibians including great crested newt and common toad, medicinal leech, breeding and wintering wetland birds, rare plants such as greater water parsnip *Sium latifolium*, and invertebrates associated with shingle and wetland habitats. The area is important for bats, particularly serotine and soprano pipistrelle, and holds one of the few remaining tree sparrow populations in Kent.

Targets:

- Protect, manage and enhance existing habitats and designated sites.
- Identify opportunities to restore, recreate and enhance grazing marsh and to restore or recreate fen, swamp and other natural wetland habitats, particularly where this would contribute to the establishment of a new, landscape-scale, freshwater wetland complex, including fen, reedbed and grazing marsh, in which successional processes are allowed to proceed. This should include recreation of at least 100ha of grazing marsh. In this context, a 'landscape-scale' complex should be considered as extending over at least 1000 hectares.
- Ensure no net loss of coastal vegetated shingle and restore all coastal vegetated shingle to favourable condition or unfavourable recovering condition (subject to

constraints arising from natural coastal changes).

- Pursue opportunities to enhance or recreate acid grassland on suitable soils where this would contribute to the county-wide target of creating up to 145ha.
- Pursue opportunities for creation of species-rich neutral grassland where this would contribute to the county-wide target of creating 250ha of new lowland meadow in blocks of at least 2ha.
- Provide guidelines on best practice for managing ditches to maximise biodiversity whilst retaining their effective water management function.
- Work with landowners to restore management of 15% of ditches that are not part of the main drainage system (and therefore not managed by the IDB or EA), to improve connectivity across target area.
- Identify how best to integrate a more natural functioning of the Dungeness coast with existing infrastructure, and restore natural coastal processes, as far as possible, to all areas of the coast.

05:16 High Weald

A large and dispersed target area covering a mosaic of small woods, patches of heathland and acid grassland, and neutral grassland, interspersed with streams and ponds, and reflecting the complex geology and topography of the High Weald landscape. The landscape has long been shaped by the impact of human activity and intervention, but has remained relatively unchanged in modern times.

Joint Character Area(s): High Weald

Landscape Types: A well-wooded landscape rising above the Low Weald and deeply incised in many places to give a complex pattern of ridges and steep stream valleys. Distinctive and scattered sandstone outcrops or 'bluffs' rise above the farmland and woodland.

Geology: Sandstones and clays of the Hastings Beds series.

Biodiversity:

- An intricate matrix of ancient semi-natural woodland and grassland, with small water bodies, streams and rivers and associated riparian habitats, as well as patches of heathland and important areas of acid grassland and lowland meadow. Some woodland and grassland sites are of national significance.
- The area contains furnace/hammer ponds and other acidic water courses which are unique.
- The area is important for many species which are at the edge of their range in Kent, including golden-ringed and brilliant emerald damselflies, and a number of western bryophyte species associated with rock outcrops and gills. The area is important for bats, particularly woodland species. Birds otherwise very scarce in Kent, including willow tit, lesser spotted woodpecker and woodlark occur here.

Targets:

- Restore, recreate and enhance woodland through active conservation management, particularly locally unique gill woodlands, heathy woodlands and wood pasture. Restore plantations on ancient woodland sites to native woodland.
- Secure the appropriate conservation management of all existing Lowland Meadows.
- Pursue opportunities to create new species-rich neutral grassland where this will contribute to meeting the target 100ha should be in the Low Weald and High Weald, in blocks of 2ha or more.
- Reinforce the intricate matrix of habitats by restoring and recreating heathland, acid grassland, and neutral grassland, and reconnecting fragmented woodlands. In the Pembury area, at least 5ha of heathland should be restored and at least 15ha of heathland and acid grassland created. Opportunities should be taken for heathland or acid grassland restoration as part of woodland management, for example at Bedgebury Forest and Hemsted Forest. Additional opportunities for creation of acid grassland and

heathland should be pursued where this would contribute to the county-wide target of creating up to 145ha.

- Pursue other opportunities to create new acid grassland and heathland where this will contribute to the county-wide target of up to 50ha in blocks of at least 1ha and no more than 500m from other existing or new semi-natural habitat.
- Maintain and restore water courses and maintain, restore and create ponds.

South East England Biodiversity Forum

Oxfordshire

06:01 Blenheim and Ditchley

This area includes Blenheim Park and Ditchley Park and extends onto the farmland and woodland owned by the estates.

Joint Character Area: Cotswolds

Landscape Types: Wooded Estatelands

Geology: Mainly limestone.

Topography: On the relatively flat Cotswolds plateau. Ditchley has two stream valleys while the Glyme Valley hotspot area intersects with Blenheim.

Biodiversity:

- Parkland: Centred on two areas of historic parkland with high biodiversity. At Blenheim there are areas of old wood pasture that are an SSSI.
- Woodland: There are many large areas of woodland especially at Ditchley though areas of ancient woodland have been partly or entirely replanted. Sites include Out Wood SSSI and Kings and Wootton Woods CWS.
- The historic green lane “The Saltway” is the western boundary – this has limestone grassland, including a population of downy woundwort and species rich hedgerows.
- Species: There is some arable wildflower interest at Ditchley.

Access: Parts of Blenheim are accessible to the public. Bridleways include the Saltway.

Archaeology: Two historic parklands.

Targets: Parkland management and restoration, woodland management and restoration, arable wildflowers.

06:02 Chilterns Escarpment Central

This is the section of the escapement between Swyncombe and Hailey.

Joint Character Area: Chilterns

Landscape Types: **Wooded Estate Slopes and Valley Sides.**
Geology: Chalk

Topography: A north-west facing escarpment. This section is less steep than other parts of the escarpment.

Biodiversity:

- Cereal Field Margins: These support arable wildflowers such as shepherd's needle. There is a good diversity of other arable wildflowers in this area. Good numbers of fields have been managed with the conservation headlands as part of the Countryside Stewardship scheme.
- Farmland Birds: A significant part of a key area for farmland birds in the Chilterns is included in this target area. Species present include corn bunting, grey partridge, linnet and skylark.
- Other habitats: There are a few areas of ancient woodland and one chalk grassland site at Nuffield Common.

Access: Numerous bridleways are found here including the ridgeway.

Archaeology: Grims Ditch crosses the area to the south.

Targets: Arable wildflower conservation. Farmland birds conservation.

06:03 Chiltern Escarpment North

The steepest parts of the escarpment running north from Swyncombe. At the northern end includes a section of the plateau and part of a dipslope valley to encompass extensive areas of woodland continuous with woodland on the escapement.

Joint Character Area: Chilterns

Landscape Types: Wooded Estate Slopes and Valley Sides.

Geology: Mainly chalk but includes some clay-with-flints on the plateau to the north.

Topography: A steep west facing escarpment and some flat plateau land to the north

Biodiversity:

- Chalk grassland: extensive SSSI chalk grassland and a few smaller areas including Oakley Nature Reserve. Associated with these areas are small areas of chalk heath and juniper scrub.
- Woodland: Extensive beech and yew woodland, including one area of yew woodland, and lowland mixed deciduous woodland, especially at the northern end and at Watlington Park.
- Parkland: Watlington Park supports important parkland habitat.

Access: Aston Rowant National Nature Reserve, National Trust land at Watlington Hill, BBOWT reserves at Chinnor Hill and Oakley Hill

Archaeology:

Targets: Chalk grassland management and restoration, juniper management, chalk heath management, woodland management.

06:04 Chilterns Escarpment South

This is the escarpment from Goring to Mapledurham and includes some dry valleys that cut into the Chilterns plateau.
Joint Character Area: Chilterns

Landscape Types: Wooded Estate Slopes and Valley Sides.

Geology: Chalk

Topography: Steep west and south facing escarpment and steep banked dry valleys running east and north.

Biodiversity:

- Chalk grassland: Numerous banks of chalk grassland with concentrations near Goring and between Pangbourne and Mapledurham. Many are County Wildlife Sites and there is also an SSSI at Hartslock.
- Woodland: There are a number of ancient woodland sites with beech and yew woodland especially near Goring which includes Hartslock SSSI. Further east Bottom Wood, near Hardwick, is the largest site.

Access: Largely restricted to bridleways and footpaths. There is a BBOWT nature reserve at Hartslock.

Archaeology:

Targets: Chalk grassland management and restoration, woodland management.

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06:05 Chilterns Escarpment South Central

This part of the escarpment runs from Hailey to Woodcote.
Joint Character Area: Chilterns

Landscape Types: Wooded Estate Slopes and Valley Sides.

Geology: Chalk

Topography: A steep escarpment. Though generally north-west facing dry valleys run into the Chilterns plateau and there are some south and north facing slopes.

Biodiversity:

- Woodland: Beech woodland and lowland mixed deciduous woodland is abundant on these slopes and there are many Chiltern Heritage Woodlands.
- Chalk grassland. Less extensive here and found in a few small sites at Warren Bank, Berins Hill Bank and Langtree House Bank. The steep chalk slopes have good potential to extend these areas.

Access: Largely restricted to bridleways and footpaths. Warren Bank is a BBOWT nature reserve.

Archaeology:

Targets: Woodland management, chalk grassland management and restoration.

06:06 Glyme and Dorn Valley

The whole Glyme Valley from it's source near Chipping Norton to Blenheim Park and including some tributary valleys, especially the Dorn.

Joint Character Area: Cotswolds

Landscape Types: Wooded Pasture Valleys and Slopes

Geology: For most of its length the Glyme Valley cuts through limestone rocks and there are also bands of the Sharp's Hill sandstone and limestone. West of Radford the geology is more varied with bands of Lias mudstone and siltstone and some of the iron rich Marlstone limestone as well as other limestone. The Dorn is similar as it also cuts through the limestone and has Lias mudstone and siltstone in its upper reaches. The main variation is the presence of some Horsehay Sand east of Middle Barton. Alluvium is present along the base of the valleys.

Topography: Mainly narrow valleys running north and then west. The valley sides range from steeply sloping in the narrower section to much more gently sloping where the valleys widen out.

Biodiversity:

- Limestone grassland: there are numerous banks of limestone grassland scattered along the Glyme and lower reaches of the Dorn. These include a number of SSSI's and County Wildlife Sites. There are other banks with remnant limestone grassland habitat.
- Lowland Meadow: on the banks and more gently sloping Lias sections. The largest site is Little Tew Meadows SSSI at the top end of the Dorn.
- Fen, swamp and reedbed: scattered fen throughout the valley with occasional areas of swamp. There is a concentration between Wootton and Glympton. Along the Cockley Brook, a tributary of the Dorn the largest fen area is found at Middle Barton Fen SSSI. Remnant habitat is found near Woodstock. There is a reedbed at Hollybank Marsh on the Dorn.
- Parkland: There are parklands at Glympton, Kiddington, Heythrop, Middle Barton and Sandford St. Martin. However the status of the habitat in these parklands is largely unknown. The Lower Glyme flows through Blenheim Park.
- Woodland: There are few sites and most are plantation. There is some lowland mixed deciduous woodland at Priory Wood and another small site in the Upper Glyme.
- Acid grassland: remnants are found at Ovens Gorse though this is mainly dominated by bracken.
- Eutrophic Standing Water: found in parkland lakes and a large pond in the Upper Glyme. The largest site is at Blenheim Park.

Access: Blenheim Park is accessible to the public as is the nearby Woodstock Meadow. Wootton Jubilee Fields has public access. There is BBOWT nature reserve in the Upper Glyme. Elsewhere access is restricted to bridleways and footpaths.

Archaeology: There are medieval village sites in the Upper Glyme.

Targets: Limestone grassland management and recreation, lowland meadow management and restoration, Fen, swamp and reedbed management and restoration, parkland/veteran tree management and restoration.

06:07 Kirtlington and Bletchingdon Parks and Woods

The historic parklands at Kirtlington and Bletchingdon, including areas of degraded parkland, the woodlands to the east of Bletchingdon and including Weston Fen at the east edge.

Joint Character Area: Cotswolds and Thames and Avon Vales.

Landscape Types: Wooded Estatelands and Clay Vale to the south east though is well wooded.

Geology: Cornbrash limestone in the east, Kellaways and Oxford Clay in the east. Some areas of sand and gravel and alluvium along the Gallos Brook at the eastern edge.

Topography: Relatively flat plateau land.

Biodiversity:

- Parkland: rich parkland habitat at Kirtlington with many veteran trees with long term management and restoration agreed. Outside the main park there is are degraded areas while Bletchingdon Park may have some parkland habitat but has not been assessed yet.
- Lowland Mixed Deciduous Woodland: The most important woodlands are to the south east where there are three County Wildlife Sites. There are other areas of woodland associated with the parks with one area of ancient woodland.
- Fen, swamp and wet woodland. There is an area of fen habitat at Weston Fen SSSI along with wet woodland. The largest of the Kirtlington Park lakes has a good sized reedbed and wet woodland at the west end.
- Limestone grassland: found at Stonepit Hills at Weston Fen SSSI.

Access: Restricted to bridleways and footpaths.

Archaeology:

Targets: Parkland management and restoration. Woodland management and perhaps some planting to link sites. There is little potential to extend the area of fen, swamp and wet woodland except perhaps along the Gallos Brook. The plateau soils may be too deep and rich to allow the restoration of rich limestone grassland in the east of the area though some buffer areas near Stonepit Hills could be considered. Lower Cherwell Valley

06:08 Lower Cherwell Valley

The Cherwell Valley from just south of Lower Heyford to Kidlington. Includes sections of valley side where the slopes are steeper and BAP priority habitats are found and includes a number of limestone quarries on the valley edge. To the south it includes a corridor along the Oxford Canal running south almost to Wolvercote.

Joint Character Area: Cotswolds and Thames and Avon Vales.

Landscape Types: River Meadowlands with small areas of Clay Vale. The quarry sites are in Wooded Estateland and Estate Farmland Area though are not typical of the landscape. Along the canal at Kidlington there are small areas of Lowland Village Farmlands and Alluvial Lowland.

Geology: The floor of valley is alluvium with some sand and gravel deposits. The areas of valley sides included in this area are limestone.

Topography: Flat riverside land, some east or west facing slopes and some quarries.

Biodiversity:

- Swamp. There are a variety of sites which including Enslow Marsh, an area next to the oxbow lake at Northbrook Marsh, riverside land south of Enslow, including some degraded sites, in part of Rushy Meads SSSI and within Shipton-on-Cherwell Quarry.
- Reedbed. There are areas in the area east of Kidlington and an area has been created next to the canal south of Kidlington.
- Lowland meadow. The main site is Rushy Meads SSSI at Kidlington. There are remnant areas in the meadows east of Kidlington, in a meadow near Pigeon Lock and canalside fields at Yarnton.
- Wet grassland: found at Langford Lane Meadows. At Home Farm Ponds there is a wet grassland/fen mixture at the pond edge.
- Limestone grassland: found in the quarries between Enslow and Shipton-on-Cherwell and at Kirtlington. There is a bank north of Kirtlington Quarry with remnant limestone grassland.
- Eutrophic Standing Water: The main site is the Oxford Canal. There is a rich oxbow lake at Northbrook Marsh and ponds at Home Farm.
- Scrub: A Cherwell BAP priority habitat. The main site is St. Mary's Field Parish Nature Reserve at Kidlington.
- Species: the Canal is a key site for water vole. The area is important for birds including BAP species. Some sites, such as Langford Lane Meadows, support high numbers of overwintering snipe.

Access: There is a local nature reserve at Kirtlington Quarry. There is controlled access at Enslow Marsh sedgebed. The main access feature is the Oxford Canal which runs the whole length of the area. There is an area of planted woodland at Kidlington where access

is allowed. There is public access on land next to the canal south of Kidlington. St. Mary's Field Parish Nature Reserve at Kidlington

Archaeology:

Targets: Swamp and reedbed management and restoration. Lowland meadow management and restoration. Management for water vole. Wet grassland management and restoration.

06:09 Lower Windrush Valley

The gravel pit and riverside meadowland dominated landscape stretching south from the centre of Witney.

Joint Character Area: Thames and Avon Vales

Landscape Type: Riverside Meadowlands and Lowland Village Farmlands to the south east.

Geology: Alluvium and sand and gravel.

Topography: Flat riverside land.

Biodiversity:

- Eutrophic Standing Water: large numbers of gravel pits managed largely for fishing and water sports. Some have a rich invertebrate fauna and aquatic plant flora. Important for birds, especially overwintering wildfowl. One pit with a nature conservation afteruse lies in the Upper Thames hotspot area but may be best included here.
- Lowland Meadows: A few scattered unimproved and semi-improved sites. These include Ducklington Mead SSSI, Witney Marsh (Grimes Meadow) at the north end of the area, Witney Meadow, which is owned by Witney Town Council, and Dunster Meadow near Standlake. Langleys Lane Meadows SSSI lies just outside the area within the Upper Thames hotspot.
- Reedbeds and swamp: There is a reed bed in an old gravel pit at Standlake and sedge swamp at Witney Marsh. Small areas of marginal swamp vegetation are found at the edge of many of the pits and along the Windrush. New areas will be created in pits that have a nature conservation afteruse.

Access: Langel Common, Witney Lake and Meadow, Lower Windrush path.

Archaeology: Important sites include Devil's Quoits

Targets: Management of water filled gravel pits, management and restoration of lowland meadows, management of swamp and reedbed and creation of new areas of reedbed.

06:10 North Evenlode Valleys

A group of valleys on the northern side of the Evenlode Valley cutting into the Cotswolds plateau. Extends onto the plateau to the east where there is an extensive grassland recreation program.

Joint Character Area: Cotswolds

Landscape Types: Farmland Slopes and Valley Sides (eastern valleys) with small fringing patches of Farmland Plateau, Settled Ancient Pastures to the east along with Farmland Plateau.

Geology: The eastern sections are largely dry limestone valleys. To the west the valleys are wet with a more varied geology with Lias mudstones, limestones, some gravel and alluvial deposits along the streams. The plateau is oolitic limestone.

Topography: Sections of the south facing Evenlode Valley sides and a number of narrow valleys to the north of the main valley. West of Charlbury the area includes more gently valley sides. West of Chadlington it includes flatter areas of plateau land and the top end of another wider valley.

Biodiversity:

- Limestone grassland. The eastern valleys include SSSI's at Stonesfield and Reed Hill. One valley extends to the relatively flat grasslands at Newbarn Farm at the valley head. The Cotswold Line cuts through the area where limestone grassland is also found on the embankments. To the west, limestone grassland is more restricted but includes sites with meadow clary and road verge reserves. Beyond Chadlington the area extends beyond the valleys onto the plateau where limestone grassland has been recreated.
- Lowland Meadows. Between Charlbury and Chadlington lowland meadow habitat is found in the valleys. There are remnants of this habitat outside the designated sites.
- Wetland springs and flushes. Many springs and flushes supporting fen habitat are found along the eastern brooks especially at Tatson and Dean.
- Woodland: Mainly small areas including Dean Wood CWS. The head of the most eastern valley includes Sarsgrove Wood SSSI. There are other small areas at Stonesfield and Bridgefield Brake.
- Species: Cotswold pennycress present at one site.

Access: Largely restricted to footpaths and bridleways. The Oxfordshire way crosses the area. There is a community woodland at Charlbury and a BBOWT nature reserve.

Archaeology: Includes Knollbury Fort west of Chadlington.

Targets: Limestone grassland management and restoration. Core target areas are in the valleys. On the deeper soils on the adjacent plateau the potential is more limited and the

key target area is west of Chadlington to extend existing schemes. Management and restoration of lowland meadow and fen and flushes between Charlbury and Chadlington.

06:11 Northern Valleys

The valleys of the Sor Brook and North Newington Stream. Extends westwards to include Epwell, Shenlow and Rough Hills and then onto the escapement of the Stour Valley. The section of the Sor Brook, running south to the confluence of the two watercourses, is excluded because in the wider valley and on the more gently slopes no typical habitat for this area is known.

Joint Character Area: Midland Clay Pastures and at Epwell, the Cotswolds.

Landscape Types: Wooded Pasture and Valley Slopes with small areas of Pasture Hills.

Geology: The valleys are fringed by the iron rich Marlstone Rockbed. The upper slopes are a mixture of Lias mudstone and siltstone which the lower slopes are Lias mudstone. Alluvium is found along the valley bottom. The hill area to the west is also Lias mudstone with the crowns topped by sand.

Topography. Quite narrow steep sided valleys with a sometimes quite wide gently sloping area towards the valley bottoms. To the west there is a small area of flatter plateau with three distinct small hills and then a section of the west facing escarpment of the Stour Valley.

Biodiversity:

- Lowland Meadow: The more acidic type of this habitat is found on banks and stream side land. This includes Hornton Meadows, Wroxton and Balscote Mills, on the Stour escarpment near Shenlow Hill and a few other small sites.
- Acid grassland: a few scattered sites are known near Hornton and in the County Wildlife Site at Wroxton and Balscote Mills.
- Limestone grassland: has been reported in the area but there is some doubt concerning its identification. There may be some more calcareous lowland meadow habitat and strongly calcareous rough grassland along the disused railway at Horley.
- Note: It is highly likely that further survey would uncover other grassland sites along these valleys. The western hills appear to be very suitable for acid or neutral to acid grassland.
- Fen and swamp. Fen habitat is found in scattered flushes along the valley and in small pockets near the streams. Some of the meadows at Wroxton and Balscote Mills have fen habitat. Swamp habitat is found next to the fishponds at Horley.

Access: restricted to footpaths and bridleways.

Archaeology:

Targets: Grassland survey, management and restoration. Fen and swamp management.

06:12 Otmoor and Wendlebury Meads

This area includes the wet low lying Otmoor basin and adjacent areas extending north of Charlton-on-Otmoor and eastwards to Whitecross Green Wood.

Joint Character Area: Thames and Avon Vales.

Landscape Types: Alluvial Lowland with a small area of Wooded Farmland in the vicinity of Whitecross Green.

Geology: Largely alluvium with some patches of sand and gravel deposits and Oxford clay mudstone to the south-east and in patches in the north.

Topography: Flat low lying land in the Ray Valley.

Biodiversity:

- Floodplain grazing marsh. This dominates the south-west of the area on Otmoor where extensive restoration on the RSPB reserve has greatly increased the original core area within Otmoor SSSI. Within this area there is wet grassland, swamp, rush pasture and lowland meadow habitat.
- Lowland Meadow. Found within Otmoor SSSI, in a number of the small meadows in the northern part of Otmoor, in the north of the area at Wendlebury Meads and Mansmoor Closes SSSI and in the east at Murcott Meadows SSSI (Asham Meads). There are remnants in other fields especially in the northern part of Otmoor. Ridge and furrow is a feature of many of the meadows.
- Reedbed. An extensive area has been created in the RSPB Otmoor reserve.
- Rush pasture: found at Otmoor Rifle Range.
- Wet grassland: besides the areas in Otmoor SSSI and the RSPB reserve some other fields on Otmoor have wet grassland habitat.
- Hedgerows: There are hedgerows with good structure and also species rich examples in this area.
- Eutrophic Standing Water: There are a number of small ponds and The Pill on Otmoor retains standing water through the year. Shallow pools have been created by the RSPB. Some ponds are known to quite species rich.
- Species: The area is particularly important for waders and wildfowl and the RSPB reserve has significantly increased the importance of the area. This is also a good area for turtle dove. Black hairstreak and brown hairstreak butterflies are associated with hedgerows.

Access: Controlled access at RSPB Otmoor Reserve, BBOWT reserves at Asham Meads and Whitecross Green Wood, a number of bridleways and footpaths especially at Otmoor.

Archaeology: A Roman road crosses Otmoor**.**

Targets: Continue to increase the area of grazing marsh on Otmoor and management of land for breeding waders. Lowland meadow management and restoration elsewhere.

There may be potential to create further areas of reedbed in the area. Hedgerow management.

06:13 Oxford Heights East

The section of the Oxfordshire Heights to the south of Otmoor covering the escarpment from Elsfield to Stanton St John and the land between.

Joint Character Area: Midvale Ridge

Landscape Types: Wooded Estatelands and Wooded Farmland

Geology: The escapement has narrow bands of mudstone and some sandstone. Beyond the escapement there are areas of sandstone and limestone. Alluvium, head (clay, silt and sand) and peat are found along the lines of streams flowing down the escapement.

Topography: On the west, north and east sides the escarpments slopes, quite steeply in places, to the flat valley land associated with Otmoor, the Holton Brook and the River Cherwell. To the south-west a small valley cuts into the area. Beyond the escarpment the land is much flatter.

Biodiversity:

- Woodland: There are numerous areas of ancient woodland on the escarpment. These include Woodeaton Wood SSSI as well as Noke Wood, Cookes Copse and Long Wood, which are County Wildlife Sites. Woodland is also found at Sydlings Copse and College Pond SSSI along the valley to the south west. Stow Wood is at the head of this valley, and lies largely on the plateau.
- Fens and flushes: Fen is found along the south western valley in Sydlings Copse and College Pond. There are many springs and flushes along the escapement, especially associated with the junction between the mudstone and sandstone. These are extensive in Cookes Copse and can be seen in such sites as the County Wildlife Sites of Beckley Pasture and Park Farm.
- Lowland Meadows: Found in a few sites on the mudstone near Beckley and the alluvium at Park Farm.
- Limestone grassland: found in small patches largely where the limestone occurs on or near the escarpment and in the south-west valley. It has also been found at the old Beckley Airfield site in the past.
- Acid grassland: Remnants of this habitat are found on the sandstone in the south-west valley though bracken dominates.
- Species: Arable wildflowers – this area may be important for arable wildflowers – clarification is being sought.

Access: Largely restricted to bridleways and footpaths. The Oxfordshire Way crosses the area at Beckley. Sydlings Copse and College Pond is a BBOWT nature reserve.

Archaeology: Beckley Palace, Dark Dale at Beckley, fishponds east of Beckley. A roman road crosses the area.

Targets: Woodland management, fen and flush management, restoration of lowland meadow, management of cereal field margins for arable wildflowers. There may be potential for restoration of acid and limestone grassland.


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06:14 Oxford Heights West

This complex area encompasses the Oxford Heights from west of the city to Appleton in the west and Frilford in the south west. Includes Cumnor Hill, Boars Hill and the woodlands to the south.

Joint Character Area: Midvale Ridge

Landscape Types: Wooded Estateland (western slopes, south east woodlands and running from Cumnor to Frilford). Wooded Farmland at Boars Hill and Hurst Hill. Rolling Farmland west of Lashford Lane.

Geology: Boars Hill is topped with glacial sand and gravel and sandstone. The Ampthill and Kimmeridge Clay band is found in the wooded area to the south where there are also further areas of glacial sand and gravel. On the western slopes there is a band of limestone and Oxford Clay mudstone towards the base. The northern escarpment is similar but also includes a band of sandstone. The area running from Cumnor to Frilford is sandstone with some limestone with alluvium along the stream valleys. Calcareous Grit, which is a mixture siltstone, sandstone and mudstone, is found at Appleton and in bands along the western streams.

Topography: The prominent hills west of Oxfordshire, sections of the Oxford Heights escapement to the north and near Appleton and the land running gently down to the Ock Valley to the south. This are is intersected by a number of streams including the Sandford Brook and brook flowing from Frilford to Cumnor. Three small valleys cut into the western slopes.

Biodiversity:

- Fen: this area has the main concentration of fen in Oxfordshire especially along the Sandford Brook. There is reed dominated fen in the valleys on the western slopes and flushes on the northern escarpment and in woodland near Appleton. Hurst Hill has remnant Spagnum bog.
- Wet Woodland: found is association with the fens and in woodland near Appleton.
- Lowland Mixed Deciduous Woodland: Found in the woodlands to the south-east, some of the woodland along the Sandford Brook at Cothill, in woodland on the northern escarpment, Hurst Hill, in the woodlands at Appleton and in remnants in Tubney Wood.
- Acid grassland: there are patches of acid grassland in some sites on Boars Hill. It is also found at Frilford Heath golf course and in restored land at Sheepstead Farm. It is also found on rides in Tubney Wood and there is remnant habitat at Besselsleigh Common Wood.
- Heathland: some areas have been restored at Sheepstead Farm. Has been known from Frilford Heath in the past. It was also present at Hurst Hill.
- Limestone Grassland: on the northern escarpment and in the small western valleys.
- Lowland Meadow: found on northern escarpment. Remnants are found elsewhere including a meadow at Appleton and some fairly acidic examples are found on Boars Hill.

- Geology: geological SSSIs are found at Dry Sandford Pit, Cumnor, Hitchcopse Pit, Hurst Hill.
- Other species: arable wildflowers are found on sandy soils for example at Tubney Manor Farm.

Access: Besselsleigh Common Wood, BBOWT reserves at Cothill, Oxford City Council land and a nature park on the western slopes. There are some accessible areas on Boars Hill.

Archaeology:

Targets: Heathland and acid grassland restoration on the sandstone. Fen management. Woodland management. Lowland meadow management and restoration mainly on the northern escarpment. Management for arable wildflowers.

06:15 Oxford Meadows and Farmoor

This area includes the Thames Valley to the west of Oxford as far as Farmoor. It includes the Oxford Meadows Special Area of Conservation, Farmoor Reservoir and gravel workings between Yarnton and Cassington.

Joint Character Area: Thames and Avon Vales

Landscape Type: Riverside Meadows

Geology: Alluvium

Topography: Flat riverside land

Biodiversity:

- Lowland Meadows: Extensive areas of nationally important lowland meadow habitat are found at Pixey and Yarnton Meads, Port Meadow, Wolvercote Meadows and Cassington Meadows. There are also a number of smaller meadow sites at Wolvercote, Yarnton and near Eynsham. There are also remnant areas of wet grassland
- Eutrophic Standing Water: Farmoor Reservoir is the largest area of standing water in Oxfordshire. Some of the new gravel pits near Yarnton also attract good number of wildfowl. Wolvercote gravel pit is also in this area. This habitat is also found at Pinkhill at Farmoor, Dukes Lock Pond and old gravel workings near Cassington.
- Fen/swamp: Swamp habitat is found in a canalside meadow at Wolvercote, which supports good numbers of overwintering snipe, and in small railside pits at Yarnton. Rich areas are found in ditches at Wytham.
- Reedbeds There is a reedbed at Dukes Lock Pond and in an old gravel pit at Cassington. Reedbeds have been created next to the Thames at Farmoor Reservoir.
- Wet Woodland: Small areas largely associated with old pits

Access: Largely restricted to footpaths and bridleways including the Thames Path. There is controlled access at Farmoor.

Archaeology:

Targets: Lowland meadow management and restoration. Management of gravel pit afteruse, management of existing reedbed, fen and swamp. There may be potential to create some new areas of reedbed. Management of wet grassland for breeding waders.

06:16 Shotover

This area is Shotover Hill and includes the Country Park and Shotover House Park. It extends of the Hill to include Country Park land near the Oxford eastern bypass and includes Open Magdalen and Stansfeld Field Study Centre on the west of the Bypass

Joint Character Area: Midvale Ridge

Landscape Types: Wooded Estatelands, a small area of Lowland Village Farmland and Rolling Farmland off the hill to the west.

Geology: A sandstone capped hill with bands of Kimmeridge Clay mudstone, sandstone and siltstone at the edge. There are also some areas of Head deposits which are a mixture of clay, sand, silt and gravel. At the bottom of the Hill, to the north-east and west, there are areas of Amptill Clay, thin bands of alluvium and a small area of Wheatley Limestone in the east.

Topography: A hill to the east of Oxford and including flat land beyond the hill slopes to the west.

Biodiversity:

- Heathland: There are areas of restored heathland in the Country Park
- Lowland Mixed Deciduous Woodland: Extensive areas in Shotover Park and in the woodland to the west. The scrubby edges of Brasnose Wood are important fir nightingales.
- Lowland Meadow: Some patches on the hill such as at the County Wildlife Site on the northern slopes. Also found off the Hill to the west in the SSSI.
- Acid Grassland: Some areas in the Country Park and the County Wildlife Site on the northern slopes.
- Fen: Found in flushes on Shotover Hill
- Parkland: Shotover House has important parkland/veteran tree habitat.
- Eutrophic Standing Water: Include the BBOWT Henry Stephen/C. S. Lewis reserve and a lake at Shotover Park.

Access: Extensive open access through the Country Park. The BBOWT Henry Stephen/C. S. Lewis reserve is also in this area.

Archaeology:

Targets: Heathland and acid grassland management and restoration. Lowland meadow management and restoration, parkland/veteran tree management and restoration, woodland management. Management and restoration of fen habitat in flushes South Cotswold Valleys

06:17 South Cotswold Valley

Joint Character Area: Cotswolds (north), Thames and Avon Vales (south)

Landscape Type: Wooded Pasture Valleys and Slopes (north), Lowland Village Farmland (south).

Geology: From Carterton and northward the valley cuts through limestones and there is alluvium along the Shill Brook. To the south the alluvium widens out and there is Forest Marble mudstone.

Topography: A narrow valley to the north with some steep sides that widens out west of Carterton through to Black Bourton with gently sloping side.

Biodiversity:

- Lowland Meadow: Alvescot Meadows SSSI is the richest site. There are other meadows at Alvescot with remnants of this habitat.
- Fen: Fen meadow habitat is found in Willow Meadows at Carterton while Alvescot Meadows has elements of fen habitat.
- Limestone grassland: There is a bank of limestone grassland at Carterton and some remnant habitat further north at Mount Zion Bottom. There is also a road verge nature reserve at Signet.

Access: Willow Meadows and other land along the valley at Carterton have public access. Otherwise access is restricted to footpaths.

Archaeology:

Targets: Limestone grassland restoration and management from Carterton northwards. Lowland Meadow management and restoration south of Carterton. Fen management at Willow Meadows.

06:18 Swere Valley and Upper Stour

The Swere Valley from Barford St Michael to its source south east of Great Rollright. The area includes tributary valleys extending west of Hook Norton and then north across the watershed to the valleys and quarries at Sibford Ferris where the source of he River Stour is found.

Joint Character Area: Cotswolds

Landscape Types: Farmland Slopes and Valley Sides to the west and River Meadowlands to the east.

Geology: The valley has a complex geology with siltstones and mudstone, the iron rich limestone, known as Marlstone Rockbed, oolitic and Chipping Norton limestones. These latter two limestones are particularly prominent at South Newington, along the main Swere Valley south west of Hook Norton and in the area of the Upper Stour. East of Hook Norton, alluvium is found alongside the River.

Topography: To the east there is a wide valley with gently sloping sides. Further west the valley and that of the tributaries and the Stour are narrower with steeper banks.

Biodiversity:

- Lowland meadow: This is largely found on the banks on the mudstone often quite acidic in nature. In places though it is quite calcareous in nature. On some sites small flushes are found in association with it. The main sites are between South Newington and Hook Norton, Another site is found at Berryfields Farm to the west of Hook Norton. Remnants are found in some riverside meadows including a field near Barford.
- Limestone grassland: The main concentration is found west of Swerford. These include Swere Bank SSSI and the railway cutting nature reserve as well as a road verge near Walk Farm. Further area are found in the Upper Stour area on banks and in disused quarries.
- Swamp and fen. Swamp habitat is found in a number of sites along the base of the valley including in the old river channel at Wiggington, at South Newington, Cradle Farm, in old pond at Priory Mill and near Swerford. Rush and sedge dominated flushes are found on banks amongst lowland meadow habitat.
- Wet Woodland:
- Lowland Mixed Deciduous Woodland: Restricted to a few small sites at South Newington, west of Swerford and at Priory Mill. Scrubby secondary woodland is also found in the old quarries in the area of the Upper Stour.
- Other habitat: Eutrophic standing water at Lambs Pool and parkland at Swerford Park.
- Species: The Swere west of Swerford has a good population of White-clawed crayfish.

Access: Hook Norton Railway Cutting and Lambs Pool are nature reserves.

Archaeology: Targets: Lowland meadow and wetland management and restoration in the flat riverside land. On the banks there is potential for extending the area of limestone and lowland meadow habitat depending on the geology. The Stour Area has been extended east to include the steeper limestone banks in the area.

06:19 Thame Park

A fairly large but rather isolated area that encompasses Thame Park.

Joint Character Area: Thames and Avon Vales

Landscape type: Rolling Clayland.

Geology: Gault Clay with Head (Clay, Silt Sand and Gravel) and alluvium along the Cuttle Brook and other streams.

Topography: Flat to the north along the Cuttle Brook. The south western part is a low hill and the east is on the gentle slopes of another low hill.

Biodiversity:

- Parkland: Large area of sheep grazed parkland with many veteran oak trees.
- Other habitat: there is one large area of woodland and a lake within the Park.

Access: there is one footpath through the site

Archaeology: Remains of a Cistercian Abbey

Target: Parkland/veteran tree management and restoration.

06:20 Thames and Cherwell Meadows at Oxford

Riverside land along the Thames and Cherwell at Oxford. Extends from Kennington in the south to Botley in the West and as far the A40 at Marston in the east.

Joint Character Area: Thames and Avon Vales, Midvale Ridge – this area is characteristic of the former.

Landscape Types: River Meadowlands though two pits are classed as Lowland Village Farmland.

Geology: Alluvium

Topography: Flat riverside land

Biodiversity:

- Lowland Meadows: This is the main habitat in the area. There are species rich meadows at Iffley and Marston which are SSSIs. Magdalen Meadow, St Hilda's College Meadow and Lower Farm Meadow are CWS.
- Wet grassland/fen/swamp/reedbed. Parts of Iffley Meadows are wet grassland and there is also fen and swamp habitat here. A number of the meadows along the Cherwell and Thames have wet grassland habitat and there are patches of swamp. Long Meadow supports swamp habitat and there is a reed bed at Fiddler's Island.

Access: Riverside paths including the Thames Path. There is a nature reserve at Iffley and a nature park at Botley.

Archaeology:

Targets: Management and restoration of lowland meadow habitat. Management of wet grassland, fen, swamp and reedbed. Creation of new areas of reedbed.

06:21Thames Clifton to Shillingford

The Thames floodplain between Clifton and Shillingford but including the gravel pits at Dorchester and Little Wittenham Nature Reserve.

Joint Character Area: Thames and Avon Vales

Landscape Types: River Meadowlands, Terrace Farmland (Dorchester Gravel Pits), Rolling Farmland and Farmland Hills (Little Wittenham Nature Reserve).

Geology: Alluvium and sand and gravel in river valley. Mudstone, siltstone and sandstone at Little Wittenham Nature Reserve with chalk on the hill top.

Topography: Largely flat riverside land but including the mainly north facing slopes and hill tops of the northernmost of the Sinodun Hills at Little Wittenham.

Biodiversity:

- Lowland Meadow: Two County Wildlife Sites near Clifton Hampden. Lowland Meadow habitat is also present in Church Meadow and on Round Hill at Little Wittenham. Some remnants in other fields.
- Eutrophic Standing water: Four of the gravel pits at Dorchester are County Wildlife Sites and are important for wintering wildfowl. Little Wittenham has a series of ponds that are important breeding sites for great crested newt.
- Wet woodland. Small area next to the Thames at Burcot, Little Wittenham and Shillingford that support populations of Lodden lily.
- Other Woodland at Little Wittenham, some limestone grassland here and on Dyke Hills.

Access: Little Wittenham Nature Reserve and the Thames Path.

Archaeology: Dyke Hills at Dorchester, Castle Hill at Little Wittenham.

Targets: Restoration and management of lowland meadow along the Thames, management of wet woodland, maintaining the value of Dorchester Pits.

06:22 Thames Radley to Abingdon

The riverside land near Radley and Abingdon.

Joint Character Areas: Thames and Avon Vales, Midvale Ridge – the whole area is more typical of the former.

Landscape Type: River Meadowlands and Alluvial Lowlands.

Geology: Alluvium and sand and gravel.

Topography: flat riverside land.

Biodiversity:

- Eutrophic Standing Water: gravel pits at Radley include at least one site that is rich in aquatic plants. Some land has permission for further gravel extraction with nature conservation afteruse.
- Wet Woodland: small areas next to the river include Thames Cut County Wildlife Site. There is also wet woodland at Culham Brake SSSI.
- Fen: Culham Brake which is important for its population of Lodden Lily.
- Other habitat: Infilled gravel pits at Radley have developing grassland and woodland habitats and have great potential.
- Other species: this is an important area for nesting lapwing.

Access: Barton Fields is managed for public access and nature conservation.

Archaeology: work at Thrupp has uncovered large numbers of Bronze Age finds.

Targets: Management of standing water sites, management of wet woodland, management and restoration of infilled pits. Woodland planting should be avoided.

06:23 Thames Wallingford to Goring

The floodplain of the Thames between Wallingford and Goring.

Joint Character Area: Thames and Avon Vales

Landscape type: River Meadowlands

Geology: Alluvium

Topography: Flat riverside land.

Biodiversity:

- Fen, swamp and reedbed. South Stoke Marsh. A very important site for birds and invertebrates and the largest area of wetland along the Thames in Oxfordshire. There is also swamp habitat at Cholsey Marsh.
- Wet Woodland: A number of small areas of wet woodland, some on islands in the Thames that support populations of Lodden lily.
- Wet grassland. There are a few wet meadow sites including Cholsey Marsh and fields near Wallingford.

Access: Thames path, Cholsey Marsh Nature Reserve

Archaeology:

Targets: Swamp habitat, including reedbeds. Wet woodland management. There may be potential to extend the area of wet grassland.

06:24 Tusmore and Shelswell Parks with Stoke Lyne Woodlands

This are encompasses the parks and woodlands at Tusmore and Shelswell Parks and a number of ancient woodlands near Stoke Lyne.

Joint Character Area: Cotswolds and West Anglian Plain.

Landscape Types: Wooded Estateland plus a small area of Farmland Plateau (though this area includes a large wood).

Geology: Limestone with some mudstone and limestone mixtures to the south. Extensive glacial sand and gravel deposits in the parklands with alluvium along streams.

Topography: largely flat plateau land intersected by shallow valleys.

Biodiversity:

- Parkland: Large parks at Tusmore and Sheslwell, though the importance of these have not been assessed, with large areas of woodland.
- Lowland Mixed Deciduous Woodland: Besides the parkland woods there are a number of ancient woodland sites near Stoke Lyne.
- Other habitats: the parks have lakes. On the northern side of Shelswell Park, Cottisford Pond is a County Wildlife Site along with the adjacent wet woodland.

Access: Stoke Wood is a Woodland Trust nature reserve. Otherwise access is restricted to bridleways and footpaths.

Archaeology:

Targets: Woodland management and possibly some planting to link sites. Parkland/veteran tree management and restoration.

06:25 Upper Cherwell Valley

The Cherwell Valley from Lower Heyford to Clifton. This encompasses the flat wet riverside land and the Oxford Canal, which often forms the boundary of the area.

Joint Character Area: Cotswolds

Landscape Types: River Meadowlands

Geology: Largely alluvium, some sand and gravel and Lias mudstone at the edge.

Topography: Flat riverside land.

Biodiversity:

- Lowland Meadow: The largest site is Bestmoor SSSI. There are a few other small sites.
- Wet Grassland: There are some fields with wet grassland habitat and remnants elsewhere.
- Other habitat: The River Cherwell and Oxford Canal. Some woodland has been planted here.
- Species: this area has been important for wading birds and overwintering wildfowl though less so these days.

Access: The Canal is the main accessible area.

Archaeology:

Targets: Lowland meadow management and restoration. Wet grassland restoration to improve the area for waders and wildfowl. There is potential to create some reedbed habitat in this area.

06:26 Upper Thames

The riverside land between Northmoor and the County boundary.

Joint Character Area: Thames and Avon Vales.

Landscape Type: River Meadowland and Alluvial Lowland.

Geology: Alluvium

Topography: Flat riverside land

Biodiversity:

- Lowland Meadows: The key habitat in this area. There is an extensive area at Chimney Meadows SSSI and a large restoration protect on adjacent land owned by BBOWT. Sites are scattered elsewhere and include Langleys Lane Meadows SSSI, Grafton Lock Meadow SSSI and Buckland (Carswell) Marsh County Wildlife Site. There are other meadows with snake's-head fritillary near Grafton Lock.
- Wet grassland: found in one meadow at Chimney Meadows. This habitat has developed in set aside fields where birds such as curlew and skylark have been recorded.
- Eutrophic Standing Water and reedbed: One gravel pit with nature conservation afteruse near Standlake is included though this may be better positioned in the Lower Windrush Area.
- Other species: the area has been very important for wading birds in the past, especially at Chimney, and still retains some important areas. Curlew still nest in the area and there is an important area near Northmoor for nesting lapwing.

Access: Chimney Meadows is a National Nature Reserve. Controlled access here and in the adjacent BBOWT land. Thames path along the River.

Archaeology:

Target: Restoration and management of lowland meadow. Restoration of wet grassland habitat for breeding waders. There may be some potential to create areas of reedbed.

06:27 Upper Windrush

The valley of the Windrush from Witney to the Oxfordshire border. Much of the area is the flat riverside land but includes some of the steeper valley slopes where limestone grassland is found. The area includes the numerous small valleys that run north of main valley and cut into the Cotswold plateau.

Joint Character Area: Cotswolds

Landscape Types: River Meadowlands along the main valley. Farmland Slopes and Valley Sides in places on the main valley and in some of the northern valleys. Wooded Valleys Pasture and Slopes in other northern valleys. The small valley at Crawley is classed as Settle Ancient Pastures.

Geology: Alluvium on the flat riverside land extending along the base of some of the smaller northern valleys. Limestones are found on the valley sides along with some Forest Marble mudstone, and also along most of the smaller northern valleys. To the west there is Lias mudstone and some Lias siltstone at the valley edge and in the valley north of Taynton along with iron rich limestone (Marlstone Rockbed).

Topography: Flat riverside land with some adjacent steep banks along with narrow steep sided valleys running north.

Biodiversity:

- Lowland Meadows: The main sites are at Crawley, where there are particularly rich sites and at Worsham. There are remnants of this habitat elsewhere in the meadows at Minster Lovell and near Burford.
- Wet grassland: There is some wet grassland near Burford where shallow pools have been created and in a number of other riverside meadows such as Minster Lovell Marsh, Crawley Mead and some meadows between Crawley and Witney.
- Swamp and Fen: The main swamp sites are at Minster Lovell Marsh, Crawley Mead and Minster Lovell Fishponds. Remnants of this habitat are found elsewhere on islands near Witney. Fen is found along the narrow valleys that run north at Swinbrook and Taynton Quarries SSSI. The valley north of Taynton has many spring sites at the southern end.
- Limestone grassland: On the main valley limestone grassland is restricted to the steeper banks such as the meadow above the pumping station at Worsham, on some road verges with remnants in quarries at Worsham. Taynton Quarries SSSI has the most extensive area of limestone grassland. Smaller banks are found along some of the other valleys including a number of County Wildlife Sites. Remnant limestone grassland is found in other valleys.
- Woodland: There is one important site along the main valley near Crawley. It is more common in the northern valleys especially at Taynton where there are substantial areas and in a valley near Asthall Leigh.
- The main river valley has good numbers of willow pollards.
- Species: the area has been important for breeding waders and has potential for restoration of suitable habitat.

Access: restricted to footpaths and bridleways.

Archaeology:

Targets: management and restoration of lowland meadows, wet grasslands (for waders), swamp, and limestone grassland. Management of woodland.

06:28 West Oxford Heights Streams, Woods, Hills and Parks

A complex area encompassing the majority of important habitat in the Oxfordshire Heights in the west of the county. It includes a number of stream valleys, including the outlying Pennyhooks Brook, some land between these valleys, a number of hills and parks and the northern escapement of the Oxfordshire Heights from Faringdon to Littleworth.

Joint Character Area: Midvale Ridge.

Landscape Types: Wooded Estatelands, Rolling Farmland (mainly along the Pennyhooks Brook), a small area of Clay Vale at Standford-in-the-Vale.

Geology: Complex though largely sandstone, limestone and mudstone clay. Sandstone and limestone to the east, alluvium along the valleys, hills of Greensand sandstone, Calcareous Grit sandstone, siltstone and mudstone in bands on the hills and extending along the northern escarpment along with some Ampthill Clay mudstone, Oxford Clay mudstone at the base of the escarpment and some hills and at Buscot Park. Pennyhooks Brook Valley is siltstone, sandstone, mudstone and limestone with alluvium.

Topography: To the east there are narrow stream valleys cutting through gently rising land along with some land between. To the west the area encompasses a series of hills and the between. To the north there is north facing escarpment.

Biodiversity:

- Wet woodland: Found in small sites along the stream valleys.
- Acid grassland: there are small remnant patches of acid grassland, sometimes with lichen heath, often associated with quarries. Although small and scattered these areas often support an interesting invertebrate fauna.
- Fen: small areas are found along the stream valleys often in association with wet woodland sites some of which have developed on once open fen. This is the case at Buckland Warren Woods. The main site is along the Pennyhooks Brook at Shrivenham.
- Lowland Mixed Deciduous Woodland: Found in numerous sites including Buckland Warren Woods and Badbury Forest.
- Lowland Meadow: restricted to one site at Faringdon and along the Pennyhooks Brook although there are remnants in wet grassland near Standford-in-the-Vale.
- Parkland: There are many areas of parkland. The value of some sites have yet to be investigated. Coleshill Park and Buscot Park are the most important sites. Other sites are found at Faringdon, Barcote and Pusey.
- Calcareous grassland – although the north east of the area has been suggested as a target area for calcareous grassland it is only found on the ramparts of Cherbury Camp. The only other site is a Tuckmill Meadows.
- Geology: There are three geological SSSI's near Faringdon.
-

Access: Mainly restricted to bridleways and footpaths. National Trust woodland at Badbury Camp has access along tracks.

Archaeology: Badbury Fort, Cherbury Camp

Targets: Management of wet woodland and associated fen, management and restoration of acid grassland, woodland management, parkland/veteran tree management and restoration. Significant areas in the west are owned by the National Trust are in Countryside Stewardship or will in the Higher Level Scheme.

06:29 Wychwood and Lower Evenlode

The remains of Wychwood Forest and extensive areas within the old forest boundary extending as far as Eynsham Hall Park. It includes the southern side of the Evenlode Valley

Joint Character Area: Cotswolds

Landscape Types: Wooded Farmland, Wooded Estate Slopes and Valley Sides, Farmland Slopes and Valley Sides, Settled Ancient Pastures.

Geology: Mainly a variety of limestone rocks extending onto the Oxford Clay to the south. Some areas of glacial sand and gravel at North Leigh and in the vicinity of Wychwood.

Topography: A rolling plateau intersected by a number of dry and wet valleys that run down to the Evenlode Valley. Includes the steeper valley sides along the southern edge of the Evenlode Valley.

Biodiversity:

- Woodland. The largest feature is the rich ancient woodland of Wychwood. Numerous other woodlands, that were part of the original Wychwood Forest, are present extending as far as Cogges Wood and Eynsham Hall Park. Also includes the hanging woodland along the Evenlode Valley including Sturt Copse SSSI.
- Parkland. There are two significant historic parklands – Cornbury which is known to be of high interest and Eynsham Hall which is thought to be of significant interest.
- Limestone grassland. This habitat is associated with the valleys that cut through the area and is also found on a section of the Cotswold Line and on road verges.
- Species rich hedgerows. Many of the hedgerows are rich in species and derived from enclosure of Wychwood Forest.
- Heathland and acid grassland. Remnants of this habitat are found where the glacial sands and gravels are found especially at North Leigh Heath and also at Ramsden and within woodland to the north-west of Wychwood.

Access: North Leigh Heath, Woodland Trust Reserve at Ramsden, various footpaths and bridleways

Archaeology:

Targets: Woodland management, parkland/veteran tree management and restoration, limestone grassland management and restoration along the valleys, heathland restoration at suitable sites.

06:30 Wytham Hill

This area is dominated by the wooded Wytham Hill.

Joint Character Area: Midvale Ridge

Landscape Type: Wooded Hills

Geology: The hill is capped with limestone. Then there is a band of sandstone. On the lower slopes and much of Beacon Hill the geology is Oxford Clay mudstone.

Topography: A prominent hill rising out the Thames Valley which also includes Beacon Hill to the west.

Biodiversity:

- Woodland covers a large part of this area. Most of the woodland is within the woods of Wytham SSSI which form a large and continuous area. There are a number of smaller woodland areas on the southern slopes of the hill including Stroud Copse which is included in the SSSI. Some of the woodland was once wood pasture and there are many veteran trees.
- Limestone grassland: Found within the SSSI at Hill End and in the grazing plots near the summit of Wytham Hill. Beacon Hill, at the west end, may support limestone grassland but little is known about this site. The slopes of Beacon Hill are on the mudstone and may support lowland meadow habitat.
- Fen: On the northern edge there is a small area of fen meadow associated with flushes in a small sloping field. There are other fenny flushes within the woodland.

Access: Largely inaccessible.

Archaeology:

Targets: Woodland management, veteran tree management, restoration of limestone grassland especially to the south east, fen/flush management. The steep slopes of Beacon Hill may support lowland meadow habitat and there may be potential to restore other areas to this habitat.

06:31 Bernwood

This area encompasses the woodlands of Bernwood and Shotover Forest to the east of Horton-cum-Studley. It consists of the valley of the Holton Brook, Moorbridge Brook and Danes Brook, and the gently rising wooded land on each side. The area extends into Buckinghamshire. The Oxfordshire Heights East hotspot lies to the north west where the ground rises and geology changes.

Joint Character Area: Midvale Ridge, Clay Vale

Landscape Types: Wooded Farmland and Wooded Estateland. The Rolling Farmland to the south is largely wooded. River Meadowlands along the Holton Brook.

Geology: Largely Oxford Clay mudstone with some small areas of sandstone. There is alluvium along the brooks which forms a wider area between Stanton Great Wood and Waterperry Wood. There are also some small areas of river terrace sands and gravels.

Topography: A flat river valley that is narrow to the south and wider to the north with gently sloping valley sides along the western, eastern and northern edge.

Biodiversity:

- Woodland. Extensive areas of semi-natural ancient woodland and replanted ancient woodland including the SSSI's of Waterperry Wood, Holton Wood, Stanton Great Wood and Holly Wood and extending into Buckinghamshire to include Shabbington Woods SSSI. Waterperry and Shabbington form Bernwood Forest Nature Reserve and are especially important for butterflies.
- Lowland Meadows: There are a group of meadows along the Holton Brook to the south of the area and Bernwood Meadows SSSI towards the north-east. Grassland is an important component along the rides in some of the woods, especially in Waterperry and Shabbington Woods where species rich rides and intersections have been created. There are areas of fairly acidic wet neutral grassland between the remains of Studley Wood and the surrounding golf course.
- Species: The woodlands are important for butterflies.

Access: Bernwood Forest Nature Reserve has public access. Bernwood Meadows Nature Reserve is managed by BBOWT.

Archeology:

Targets: Woodland management, management and restoration of lowland meadows along the streams.

06:32 Brill and Muswell Hill

Brill and Muswell Hill. Only the northern slopes of Muswell Hill are in Oxfordshire:

Joint Character Area: Midvale Ridge

Landscape Type: not defined

Geology: Sand capped hills with bands of Purbeck limestone, sandstone and siltstone and Kimmeridge sandstone, siltstone and mudstone on the slopes.

Topography: Two prominent hills. Muswell Hill has steep slopes, as does the northern part of Brill Hill. The southern slopes of Brill Hill are less steep.

Biodiversity:

- Lowland Meadow: Muswell Hill has extensive areas of strongly acidic lowland meadow habitat though. Some areas appear to have great potential for this habitat and perhaps some acid grassland. Remnants are found elsewhere including on Brill Common where extensive pits have been dug in the past and the grassland is more calcareous in nature.
- Fen: remnants present in small areas in the many largely rush dominated flushes found on the hill which are a mixture of fen and wet grassland habitat.
- Acid grassland: some areas have extensive patches of Bracken including in the County Wildlife Site at Muswell Hill and the moto-cross circuit. There may be remnant areas of acid grassland. The soils are certainly suitable.

Access: Brill Common has open access. There are footpaths elsewhere

Archaeology:

Targets: Lowland meadow management and restoration. Acid grassland restoration. Management of flushes.

06:33 Ray

The alluvial floodplain of the River Ray extending along a number of small tributary streams and including some areas of land between these streams. This area extends into Buckinghamshire. The area extends onto the clay to included known areas of wet grassland and the main areas of ridge and furrow.

Joint Character Area: Thames and Avon Vales

Landscape Types: Alluvial Lowland with some areas of Clay Vale.

Geology: Mainly alluvium along the Ray. Alluvium is also present in narrow bands along the small streams and there are Oxford Clay mudstones away from the streams and river.

Topography. Flat riverside land.

Biodiversity:

- Lowland Meadow. The key habitat in this area. It is found in a number of SSSI's and County Wildlife Sites mainly at least partly on the alluvium. North west of Blackthorn Hill there is a larger group of meadows which are largely on the Oxford Clay. Remnants of this habitat are found elsewhere especially between Bicester and Blackthorn Hill and in some meadows in Buckinghamshire.
- Wet grassland. Found in meadows along with lowland meadow habitat with remnants elsewhere.
- Hedgerows. Some rich and well structured hedgerows with brown and black hairstreak.
- Other Species: true fox sedge is found in a number of sites in the area.

Access: Largely restricted to bridleways and footpaths. There are two BBOWT nature Reserves – Dorothy Bolton Reserve and Long Herdon Meadows. Access routes have been created adjacent to BBOWT reserves.

Archaeology: Extensive ridge and furrow.

Targets: Lowland meadow management and restoration. Many fields were entered into the ESA scheme. There is good potential for the restoration of lowland meadow and wet grassland habitat. This potential may extend onto the Oxford Clay mudstone. There may be potential to create some swamp and reedbed habitat.

06:34 Chiltern Dipslope Valleys and Plateau

This complex area consists of the steeper side of the chalk valleys that cut through the plateau and key areas of the plateau where the main areas of woodland and heathland remnants are found. These valleys run into Buckinghamshire to the north. Valleys with chalk grassland or significant woodland at the edge of the area are excluded along with the flat chalk areas at the heads of the valleys.

Joint Character Area: Chilterns

Landscape Types: Wooded Estate Slopes and Valley Sides along the valleys. Wooded Farmland on the plateau.

Geology: The valleys are chalk. On the plateau there are deposits of sand, gravel and clay with flints. Areas with clay with flints are largely excluded except where there are extensive woodland areas.

Topography: Narrow steep sided chalk valleys running from the north east to the south east cut through the flatter Chilterns plateau.

Biodiversity:

- Chalk Grassland: The steeper slopes support a number of relatively small chalk grassland sites.
- Woodland: There are with numerous areas of ancient woodland with beech woodland and some lowland mixed deciduous woodland including SSSI's at Bix, Pishill, Harpsden and Bear, Oveys and Greatbottom Wood. The plateau areas included extensive areas of woodland in the area running from Crays Pond to Sonning Common and south of Nettlebed.
- Heathland: This area includes remnants of heathland on the Chiltern Commons, in association with some of the woodland.
- Further areas of plateau land are found at Crowsley, where there is important parkland and acid grassland habitat, Gillots Field and the adjacent geological SSSI at Henley are also included.
- Species: the arable land is important for arable wildflowers and farmland birds.

Access: Warburg Reserve at Bix, a number of areas of common land, Gillots Field at Henley and many bridleways and footpaths.

Archaeology:

Targets: Chalk grassland management and creation along the valleys. Heathland restoration on the plateau. Woodland management throughout. Management for farmland birds and arable wildflowers.

South East England Biodiversity Forum

Surrey

07:01 Chiddingfold and West Weald Woodlands

The site is located east of Haslemere in south-west Surrey centred on the village of Chiddingfold. The area encompasses the main are covered by the West Weald Landscape Project in Surrey.

Joint Character Area: Low Weald, Wealden Greensand

Geology: Weald Clay, Lower Greensand

Topography: To follow

Soils:

- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Loamy soils with naturally high groundwater

Biodiversity:

- Lowland Mixed Deciduous Woodland
- Wet Woodland
- Lowland Meadows
- Ancient Woodland
- The Opportunity Area includes two SSSIs (Netherside Stream Outcrops, Chiddingfold Forest) and 46 SNCIs

Access: Fir Tree Copse; SWT, Dunsfold Common; Waverley Borough Council, Chiddingfold Green; Waverley Borough Council, Tickner's Heath; Waverley Borough Council, Botany Bay to Durfold Wood; Forestry Commision, Sydney Wood; Forestry Commision

Archaeology:

- Chiddingfold Roman villa

Targets: To follow

07:02 Cranleigh Woodlands

The south is located to the north-east and south-east of Cranleigh in the south-west of Surrey.

Joint Character Area: Low Weald, Wealden Greensand

Geology: Weald Clay**,** Lower Greensand

Topography: To follow

Soils:

- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Loamy soils with naturally high groundwater
- Freely draining very acid sandy and loamy soils

Biodiversity:

- Lowland Mixed Deciduous Woodland
- Wet Woodland
- Lowland Meadows
- Ancient Woodland
- The Opportunity Area includes 20 SNCIs

Access: Fowls Copse; SWT, Bowles Rough/Fir Tree Copse; SWT

Archaeology: The Opportunity Area contains no scheduled ancient monuments

Targets: To follow

07:03 Wallis Wood

The site is located south-east of Ewhurst in southern Surrey.

Joint Character Area: Low Weald

Geology: Weald Clay

Topography: To follow

Soils:

- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Loamy soils with naturally high groundwater

Biodiversity:

- Lowland Mixed Deciduous Woodland
- Wet Woodland
- Lowland Meadows
- Ancient Woodland
- The Opportunity Area includes one SSSI (Smokejack Clay Pit) and six SNCIs

Access: Wallis Wood; SWT

Archaeology: The Opportunity Area contains no scheduled ancient monuments

Targets: To follow

South East England Biodiversity Forum

07:04 Vann Lake and Ockley Woodland

The site is located at Ockley in southern Surrey.

Joint Character Area: Low Weald

Geology: Weald Clay

Topography:

Soils:
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Loamy soils with naturally high groundwater

Biodiversity:
- Lowland Mixed Deciduous Woodland
- Wet Woodland
- Ancient Woodland
- The Opportunity Area includes two SSSIs (Vann Lake & Ockley Woods and Auclaye) and five SNCIs

Access: Vann Lake; SWT

Archaeology:
- Medieval Moated Site, north of Oakdale Farm

Targets: To follow

South East England Biodiversity Forum

07:05 Glovers Wood and Edolph's Copse

The site is located south-west of Newdigate in southern Surrey.

Joint Character Area: Low Weald

Geology: Weald Clay

Topography: To follow

Soils:
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils

Biodiversity:
- Lowland Mixed Deciduous Woodland
- Wet Woodland
- Ancient Woodland
- The Opportunity Area includes one SSSI (Glovers Wood) and seven SNCIs

Access: Glover's Wood; Woodland Trust, Edolphs Copse; Woodland Trust

Archaeology: The Opportunity Area contains no scheduled ancient monuments

Targets: To follow

07:06 Newdigate Woodland

The site is located north of Newdigate in southern Surrey.

Joint Character Area: Low Weald

Geology: Weald Clay, Alluvium

Topography: To follow

Soils:

- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Loamy soils with naturally high groundwater

Biodiversity:

- Lowland Mixed Deciduous Woodland
- Wet Woodland
- Ancient Woodland
- The Opportunity Area includes seven SNCIs

Access: Hammonds Copse; Woodland Trust, Newdigate Brickworks; SWT

Archaeology: The Opportunity Area contains no scheduled ancient monuments

Targets: To follow

07:07 Earlswood and Redhill Commons

The site is located south of Reigate and Redhill.

Joint Character Area: Low Weald, Wealden Greensand

Geology: Lower Greensand, Weald Clay

Topography: To follow

Soils:
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Freely draining slightly acid loamy soils

Biodiversity:
- Wet Woodland
- Ancient Woodland
- The Opportunity Area includes six SNCIs

Access: Earlswood Common; Reigate and Banstead Borough Council, Redhill Common; Reigate and Banstead Borough Council

Archaeology:
- Bowl Barrow on Earlswood Common 20m south of Pendleton Road

Targets: To follow

South East England Biodiversity Forum

07:08 North Downs Scarp; The Hog's Back

The site runs to the west of Guildford along the Hogs Back (A31).

Joint Character Area: North Downs

Geology: Chalk, Alluvium, Upper Greensand, Blackheath,

Topography: To follow

Soils:
- Shallow lime-rich soils over chalk or limestone
- Freely draining slightly acid but base-rich soils
- Freely draining slightly acid sandy soils
- Shallow lime-rich soils over chalk or limestone

Biodiversity:
- Lowland Calcareous Grassland
- Lowland Mixed Deciduous Woodland
- Lowland Beech and Yew Woodland
- The Opportunity Area includes one SSSI (Seale Chalk Pit) and six SNCIs

Access: Seale Chalk Pit; SWT

Archaeology:
- Henley Fort: A London Mobilisation Centre

Targets: To follow

South East England Biodiversity Forum

07:09 North Downs Scarp and Dip; Guildford to the Mole Gap

The site runs between Guildford and Leatherhead.

Joint Character Area: North Downs, Wealden Greensand, Thames Basin Lowlands
Geology: Chalk, Alluvium, Clay with Flints, Upper Greensand, Blackheath, Glacial Sand and Gravel

Topography: To follow

Soils:
- Freely draining slightly acid loamy soils
- Freely draining slightly acid but base-rich soils
- Shallow lime-rich soils over chalk or limestone
- Freely draining lime-rich loamy soils
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils

Biodiversity:
- Lowland Calcareous Grassland
- Lowland Mixed Deciduous Woodland
- Lowland Beech and Yew Woodland
- Ancient Semi-Natural Woodland
- The Opportunity Area includes six SSSIs (Sheepleas, Combe Bottom, Upper Common Pits, Hackhurst & White Downs, Ranmore Common and Mole Gap to Reigate Escarpment) and 28 SNCIs.

Access: Pewley Downs; Guildford Borough Council, Merrow/Clandon Downs; Guildford Borough Council, The Chantries; Guildford Borough Council, Newlands Corner; SCC/SWT, St Martha's; SCC/SWT, Netley Park; National Trust, Hackhurst Down; National Trust, Colekitchen Down; SWT, White Downs; SWT, Effingham Forest; Forestry Commision, Ranmore Common; National Trust, Norbury Park; SWT

Archaeology:
- Bowl Barrow at Newlands Corner
- West Humble Chapel

Targets: To follow

07:10 North Downs Scarp; Mole Gap to Reigate

The site is located north-west of Dorking.

Joint Character Area: North Downs, Wealden Greensand

Geology: Chalk, Lenham Beds, Clay with Flints, Upper Greensand, Blackheath, Alluvium

Topography: To follow

Soils:

- Shallow lime-rich soils over chalk or limestone
- Freely draining slightly acid but base-rich soils
- Freely draining slightly acid loamy soils
- Slightly acid loamy and clayey soils with impeded drainage
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils

Biodiversity:

- Lowland Calcareous Grassland
- Lowland Mixed Deciduous Woodland
- Lowland Beech and Yew Woodland
- Lowland Heathland
- Ancient Semi-Natural Woodland
- Mole Gap to Reigate Escarpment SAC
- The Opportunity Area includes one SSSI (Mole Gap to Reigate Escarpment) and five SNCIs

Access: Box Hill; National Trust, Headley Heath; National Trust, Reigate Hill; National Trust, Gatton Park; National Trust, Betchworth; SWT, Brockham, SWT, Dawcombe; SWT, Fraiser Down; SWT, Nower Wood; SWT

Archaeology:

- Reigate Fort: A London Mobilisation Centre
- Bowl Barrow: Part of Leatherhead Down Round Barrow Cemetery
- Two Bowl Barrows: Part of Leatherhead Down Round Barrow Cemetery
- Stane Street
- Box Hill Fort: A London Mobilisation Centre
- Bowl Barrow on Box Hill, 250m north-west of Boxhurst
- Bowl Barrow on Box Hill, 230m west of Upper Farm Bungalow
- Brockham Lime Works: Lime Kilns and Hearthstone Mine
- Betchworth Fort: A London Mobilisation Centre
- Lime Kilns at four sites on Betchworth Quarry

Targets: To follow

07:11 North Downs; Epsom Downs

The site is located south-east of Epsom.

Joint Character Area: North Downs

Geology: Chalk

Topography: To follow

Soils:

- Shallow lime-rich soils over chalk or limestone
- Freely draining slightly acid but base-rich soils
- Freely draining slightly acid sandy soils
- Freely draining slightly acid loamy soils

Biodiversity:

- Lowland Calcareous Grassland
- Lowland Mixed Deciduous Woodland
- Lowland Beech and Yew Woodland
- Ancient Semi-Natural Woodland
- The Opportunity Area includes nine SNCIs

Access: Epsom Downs; Epsom Downs Conservators/Epsom and Ewell Borough Council

Archaeology:

- Enclosure south-west of South Tadworth Farm
- Stane Street

Targets: To follow

07:12 North Downs; Banstead Downs

The site is located south-west of Banstead towards the north-east of the county.

Joint Character Area: North Downs

Geology: Chalk, Clay with Flints, Blackheath, Lenham Beds, Glacial Sand and Gravel

Topography: To follow

Soils:

- Shallow lime-rich soils over chalk or limestone
- Freely draining slightly acid loamy soils
- Freely draining slightly acid sandy soils

Biodiversity:

- Lowland Calcareous Grassland
- Lowland Mixed Deciduous Woodland
- Lowland Beech and Yew Woodland
- Ancient Semi-Natural Woodland
- The Opportunity Area includes one SSSI (Chipstead Downs) and two SNCIs

Access: Ruffett Wood; Woodland Trust, Banstead Woods; Reigate and Banstead Borough Council, Park Down; Reigate and Banstead Borough Council, Chiphouse Wood; Woodland Trust, Shabden Park Farm; SCC/SWT

Archaeology: The Opportunity Area contains no scheduled ancient monuments

Targets: To follow

07:13 North Downs Scarp; Reigate to M23

The site is located south of Caterham in the north-west of Surrey.

Joint Character Area: North Downs, Wealden Greensand

Geology: Chalk, Blackheath, Clay with Flints, Upper Greensand

Topography: To follow

Soils:

- Shallow lime-rich soils over chalk or limestone
- Slightly acid loamy and clayey soils with impeded drainage
- Freely draining lime-rich loamy soils
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils

Biodiversity:

- Lowland Calcareous Grassland
- Lowland Mixed Deciduous Woodland
- Ancient Semi-Natural Woodland
- The Opportunity Area includes one SSSI (Quarry Hangars) and four SNCIs

Access: Quarry Hangers; SWT, Fosterdown Wood; Tandridge District Council, Tupwood Scrubs; Tandridge District Council

Archaeology:

- Fosterdown or Pilgrim Fort: A London Mobilisation Centre
- Large Multivallate Hillfort at War Coppice Camp

Targets: To follow

07:14 North Downs Scarp; Woldingham

The site is located east of Caterham in the north-west of Surrey.

Joint Character Area: North Downs, Wealden Greensand

Geology: Chalk, Blackheath, Clay with Flints, Upper Greensand,

Topography: To follow

Soils:

- Shallow lime-rich soils over chalk or limestone
- Freely draining slightly acid loamy soils
- Freely draining lime-rich loamy soils
- Slightly acid loamy and clayey soils with impeded drainage

Biodiversity:

- Lowland Calcareous Grassland
- Lowland Mixed Deciduous Woodland
- Lowland Beech and Yew Woodland
- The Opportunity Area includes one SSSI (Woldingham & Oxted Downs) and 11 SNCIs

Access: Marden Park; Woodland Trust, Oxted Downs; National Trust, Hill Park; SCC/SWT

Archaeology:

- Bronze Age Enclosure on Nore Hill

Targets: To follow

07:15 Hogsmill

Hogsmill and floodplain running north-west from Epsom to the county boundary with Greater London.

Joint Character Area: Thames Basin Lowlands

Geology: London Clay, Blackheath

Topography: To follow

Soils:

- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Loamy soils with naturally high groundwater
- Freely draining slightly acid but base-rich soils

Biodiversity:

- Floodplain Grazing Marsh
- Lowland Meadows
- Wet Woodland
- The Opportunity Area includes one SNCI

Access: To follow

Archaeology: The Opportunity Area contains no scheduled ancient monuments

Targets: To follow

07:16 Eden (plus tributaries)

River Eden plus floodplain as it flows in an easterly direction towards the county boundary with Kent. The main arm rises around Blindley Heath however smaller arms rise around Godstone, Oxted and East Grinstead.

Joint Character Area: Thames Basin Heaths, Thames Basin Lowlands, North Downs, Wealden Greensand, Low Weald, High Weald

Geology: Upper Greensand, Lower Greensand, Weald Clay, Hastings Beds, River Terrace Deposits

Topography: To follow

Soils:

- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Freely draining slightly acid loamy soils
- Loamy soils with naturally high groundwater
- Slightly acid loamy and clayey soils with impeded drainage

Biodiversity:

- Floodplain Grazing Marsh
- Lowland Meadows
- Wet Woodland
- The Opportunity Area includes the SSSIs Godstone Ponds, Lingfield Cernes, Blindley Heath and Hedgecourt, and five SNCIs

Access: To follow

Archaeology: The Opportunity Area contains no scheduled ancient monuments

Targets: To follow

07:17 Blackwater River

Blackwater River and floodplain which forms the border between Hampshire and Surrey.

Joint Character Area: Thames Basin Heaths, Thames Basin Lowlands, North Downs

Geology: Bagshot Beds, River Terrace Deposit, London Clay, Blackheath, Chalk, Alluvium

Topography: To follow

Soils:

- Loamy soils with naturally high groundwater
- Loamy and clayey floodplain soils with naturally high groundwater
- Freely draining slightly acid but base-rich soils
- Freely draining slightly acid loamy soils
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils

Biodiversity:

- Floodplain Grazing Marsh
- Lowland Meadows
- Wet Woodland
- Urban
- The Opportunity Area includes the LNR Lakeside Park, the SSSI Basingstoke Canal and eight SNCIs

Access: Lakeside Park; Guildford Borough Council, Watchmoor Reserve; Surrey Heath Borough Council

Archaeology: The Opportunity Area contains no scheduled ancient monuments

Targets: To follow

07:18 River Wey (plus tributaries)

River Wey and floodplain stretching from Thames Valley in the north to the county boundary with Hampshire and West Sussex in the south-west.

Joint Character Area: Thames Valley, Thames Basin Heaths, Thames Basin Lowlands, North Downs, Wealden Greensand, Low Weald, Hampshire Downs

Geology: Bagshot Beds, Alluvium, River Terrace Deposits, London Clay, Blackheath, Chalk, Weald Clay, Lower Greensand, Upper Greensand

Topography: To follow

Soils:

- Naturally wet very acid sandy and loamy soils
- Loamy and clayey floodplain soils with naturally high groundwater
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Loamy soils with naturally high groundwater
- Shallow lime-rich soils over chalk or limestone
- Freely draining slightly acid loamy soils
- Freely draining slightly acid sandy soils
- Freely draining slightly acid but base-rich soils
- Freely draining very acid sandy and loamy soils
- Fen peat soils

Biodiversity:

- Floodplain Grazing Marsh
- Lowland Meadows
- Wet Woodland
- Urban
- The Opportunity Area includes the SSSIs Papercourt, Wey Valley Meadows, Charterhouse to Eashing, Moor Park and 70 SNCIs

Access: Thundry Meadows; SWT, Moor Park; SWT, Papercourt Meadows; SWT, Wey and Godalming Navigations; National Trust, Stoke Park; Guildford Borough Council, Riverside Park; Guildford Borough Council, Lammas Lands; Waverley Borough Council

Archaeology:

- Brooklands Motor Racing Circuit, Remains of the pre-World War II Aerodrome, World War II Bofors Tower and Shelters, and the Brooklands Memorial
- Newark Priory: An Augustinian Priory North of the River Wey
- Woking Palace Moated Site, Fishponds and Ruins at Oldhall Copse
- The Treadwheel Crane
- Chilworth Gunpowder Works
- Medieval Moated Site West of Vachery Farm
- Somerset Bridge

- Elstead Bridge
- Waverley Abbey: A Cistercian Monastery South of Waverley Abbey House
- Bridge, East End of Tilford Common
- Bridge, North End of Tilford Green

Targets: To follow

07:19 River Mole (plus tributaries)

River Mole and floodplain stretching from the county boundary with Sussex in the south to the Thames Valley in the north.

Joint Character Area: Thames Valley, Thames Basin Heaths, Thames Basin Lowlands, North Downs, Wealden Greensand, Low Weald

Geology: River Terrace Deposits, Bagshot Beds, London Clay, Alluvium, Blackheath, Chalk, Upper Greensand, Clay with Flints, Weald Clay, Lower Greensand, Hastings Beds

Soils:

- Freely draining slightly acid loamy soils
- Freely draining slightly acid but base-rich soils
- Freely draining slightly acid sandy soils
- Loamy and clayey floodplain soils with naturally high groundwater
- Loamy soils with naturally high groundwater
- Naturally wet very acid sandy and loamy soils
- Shallow lime-rich soils over chalk or limestone
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Slightly acid loamy and clayey soils with impeded drainage

Topography: To follow

Biodiversity:

- Floodplain Grazing Marsh
- Lowland Meadows
- Wet Woodland
- Urban
- Mole Gap to Reigate Escarpment SAC
- The Opportunity Area includes the SSSI Mole Gap to Reigate Escarpment and 11 SNCIs

Access: Norbury Park; SCC/SWT, Box Hill; National Trust, Harewoods; National trust, Riverside Garden Park; Reigate and Banstead Borough Council

Archaeology:

- Late Roman bath house at Chatley Farm
- Medieval Moated Site, Cudworth Manor
- Medieval or Early Post-Medieval Tennery, Scotchman's Copse
- Thunderfield Castle Medieval Moated Site

Targets: To follow

07:20 Chobhom Common North and Wentworth Heaths

The site can be found to the west of Ottershaw and Addlestone in the north-west of Surrey.

Joint Character Area: Thames Basin Heath

Geology: Bagshot Beds, Sand and Gravel, River Terrace Deposits

Topography:

Soils:

- Naturally wet very acid sandy and loamy soils
- Freely draining very acid sandy and loamy soils
- Freely draining slightly acid loamy soils
- Loamy soils with naturally high groundwater
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils

Biodiversity:

- Lowland Heathland
- Lowland Acid Grassland
- Ancient Semi-Natural Woodland
- Thames Basin Heaths SPA, Thursley Ash, Pirbright and Chobham SAC
- The Opportunity Area includes one SAC/SSSI (Chobham Common) and eight SNCIs

Access: Chobham Common; SCC/SWT

Archaeology: The Opportunity Area contains no scheduled ancient monuments

Targets: To follow

07:21 Chobham South Heaths

The site can be found to the west of Ottershaw and Addlestone in the north-west of Surrey.

Joint Character Area: Thames Basin Heaths

Geology: Bagshot Beds, River Terrace Deposits

Topography:

Soils:
- Naturally wet very acid sandy and loamy soils
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Fen peat soils
- Slightly acid loamy and clayey soils with impeded drainage

Biodiversity:
- Lowland Heathland
- Lowland Acid Grassland
- Thames Basin Heaths SPA, Thursley Ash, Pirbright and Chobham SAC
- The Opportunity Area includes one SSSI (Chobham Common) and six SNCIs.

Access: Chobham Common; SCC/SWT, Chobham Place Wood; Surrey Heath Borough Council

Archaeology:
- Bowl Barrow 200m west of Barrowhills
- 'Bee Garden' earthwork on Albury Bottom
- Bowl Barrow 150m north-west of Pipers Green Stud
- Earthwork NW of Childown Farm on Chobham Common

Targets: To follow

07:22 Colony Bog, Bagshot Heath and Deepcut Heaths

The site is located to the west of Woking and Bisley.

Joint Character Area: Thames Basin Heaths

Geology: Bagshot Beds, Sand and Gravel, Alluvium

Topography: To follow

Soils:
- Naturally wet very acid sandy and loamy soils
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Freely draining very acid sandy and loamy soils
- Fen peat soils
- Water

Biodiversity:
- Lowland Heathland
- Lowland Acid Grassland
- Fen Communities
- Thames Basin Heaths SPA, Thursley Ash, Pirbright and Chobham SAC
- The Opportunity Area includes one SSSI (Colony Bog & Bagshot Heath) and 19 SNCIs

Access: Lightwater Country Park; Surrey Heath Borough Council, Brentmoor Heath, SWT

Archaeology:
- Four Bowl Barrows on West End Common
- Bowl Barrow at New England, West End Common

Targets: To follow

07:23 Ash, Brookwood and Whitmoor Heaths

The site is located to the east of Farnborough, towards the west of Surrey.

Joint Character Area: Thames Basin Heaths, Thames Basin Lowlands

Geology: Bagshot Beds, Sand and Gravel, River Terrace Deposits

Topography: To follow

Soils:

- Naturally wet very acid sandy and loamy soils
- Freely draining very acid sandy and loamy soils
- Loamy soils with naturally high groundwater
- Slightly acid loamy and clayey soils with impeded drainage
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Loamy and clayey floodplain soils with naturally high groundwater

Biodiversity:

- Lowland Heathland
- Lowland Acid Grassland
- Ancient Semi-Natural Woodland
- Thames Basin Heaths SPA, Thursley Ash, Pirbright and Chobham SAC
- The Opportunity Area includes four SSSIs (Ash to Brookwood Heaths, Basingstoke Canal, Whitmoor Common and Smarts & Prey Heaths) and 32 SNCIs.

Access: Pirbright Common; Guildford Borough Council, Biullswater Common; Guildford Borough Council

Archaeology:

- Linear boundary on Whitmoor Common
- Disc Barrow on Whitmoor Common

Targets: To follow

07:24 Woking Heaths

The site is located north of Woking

Joint Character Area: Thames Basin Heaths

Geology: Alluvium, Bagshot Beds

Topography: To follow

Soils:
- Naturally wet very acid sandy and loamy soils
- Fen peat soils
- Freely draining slightly acid loamy soils
- Loamy and clayey floodplain soils with naturally high groundwater

Biodiversity:
- Lowland Heathland
- Lowland Acid Grassland
- Thames Basin Heaths SPA
- The Opportunity Area includes one SSSI (Horsell Common) and six SNCIs

Access: Horsell Common, Horsell Common Preservation Society/Woking Borough Council

Archaeology:
- Bell Barrow and Disc Barrow on Horsell Common

Targets: To follow

07:25 Wisley, Ockham and Walton Heaths

The site is situated at the junction of the A3 and M25, west of Byfleet.

Joint Character Area: Thames Basin Heaths, Thames Basin Lowlands

Geology: Alluvium, Bagshot Beds, Sand and Gravel, River Terrace Deposits,

Topography: To follow

Soils:

- Naturally wet very acid sandy and loamy soils
- Freely draining slightly acid loamy soils
- Freely draining slightly acid sandy soils
- Freely draining very acid sandy and loamy soils
- Loamy soils with naturally high groundwater

Biodiversity:

- Lowland Heathland
- Lowland Acid Grassland
- The Opportunity Area includes one SSSI (Ockham & Wisley Commons) and five SNCIs

Access: Ockham and Wisley Common; SCC/SWT

Archaeology:

- Hengi-form Monument at Red Hill
- Bell Barrow on Cockcrow Hill
- Bowl Barrow west of Cockcrow Hill

Targets: To follow

07:26 Camberley and Broadmoor Heaths

The site is located north of Camberley in the north-west of Surrey.

Joint Character Area: Thames Basin Heaths

Geology: Bagshot Beds, Sand and Gravel

Topography: To follow

Soils:

- Naturally wet very acid sandy and loamy soils
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Freely draining very acid sandy and loamy soils
- Loamy soils with naturally high groundwater

Biodiversity:

- Lowland Heathland
- Lowland Acid Grassland
- Wet Woodland
- Thames Basin Heaths SPA
- The Opportunity Area includes one SSSI (Broadmoor to Bagshot Woods and Heaths) and eight SNCIs

Access: To follow

Archaeology: The Opportunity Area contains no scheduled ancient monuments

Targets: To follow

07:27 Wanborough and Normandy Woods and Meadows

The site is located to the west of Guildford.

Joint Character Area: Thames Basin Lowlands, Thames Basin Heaths, North Downs

Geology: London Clay, Bagshot Beds, Blackheath, Chalk

Topography: To follow

Soils:

- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Freely draining slightly acid but base-rich soils
- Slightly acid loamy and clayey soils with impeded drainage
- Loamy soils with naturally high groundwater

Biodiversity:

- Lowland Mixed Deciduous Woodland
- Wet Woodland
- Lowland Meadows
- Ancient Semi-Natural Woodland
- The Opportunity Area includes 17 SNCIs

Access: Broadstreet Common and Backside Common; SCC/SWT, Littlefield Common; SCC/SWT

Archaeology:

- Romano-Celtic Temple Complex 385m west of Long Common

Targets: To follow

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07:28 Clandon to Bookham Parkland

The site is located to the west of Leatherhead.

Joint Character Area: Thames Basin Lowlands

Geology: River Terrace Deposits, London Clay, Alluvium, Blackheath, Chalk, Bagshot Beds

Topography: To follow

Soils:

- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Loamy soils with naturally high groundwater
- Freely draining slightly acid loamy soils

Biodiversity:

- Lowland Mixed Deciduous Woodland
- Wet Woodland
- Wood Pasture and Parkland
- Ancient Semi-Natural Woodland
- Opportunity Area includes one SSSI (Bookham Commons) and 15 SNCIs

Access: Great Bookham Common; National Trust, Merrow Common; Guildford Borough Council

Archaeology:

- Medieval moated site and fishpond, Greatlee Wood, Effingham Junction

Targets: To follow

07:29 Esher and Oxshot Commons

The site is located to the south of Esher and north-west of Oxshott.

Joint Character Area: Thames Basin Lowlands

Geology: River Terrace Deposits, London Clay, Bagshot Beds

Topography: To follow

Soils:

- Naturally wet very acid sandy and loamy soils
- Loamy soils with naturally high groundwater
- Loamy and clayey floodplain soils with naturally high groundwater
- Freely draining slightly acid loamy soils
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils

Biodiversity:

- Lowland Heathland
- Lowland Acid Grassland
- Opportunity Area includes one SSSI (Esher Commons) and three SNCIs

Access: Esher Common; Elmbridge Borough Council, Oxshott Heath; Elmbridge Borough Council, Fairmile Common; Elmbridge Borough Council, Old Common; Elmbridge Borough Council, Claremont Gardens; National Trust

Archaeology:

- The Belvedere, Claremont

Targets: To follow

07:30 Ashtead and Epsom Woodland, Princes Coverts and Horton Country Park

The site is located to the north of Ashtead and Leatherhead.

Joint Character Area: Thames Basin Lowlands, North Downs

Geology: London Clay, River Terrace Deposits, Blackheath

Topography: To follow

Soils:

- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Loamy soils with naturally high groundwater

Biodiversity:

- Lowland Mixed Deciduous Woodland
- Wet Woodland
- Wood Pasture and Parkland
- Ancient Semi-Natural Woodland
- The Opportunity Area includes one SSSI (Epsom and Ashtead Commons) and nine SNCIs

Access: Ashtead Common; Corporation of London, Epsom Common; Epsom and Ewell Borough Council, Leatherhead Common; Mole Valley District Council, Ashtead Park; Mole Valley District Council/SWT, Princes Coverts; Crown Estates, Horton Country Park; Eposm and Ewell Borough Council

Archaeology:

- Camp in Ashtead Forest
- Roman villa in Ashtead Forest

Targets: To follow

07:31 Removed in local consultations

07:32 Windsor Great Park

The core of the Opportunity Area is centred on Windsor Great Park SAC however it also incorporates additional areas of woodland (some ancient), farmland and meadows which lie adjacent to the Great Park.

Windsor Great Park is a large area of parkland to the south of the town of Windsor on the border of Berkshire and Surrey. The park was, for many centuries, the private hunting ground of Windsor Castle and dates primarily from the mid-13th century. Now largely open to the public, the area is popular recreation destination for residents of the western London suburbs. A varied landscape of open parkland, deer lawns, formal gardens, small woods and coverts together with larger areas of ancient and more recent plantation woodland. The Bourne flows through the area and there are a number of areas of open water the largest and most significant of which is Virginia Water.

Joint Character Area: Thames Valley, Thames Basin Heaths

Geology: Bagshot Sand, Windlesham Sand, Silt and Clay, London Clay

Topography: Gently undulating ground above Thames floodplain

Soils:

- Naturally wet very acid sandy and loamy soils
- Freely draining very acid sandy and loamy soils
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Freely draining slightly acid loamy soils

Biodiversity:

- Lowland Mixed Deciduous Woodland
- Wood Pasture and Parkland
- Ancient Semi-natural Woodland
- Lowland Heathland
- Acid Grassland
- One of the main features of Opportunity Area are its ancient veteran oaks which are of international importance which support a large number of rare and notable saproxilic invertebrate species
- The Opportunity Area includes one SAC/SSSI (Windsor Forest and Great Park) and two SNCIs

Access: Windsor Great Park; Crown Estates

Archaeology: The Opportunity Area contains no scheduled ancient monuments

Targets: To follow

07:33 Runnymede Meadows and Slope

An attractive area of riverside meadows, grassland and broadleaved woodland on the outskirts of Egham. The Opportunity Area lies adjacent to the River Thames and is centred on the riverside meadows around Langham Pond SSSI and also includes important areas of woodland and parkland on and around Cooper's Hill.

Joint Character Area: Thames Valley

Geology: London Clay, Bagshot Formation Sand, Alluvium, River Terrace Deposits

Topography: Floodplain and River Terrace

Soils:

- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Loamy and clayey floodplain soils with naturally high groundwater
- Freely draining very acid sandy and loamy soils

Biodiversity:

- Lowland Mixed Deciduous Woodland
- Lowland Meadows
- Wood Pasture and Parkland
- Ancient Semi-Natural Woodland
- Standing Open Water
- The Opportunity Area includes one SSSI (Langham Pond) and one SNCI

Access: Runnymede & Coopers Hill Slopes; National Trust

Archaeology: The Opportunity Area contains no scheduled ancient monuments

Targets: To follow

07:34 Staines Moor and Shortwood Common

An open landscape on the outskirts of Staines dominated by four large reservoirs, this Opportunity Area is centred on Staines Moor SSSI, one of the largest areas of neutral grassland in England that has not been extracted for gravel or agriculturally improved. The Opportunity Area also contains important smaller areas of open water created by mineral extraction (a number of sites are still active providing futher opportunities for habitat creatiohn in the future). A number of important tributary streams (the Colne, the Wraysbury and the Ash) flow south towards the Thames.

Joint Character Area: Thames Valley

Geology: Superficial Sand and Gravel, Silt and Clay over London Clay

Topography: Thames floodplain

Soils:

- Freely draining slightly acid loamy soils
- Loamy and clayey floodplain soils with naturally high groundwater

Biodiversity:

- Standing Open Water
- Floodplain Grazing Marsh
- Urban
- South-West London Waterbodies SPA
- The Opportunity Area also includes two SSSIs (Staines Moor and Wraysbury Reservoir) and eleven SNCIs

Access: Staines Moor; Spelthorne Borough Council

Archaeology: The Opportunity Area contains no scheduled ancient monuments

Targets: To follow

07:35 Thorpe and Shepperton

A open landscape of farmland and meadows south of Staines, this Opportunity Area is dominated by a large number of areas of open water associated with current and former mineral extraction sites

Joint Character Area: Thames Valley, Thames Basin Heaths

Geology: River Terrace Deposits, London Clay, Alluvium

Topography: Thames floodplain

Soils:

- Freely draining slightly acid loamy soils
- Loamy and clayey floodplain soils with naturally high groundwater

Biodiversity:

- Standing Open Water
- Urban
- South-West London Waterbodies SPA
- The Opportunity Area includes three SSSIs (Thorpe Hay Meadow, Thorpe Park No.1 Gravel Pit and Dumsey Meadow) and 18 SNCIs

Access: Chertsey Meads; Spelthorne Borough Council, many other formal/informal areas of open space

Archaeology:

- Anglo-Saxon and medieval cemetery
- Earthworks on Laleham Burway
- Chertsey Abbey: A Benedictine Monastery on the banks of Abbey River

Targets: To follow

07:36 Molesey and Hersham

An open landscape south of the Thames this Opportunity Area between Walton on Thames and West Molesey is dominated by open water, either in the form of reservoirs or as part of active or disused mineral workings

Joint Character Area: Thames Valley

Geology: River Terrace Deposits, London Clay, Alluvium

Topography: Thames floodplain

Soils:

- Freely draining slightly acid loamy soils

Biodiversity:

- Standing Open Water
- Urban
- South-West London Waterbodies SPA
- The Opportunity Area includes one SSSI (Knight & Bessborough Reservoirs) and four SNCIs

Access: Public Parks, Elmbridge Borough Council

Archaeology: The Opportunity Area contains no scheduled ancient monuments

Targets: To follow

07:37 Puttenham and Crooksbury

The site is located north-west of Godalming towards the west of Surrey.

Joint Character Area: Wealden Greensand, North Downs

Geology: Lower Greensand, Chalk, Upper Greensand,

Topography: To follow

Soils:
- Freely draining very acid sandy and loamy soils
- Freely draining slightly acid sandy soils

Biodiversity:
- Lowland Heathland
- Lowland Acid Grassland
- Fen Communities
- Lowland Mixed Deciduous Woodland
- Ancient Woodland
- The Opportunity Area includes one SSSI (Puttenham & Crooksbury Commons) and five SNCIs

Access: Puttenham Common; SCC/SWT, Crooksbury Hill; SCC/SWT

Archaeology:
- Hillbury Hillfort
- Two Bowl Barrows in Littleworth Clump
- Triple Bell Barrows on Turners Hill
- Two Bowl Barrows on Culverswell Hill
- Soldier's Ring Hillfort

Targets: To follow

07:38 Farnham Heaths

The site is located south-east of Farnham in the west of Surrey.

Joint Character Area: Wealden Greensand

Geology: Lower Greensand, Upper Greensand

Topography: To follow

Soils:
- Freely draining very acid sandy and loamy soils
- Loamy and clayey floodplain soils with naturally high groundwater

Biodiversity:
- Lowland Heathland
- Lowland Mixed Deciduous Woodland
- Wet Woodland
- Ancient Woodland
- The Opportunity Area includes one SSSI (Gong Hill)

Access: Farnham Heath, RSPB

Archaeology:
- Bowl Barrow 100m east of Forest Cottage
- Bowl Barrow 180m south-east of Forest Cottage

Targets: To follow

07:39 Thursley Hankley and Frensham Heaths

The site is located to the south of Elstead and south-west of Milford.

Joint Character Area: Wealden Greensand

Geology: Lower Greensand, Upper Greensand

Topography: To follow

Soils:
- Freely draining very acid sandy and loamy soils
- Loamy and clayey floodplain soils with naturally high groundwater
- Freely draining slightly acid sandy soils

Biodiversity:
- Lowland Heathland
- Lowland Acid Grassland
- Fen Communities
- Ancient Woodland
- Wealden Heaths SPA, Thursley Ash, Pirbright and Chobham SAC
- The Opportunity Area includes one SSSI (Thursley, Hankley & Frensham Commons) and seven SNCIs

Access: Frensham Common; Waverley Borough Council; Thursley Common; Natural England, Witley Common; National Trust, Rodborough Common & Mousehill Down; SCC/SWT

Archaeology:
- Three Bowl Barrows on Frensham Common
- Bowl Barrow on Frensham Common
- Pair of Bowl Barrows on Thursley Common
- Bowl Barrow 430m north of Thursley Lake: one of a group of four Bowl Barrows on Witley Common
- Bowl Barrow 200m east of Penmead Copse: One of a group of four Bowl Barrows on Witley Common
- Bowl Barrow 400m north-east of the sewage works: one of a group of four Bowl Barrows on Witley Common
- Bowl Barrow on Witley Common 250m north of Stable Lake: one of a group of four Bowl Barrows on Witley Common

Targets: To follow

07:40 Devil's Punch Bowl and Hindhead Heaths

The site is located at Hindhead in western Surrey.

Joint Character Area: Wealden Greensand, Low Weald

Geology: Lower Greensand

Topography: To follow

Soils:
- Freely draining very acid sandy and loamy soils
- Freely draining slightly acid sandy soils
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Loamy soils with naturally high groundwater

Biodiversity:
- Lowland Heathland
- Lowland Acid Grassland
- Lowland Mixed Deciduous Woodland
- Wet Woodland
- Ancient Woodland
- Wealden Heaths SPA
- The Opportunity includes two SSSIs (Devil's Punch Bowl and Stockstone Quarry) and eight SNCIs

Access: Hindhead Common; National Trust, Nutcombe Valley; National Trust, Golden Valley; National Trust, Beacon Hill; National Trust

Archaeology:
- Cross Dyke on Hindhead Golf Course

Targets: To follow

07:41 Hascombe, Winkworth and Hydon's Heath and Woodland

The site is located at Hascombe in the south-west of Surrey.

Joint Character Area: Wealden Greensand, Low Weald

Geology: Lower Greensand, Weald Clay

Topography: To follow

Soils:

- Freely draining slightly acid loamy soils
- Freely draining very acid sandy and loamy soils
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils
- Loamy soils with naturally high groundwater

Biodiversity:

- Lowland Mixed Deciduous Woodland
- Lowland Beech and Yew Woodland
- Wet Woodland
- Ancient Woodland
- Relict Heathland
- The Opportunity Area includes five SNCIs

Access: Hydon Heath; National Trust, Winkworth Arboretum; National Trust

Archaeology:

- Hascombe Camp: A Small Multivallate Hillfort north-west of Lodge Farm

Targets: To follow

07:42 Blackheath, Chilworth and Farley Heaths

The site is located to the south-east of Guildford.

Joint Character Area: Wealden Greensand

Geology: Lower Greensand, River Terrace Deposits

Topography: To follow

Soils:
- Freely draining very acid sandy and loamy soils
- Freely draining slightly acid loamy soils

Biodiversity:
- Lowland Heathland
- Lowland Acid Grassland
- Lowland Beech and Yew Woodland
- Ancient Woodland
- The Opportunity Area includes one SSSI (Blackheath) and one SNCI

Access: Blackheath; Waverley Borough Council

Archaeology:
- Romano-British temple and enclosure on Farley Heath

Targets: To follow

07:43 Winterfold and the Hurtwood Greensand Ridge

The site is located south of Shere towards the centre of Surrey.

Joint Character Area: Wealden Greensand

Geology: Lower Greensand, Weald Clay

Topography: To follow

Soils:
- Freely draining very acid sandy and loamy soils
- Freely draining slightly acid loamy soils
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils

Biodiversity:
- Lowland Beech and Yew Woodland
- Wet Woodland
- Ancient Woodland
- Relict Heathland
- The Opportunity Area includes 11 SNCIs

Access: To follow

Archaeology:
- Large Univallate Hillfort at Felday
- Holmbury Camp: A Small Multivallate Hillfort north of Three Mile Road

Targets: To follow

07:44 Limspfield Heaths

The site is located east of Oxted in East Surrey.

Joint Character Area: Wealden Greensand

Geology: Lower Greensand

Topography: To follow

Soils:
- Freely draining slightly acid loamy soils
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils

Biodiversity:
- Lowland Heathland
- Lowland Acid Grassland
- Lowland Mixed Deciduous Woodland
- Ancient Woodland
- Relict Heathland
- The Opportunity Area includes seven SNCIs

Access: Limpsfield Common; SWT

Archaeology: The Opportunity Area contains no scheduled ancient monuments

Targets: To follow

07:45 Leith Hill, Wooton, Abinger and Holmwood Greensand Ridge

The site is located south-west of Dorking towards the centre of Surrey.

Joint Character Area: Wealden Greensand, Low Weald

Geology: Lower Greensand, Weald Clay

Topography: To follow

Soils:
- Freely draining very acid sandy and loamy soils
- Freely draining slightly acid loamy soils
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils

Biodiversity:
- Lowland Heathland
- Lowland Acid Grassland
- Lowland Mixed Deciduous Woodland
- Wet Woodland
- Ancient Woodland
- The Opportunity Area includes one SSSI (Leith Hill) and one SNCI

Access: Redlands & Squires Wood; Forestry Commision, Pasture Wood; Forestry Commision, Coldharbour Common; National Trust, Coldharbour Common; National Trust, Severalls Copse; National Trust, Holmwood Common; National Trust, Wotton Estate; SWT

Archaeology:
- Anstiebury Camp: A Large Multivallate Hillfort south-east of Crockers Farm

Targets: To follow

07:46 Reigate Heaths

The site is located to the south-west of Reigate in north-east Surrey.

Joint Character Area: Wealden Greensand

Geology: Lower Greensand, Clay with Flints

Topography: To follow

Soils:
- Freely draining slightly acid loamy soils

Biodiversity:
- Lowland Heathland
- Lowland Acid Grassland
- The Opportunity Area includes one SSSI (Reigate Heath)

Access: Reigate Heath; Reigate and Banstead Borough Council, Reigate Park; Reigate and Banstead Borough Council

Archaeology:
- Bowl Barrow west of Flanchford Road: part of the Reigate Heath Round Barrow Cemetery
- Bowl Barrow 20m south of Flanchford Road: part of Reigate Heath Round Barrow Cemetery
- Bowl Barrow 70m north of Flanchford Road: part of Reigate Heath Round Barrow Cemetery
- Bowl Barrow 200m north of Flanchford Road: part of Reigate Heath Round Barrow Cemetery
- Bowl Barrow 130m south of Buckland Road: part of Reigate Heath Round Barrow Cemetery
- Two Bowl Barrows 70m south of Buckland Road: part of Reigate Heath Round Barrow Cemetery
- Bowl Barrow 150m east of Buckland Corner: part of Reigate Heath Round Barrow Cemetery

Targets: To follow

07:47 Holmthorpe and Bay Pond

The site is located to the south-west of Reigate in north-east Surrey.

Joint Character Area: Wealden Greensand

Geology: Folkestone Formation Sandstone, Gault Formation Mudstone, Sandgate Formation Sandstone and Mudstone, Hythe Formation Sandstone

Topography: To follow

Soils:
- Freely draining slightly acid loamy soils
- Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils

Biodiversity:
- Standing Open Water
- Ancient Woodland
- The Opportunity Area includes one SSSI (Godstone Ponds) and five SNCIs

Access: The Moors; SWT, Spynes Mere; SWT, Kitchen Copse; SWT, Bay Pond; SWT

Archaeology:
- Iron Age Promontory Fort In Castlehill Wood

Targets: To follow

07:48 River Thames (towpath and islands)

River Thames runs through northern Surrey, along the boundaries of three of its boroughs.

Joint Character Area: Thames Valley, Thames Basin Heaths

Geology: River Terrace Deposit, London Clay, Alluvium

Topography: To follow

Soils:

- Loamy soils with naturally high groundwater
- Loamy and clayey floodplain soils with naturally high groundwater
- Freely draining slightly acid loamy soils

Biodiversity:

- Main River
- The Opportunity Area includes four SNCIs

Access: Point Meadow, Elmbridge Borough Council

Archaeology: Chertsey Bridge

Targets: To follow

South East England Biodiversity Forum

SUSSEX

08:01 Chichester Coastal Plain

The area is dominated by saltmarsh, grazing marsh and mudflat and it's associated brackish communities. The boundary of this BTA follows EA floodzone models and predictions of future saltmarsh and mudflat potential.

Joint Character Area: Coastal Plain.

Geology: Chichester Coastal Plain BTA lies on a mosaic of sand, silt and clay, with a shingle spit landform at Pagham Harbour.

Biodiversity:

- The BTA includes Pagham Harbour, an extensive area of saltmarsh and tidal mudflats which are rich in invertebrates and algae. This has resulted in the area assuming national (and in some cases international) importance for breeding and wintering birds; as such it is designated a Ramsar site, SPA, SSSI and LNR. Surrounding habitats include lagoons, reedbeds, shingle and wet grassland, and rare species such as Starlet Sea Anemone and Childing Pink can be found.
- The BTA also includes Bracklesham Bay SSSI, which consists of a long stretch of coast with some unimproved grazing pastures important for breeding and overwintering birds, and a small area of saltmarsh.
- There are two SNCIs within the BTA: Crablands Farm Meadows is a low-lying area of wet neutral grassland and marsh important for wintering and migrant birds. It also has good botanical interest including the scarce Strawberry Clover; Oakhurst Farm Meadow is a small damp neutral meadow containing large numbers of Green-winged Orchids. Ditches bounding the meadow are used by Water Voles.

Archaeology: There is one Scheduled Ancient Monument in the area: Beckett's Barn and adjoining earthworks.

Targets: Mudflat, Grazing Marsh, Reedbed and Saltmarsh. There are also opportunities to expand existing areas of rare coastal woodland.

BAP Species: 90 BAP Species have been recorded in this Biodiversity Target Area

08:02 Chichester Harbour

These areas of Chichester harbour are deemed to have the best opportunity for biodiversity on account of the current thinking on sea level influence and sea wall maintenance. They are based on elevation and existing land use. The areas contain all known zostera beds and some important areas for Brent Geese and wading birds.

Joint Character Area: Coastal plain.

Geology: The northern half of the Thorney Island part of the site consists of chalk bedrock, with clay, silt and sand to the south. Superficial deposits of sand, silt, clay and gravel. The West Itchenor part of the site sits on bedrock of clay, silt and sand, with clay, silt, sand and gravel superficial deposits.

Biodiversity

- The BTA includes part of Chichester and Langstone Harbours, which are large, sheltered estuarine basins comprising extensive mud and sand flats exposed at low tide. The site has particular significance for wintering wildfowl and waders and as such is designated a Ramsar site and SPA. The site also sits partly within Solent Maritime SAC, which is unique due to its double tides and the complexity of the marine and estuarine habitats present.
- Part of Chichester Harbour AONB and SSSI is also included. Chichester Harbour is designated a SSSI on account of its ornithological interest and the wide range of habitats and important plant communities including unimproved pasture, sand dunes and salt marsh.
- There are several SNCIs in this area; Thorney Island SNCI is a site of national and international importance for wildfowl and wading birds, and there is also Lepidoptera and botanical interest, with two rare annuals (Grass-poly and Mousetail) found in an arable field on the site. Cobnor Cottage Nature Reserve SNCI supports over 80 species of birds and is predominantly a grazing marsh with several brackish pools and a reedbed. Thornham Point SNCI is a developing saltmarsh site, with several nationally and locally significant species of plant and insects and lies immediately adjacent to Chichester Harbour SSSI, Nutborne Pastures SNCI is an area of grazing fields at the northern end of Chichester Harbour, just south of Nutbourne. It lies immediately adjacent to Chichester Harbour SSSI and Nutbourne Marshes Local Nature Reserve. It consists of semi-improved grassland and is intersected by drainage ditches. The importance of this site lies in its value to overwintering wildfowl and waders as a roosting and feeding site. Cobnor Marsh SNCI is a small area of diverse wetland habitats which lies immediately adjacent to Chichester Harbour SSSI, it consists of coastal grazing marsh, small brackish pools, a freshwater pool and small amounts of saltmarsh and is quite rich in uncommon plants. Chalkdock Marsh SNCI is a small area of derelict coastal grazing marsh adjacent to Chichester Harbour SSSI. The site is relatively species poor, however Marsh-mallow is scattered throughout making this an important site; East Itchenor Coastal Marsh SNCI lies adjacent to Chichester Harbour SSSI. The site consists of coastal grassland including a patch of the nationally scarce Divided Sedge, and a derelict ditch has shown signs of Water Vole use.

- The BTA includes part of Chichester and Langstone Harbours, which are large, sheltered estuarine basins comprising extensive mud and sand flats exposed at low tide. The site has particular significance for wintering wildfowl and waders and as such is designated a Ramsar site and SPA. The site also sits partly within Solent Maritime SAC, which is unique due to its double tides and the complexity of the marine and estuarine habitats present.
- Three LNRs are within the BTA: Eamses Farm contains reedbed and meadow habitat; Nutbourne Marsh is an area of saltmarsh and mudflats and Pilsey Island is an area of coastal vegetated shingle.

Archaeology: There are no Scheduled Ancient Monuments in this area.

Targets:
Intertidal habitat creation, maintainance of current zostera beds, coastal grazing marsh creation. There is potential for reedbed creation. Protection and creation for shore birdbird feeding areas and roosts.

BAP Species: 52 BAP Species have been recorded in this Biodiversity Target Area

08:03 Fishbourne and Chalk Streams

This area contains the chalk streams and part of their watersheds and includes freshwater wet grassland, and fen and carr associated with these. There is current conservation effort towards Desmoulins whorl snail and current wet grassland management work is concentrating on Southern Marsh Orchid. Wildlife sympathetic land management is being practices at Apuldram Manor Farm. The area is important for water voles and is likely to be important for the migration of otters from Hampshire to Sussex.

Joint Character Area: Coastal Plain.

Geology: Fishbourne and Chalk Streams BTA sits on London clay with an area of chalk in the middle.

Biodiversity

- The BTA includes part of Chichester and Langstone Harbours, which are large, sheltered estuarine basins comprising extensive mud and sand flats exposed at low tide. The site has particular significance for wintering wildfowl and waders and as such is designated a Ramsar site and SPA.
- Part of Chichester Harbour AONB and SSSI is also included. Chichester Harbour is designated a SSSI on account of its ornithological interest and the wide range of habitats and important plant communities including unimproved pasture, sand dunes and salt marsh.
- There are three SNCIs: Fishbourne Meadows consists of several meadows adjacent to Chichester Harbour SSSI, which contain a chalk spring and several locally uncommon plants including Divided Sedge; River Lavant Marsh comprises an area of grazing marsh in the former estuary of the River Lavant and a small reedbed. The site is of good botanical interest including the nationally scarce Bulbous Foxtail and Sea Barley. The site is also important for feeding and roosting waders, and breeding warblers; **Salterns Copse** is ancient semi-natural woodland on the coastal plain, with the trees coming down to a natural shoreline. It has a rich ground glora including Wood Anemone and Butcher's-broom, and a good range of breeding birds can be found.

Archaeology: There is one Scheduled Ancient Monument which is a dominant feature of this target area, which is the Roman site at Fishbourne. Part of the Chichester Dyke and Broyle earthworks Scheduled Ancient Monument can be found on the northern boundary of the target area.

Targets:

Condition improvement of chalk streams, management and possible expansion of wet grassland, and reedbed habitats. Mangement of fen and alder carr, particularly in relation to desmoulin's Whorl Snail. Restoration of hedge and shaw networks.

BAP Species: 23 BAP Species have been recorded in this Biodiversity Target Area

08:04 Westbourne Chalk Streams to Compton Tributaries

This area is selected as a BTA for its chalk streams, some of the aquifers that feed these chalk streams are also selected

Joint Character Area: South Downs and Coastal Plain

Geology: The majority of the Westbourne Chalk Streams to Compton Tributaries BTA lies on chalk bedrock, with some areas of clay, silt and sand to the south west.

Biodiversity:

- Part of the BTA is within the Sussex Downs AONB.
- There are five SNCIs in this BTA: Aldsworth Pond and Meadows, Emsworth is of considerable ornithological importance, and also supports large numbers of dragonflies and a White-letter Hairstreak colony. The two meadows have a wet influence with species such as Southern Marsh Orchid and Ragged-Robin; Brickkiln Ponds and Meadow consists of two large ponds, unimproved neutral grassland and woodland. The ponds provide important breeding sites for amphibians, birds and dragonflies, and the meadows have botanical and invertebrate interest (particularly Lepidoptera and Orthoptera); Haslett Copse complex is designated on account of its ancient semi-natural woodland and neutral grassland; Lordington Copse, Watergate Hanger, Westmarden Copse and Nore Down consists of ancient semi-natural woodland and chalk grassland, with Lordington Copse being particularly botanically rich. Several notable plant species are found within the site, including Green Hellebore and Round-headed Rampion; The River Ems and Meadows consists of a section of the river (a chalk stream) and associated semi-improved neutral grassland. Several ponds and an area of wet woodland add to the ecological interest of the site.

Archaeology: There are two Scheduled Ancient Monuments in this area; one is Pitlands Farm at Up Marden, which is a Romano-British Villa and also has traces of Medieval of occupation, and the other is two barrows in Grevitts Copse.

Targets:
Restoration of chalk stream ecology.

BAP Species: 15 BAP Species have been recorded in this Biodiversity Target Area

08:05 Walderton to Welldown including Kingley Vale

The extraordinary Yew Forest of Kingley Vale is a National Nature Reserve. This Target area has the NNR at its core, but extends both East and West to the floodzones of the adjacent streams, which to the west is a chalk stream. There is extensive chalk grassland down the central spine of this site.

Joint Character Area: South Downs.

Geology: Walderton to Welldown including Kingley Vale sits on a bedrock of chalk, with superficial deposits of clay, silt, and gravel.

Biodiversity

- The BTA is within Sussex Downs AONB.
- Kingley Vale designated a SAC, NNR and SSSI, is included in the BTA. The site lies on three geological formations: Upper Chalk, clay-with-flints and valley gravel, and this variation results in a range of habitats including the largest area of Yew woodland in Britain. The site also supports chalk grassland, chalk heath, and Yew and Juniper scrub. This in turn supports a diverse community of birds and invertebrates, particularly Lepidoptera.
- Chilgrove Hill SNCI includes areas of unimproved and semi-improved grassland, and an Ash and Yew hanger woodland. The grassland supports a number of butterfly species.

Archaeology: There are several Scheduled Ancient Monuments in this area, including barrows, flint mines, cross dykes, linear features and a settlement in Kingley Vale, hilltop enclosure, a Roman villa and a multiple enclosure fort.

Targets:

Chalk Grassland restoration and sympathetic land management on the aquifer of the chalk stream.

BAP Species: 25 BAP Species have been recorded in this Biodiversity Target Area

08:06 Lavant Watershed

The Lavant is an important chalk stream in Sussex. Despite heavy modifications due to its proximity to urban areas, there is a great deal of potential for its enhancement. The Lavant supports known populations of water vole. As a watershed area, it is likely to be an important route for the migration of species between the Western Rother and Lavant/Chichester Coastal Plain.

The Watershed covers the West Dean Estate, Hayes Down and the Trundle and to the north of the Chalk River it heads East to Singleton and Levin Down, a Sussex Wildlife Trust Reserve.

Joint Character Area: South Downs and Coastal Plain

Geology: Chalk (Seaford, Lewes, New pit, Holywell, Newhaven, Tarrant). Clay, silt, sand and gravel deposits including alluvium.

Biodiversity:

- The whole BTA is within Sussex Downs AONB.
- Singleton and Cocking Tunnels SAC is within this BTA. These tunnels constitute the most important sites for hibernating bats in the region in particular the rare Barbastelle and Bechstein's, and this is the only known location in Britain for the Greater Mouse-eared Bat.
- Levin Down SSSI comprises of species-rich chalk grassland on a south-facing slope. As well as a good range of chalk herbs and grasses, the site contains an area of chalk heath and patches of Juniper scrub. The Juniper colony is one of the largest in Sussex and supports a number of specialist invertebrates.
- Goodwood Country Park includes areas of woodland and downland.
- The BTA contains five SNCIs: Chills Down is exceptionally good remnant chalk grassland on a steep west-facing slope. The site is botanically rich including Kidney Vetch and Cowslip, and colonies of Adonis Blue and Small Blue are supported; The River Lavant consists of a shallow, fast flowing chalk stream with a rich aquatic flora including Stream Water-crowfoot which is rare in the county. Water Voles can be found in the southern part of the river; The Trundle (St. Roche's Hill) and Chalkpit Lane is a herb-rich chalk grassland site with importance for invertebrates including the Glow-worm. The site also consists of arable fields which contain several important arable plants including Prickly Poppy and Narrow-fruited Cornsalad; The Valdoe is ancient semi-natural woodland consisting mostly of Pedunculate Oak and Hazel, with some mature Beech and planted Sweet Chestnut. Notable ground flora includes Spurge Laurel and Common Cow-wheat, and many glades support a calcareous flora including Wild Basil and Salad Burnet; West Dean Railway Tunnel is designated for its importance as a bat hibernaculum, with five species recorded including Bechstein's Bat.

Archaeology: This target area contains several Scheduled Ancient Monuments including the Trundle Hillfort, causewayed enclosure and associated remains at St. Roche's Hill, Bexley Bushes earthworks and some cross dykes and barrows.

Targets:
Chalk stream restoration and enhancement. Enhancement of hedgerow and woodland networks. reedbed restoration and chalk grassland restoration South of the Lavant.

BAP Species: 44 BAP Species have been recorded in this Biodiversity Target Area

08:07 Western Escarpment

This area is important for its chalk geology and its influence on the character of the surrounding streams of the Western Rother. The 25 kilometre chalk block runs from the border with Hampshire all the way to the Arun valley. It contains key downland landmarks such as Harting Down, Duncton Down, Graffham Down and Heyshott Down. The area is characterised by its ancient woodlands, the hangars of the West Sussex Downs. The are is bounded to the north by the chalk geology and to the South by the South Downs Way National Trail and woodland edges.

Joint Character Area: South Downs and Wealden greensand.

Geology: Western Escarpment lies on chalk.

Biodiversity:

- The BTA is within Sussex Downs AONB.
- Duncton to Bignor Escarpment is an example of mature Beech woodland developed over chalk which is overlain in places by clay-with-flints. The area is designated a SAC and SSSI, and supports some rare species including White Helleborine, Yellow Bird's-nest and Green Hellebore.
- Rook Clift SAC and SSSI is a small wooded coombe on the scarp of the South Downs. Large-leaved Lime dominates the canopy together with some Ash and Beech.
- Singleton and Cocking Tunnels SAC and SSSI is within this BTA. These tunnels constitute the most important sites for hibernating bats in the region in particular the rare Barbastelle and Bechstein's, and this is the only known location in Britain for the Greater Mouse-eared Bat.
- There are three other SSSIs: Harting Downs contains species-rich chalk grassland and supports uncommon species such as Musk Orchid. There are areas of woodland on the site, a diverse breeding bird community and a number of uncommon invertebrates. The site is also LNR; Heyshott Down is an area of unimproved chalk grassland that has an assemblage of bryophytes not known from any other site on chalk in southern England. There are also areas of scrub and woodland, and the site is nationally important for Arachnids; Treyford to Bepton Downs contains representative examples of chalk grassland and yew woodland. There are several rare or uncommon molluscs on site.
- There are ten SNCIs: Barlavington Down consists of remnant unimproved chalk grassland with typical flora such as Yellow-wort and Fairy Flax; Coombe Wood is ancient semi-natural woodland with a reasonable ground flora and rich molluscan interest; Farm Hill is remnant herb-rich chalk grassland containing many notable herbs such as Round-headed Rampion, Common Rock-rose and Marjoram; Graffham Down consists of species-rich chalk grassland, a small area of chalk heath and coniferous plantation. Unusual species include Columbine, and the site has a good diversity of butterflies and breeding warblers; Hooksway Down is a species-rich chalk grassland with some planted broadleaf trees, which supports a large population of Large Thyme; Leith Copse and Old Ditcham Wood is an important section of Ash-Field Maple-Hazel woodland, which is one of the few Sussex sites for Herb-Paris. Other notable species include Toothwort, Columbine and False Oxlip; Manorfarm Down wood is a dense secondary woodland dominated by Yew, adjacent to Heyshott Down SSSI. Small remnants of chalk grassland

support species such as Round-headed Rampion and Autumn Gentian, and a rich invertebrate fauna; Rook Clift is an important wooded section of the South Downs escarpment and contains a number of Large-leaved Lime. As well as a rich ground flora the site also has a diverse molluscan community; Torberry Hill is a south-facing chalk grassland surrounded by scrub and Ash and Beech woodland. There are several notable plants including Clustered Bellflower and Quaking Grass, that along with the presence of four notable molluscs indicate this site is ancient in origin; The Warren consists of Ash dominated semi-natural woodland with notable species including Solomon's Seal and Fly Orchid.

Archaeology: There are several Scheduled Ancient Monuments in this area; Harting Down contains several earthworks, cross-dykes and part of a fort of archaeological interest. Heyshott Down contains a group of Bronze Age burial mounds with several cross dykes. Torberry Hill SNCI has an Iron Age hill fort on the hill top, there is is a deserted Medieval village at Monkton Farm, and part of the Stane Street Roman Road is in the area.

Targets:
Enhancement of hedgerow and woodland networks and chalk grassland restoration.

BAP Species: 43 BAP Species have been recorded in this area

08:08 Hampshire Rother Watershed

This stretch of the Western Rother is an important in-migration route for otters from Hampshire. Local geology makes soils prone to erosion which has a high impact on river ecology.

Joint Character Area: Wealden greensand.

Geology: The majority of the Hampshire Rother Watershed lies on mudstone, with areas of calcareous sandstone and siltstone.

Biodiversity:
The BTA lies partially within the Sussex Downs AONB
There are two SNCIs: Brickkiln Copse, Pondtail Plantation, Millhanger Copse, Harting Pond and stream includes a conifer plantation, a large lake, and areas of carr, reedbed and ancient woodland. Uncommon plants and ancient woodland indicators can be found, including Herb Paris; River Rother encompasses the river, several tributaries and adjoining habitat (woodland, carr and marshy grassland). The wet woodlands are of particular botanical interest with species such as Alternate-leaved Golden-saxifrage and Large Bitter-cress, and there is a large population of the nationally rare Desmoulin's Whorl Snail at Selham Fen.

Archaeology: There are four Scheduled Ancient Monuments, two of which sit just on the boundaries the area which are Durford Abbey (on the northern edge) and a Medieval moated site (on the southern edge). The other two are Durford Bridge and Habin Bridge which are within the area.

Targets:
Restoration and expansion of existing wetland networks, appropriate expansion of existing woodland and hedgerow networks, an area for targeted improvement in land management practices to reduce erosion and improve water quality. Some potential for stream and river rehabilitation. Possible wet woodland planting sites.

BAP Species: 1 BAP Species has been recorded in this area

08:09 Rogate Common

This area is currently mainly under conifer plantation, with a heathy understory. There are small areas of open heath such as Tullecombe SNCI. Some of this area is owned by the Forestry Commission. This area contains a very uncommon Sessile Oak woodland.

Joint Character Area: Wealden greensand.

Geology: Rogate Common BTA lies predominantly on sandstone, with a small area of Weald Clay to the north east.

Biodiversity:

- The BTA is within Sussex Downs AONB.
- Rake Hanger SSSI is within this BTA. The site is one of the few woods in the Weald where Sessile Oak is the dominant species. In addition there is an area of Alder carr over wetter soils with two acid pools.
- There are three SNCIs within this BTA: Durford Wood and Durford Heath consists of one of the finest Sessile Oak woodlands in the region and small areas of dry heath. A rich epiphytic lichen flora is found on the oaks, including several species rare and local in West Sussex; Rondle Wood appears to occupy a site that may once have been heathland. The wood comprises mostly of Beech, Birch and Rowan, with a rich bryophyte flora. Two locally scarce birds, Wood Warbler and Tree Pipit have bred here; Tullecombe comprises a heathy woodland of high entomological value. Removal of some of the Pine trees would help the heathland to regenerate.

Archaeology: There are no Scheduled Ancient Monuments in this area.

Targets:

Heathland restoration and creation of corridors between existing remnant areas of Heathland.

BAP Species: 7 BAP Species have been recorded in this area

08:10 Weavers Down to Lynchmere

On the Surrey Border this Heathland area dominates the landscape. Large expanses of open heath with a matrix of woodland, both broadleaf and conifer. There is some ownership by the Forestry Commission in the BTA. There is some wet heath at Wheatsheaf Common and Folly Pond in the Forest Mere SSSI. These wetland areas have the potential for expansion.

Joint Character Area: Wealden greensand.

Geology: Majority of site is Hythe formation sandstone, with smaller areas of Pulborough sandrock sandstone in the west. Deposits of clay, silt, sand and gravel in the northwest.

Biodiversity:

- Part of this BTA is within Sussex Downs AONB.
- Wealden Heaths Phase II SPA in within this BTA. The site is of European importance for its ornithological importance, with at least 1% of the British population of Dartford Warbler, Nightjar and Woodlark.
- There are three SSSIs within the BTA: Chapel Common consists of a mosaic of habitats dominated by dry heathland. The rare Stag's-horn Clubmoss is present along with a variety of orchids and a rich invertebrate fauna including several rare or scarce species; Forest Mere is the only West Sussex example of a shallow, base-poor lake on Lower Greensand, surrounded by woodland, heath and bog. The site supports a good community of breeding birds, and 17 species of dragonfly including Black Darter and Downy Emerald; Woolmer Forest is part of a large heathland most of which is in Hampshire. There are a number of uncommon plants, a good diversity of breeding birds, and this is the only site in Britain known to support all the native reptiles and amphibians.
- There are three SNCIs in this BTA: Liphook Golf Course SNCI is designated due to the presence of remnant wet heath and dry heath. Several regionally rare plant species are found at the site including Marsh Clubmoss; Lynchmere Common (also an LNR) consists of a mosaic of heathland, acid grassland and Birch woodland; Wheatsheaf Common.

Archaeology: There are three Scheduled Ancient Monuments which are the three parts of a Roman road at Chapel Common.

Targets:
Heathland restoration and connecting existing heathland sites with heathland corridors.

BAP Species: 67 BAP Species have been recorded in this area

08:11 Stedham, Iping, Woolbeding Crescent

The Southern section of this crescent is Stedham and Iping Commons which are owned by the Sussex Wildlife Trust and dominated by Heathland and woodland. To the eastern end the ownership is that of the National Trust, who manage Woolbeding Common, again of a heathy, woody nature with large expanses of heathland to the North of the site. On the north-western tip there is more Heathland at Stedham Marsh.

Joint Character Area: Wealden greensand and Low weald.

Geology: Stedham, Iping, Woolbeding Crescent lies on a mixture of sandstone, mudstone and pebbly sandstone.

Biodiversity:

- The site is within the Sussex Downs AONB
- There are two SSSIs in this BTA: Iping Common is one of the richest examples of heathland remaining in West Sussex with a good invertebrate fauna including several rare spiders. The site is of county importance for breeding heathland birds including Nightjar and Stonechat. Iping Common LNR is included in this site; Woolbeding and Pound Common is a large area of secondary woodland and open heathland. The wet heath is particularly notable for its large population of Intermediate Sundew, and there are a number of notable invertebrates particularly Hymenoptera and Orthoptera.
- The site contains six SNCIs: Inholms, Lambourne and Lower Bowley Copses is a Hazel-Oak semi-natural woodland with a diverse bird community and scarce butterflies including White Admiral and Silver-washed Fritillary. The site also contains a lake and stream which provides good dragonfly habitat; Midhurst Common is a registered common containing remnant wet and dry heath, semi-natural woodland and a large disused sandpit. The site has records of rare lichens and bryophytes; Oakham Common consists of a small dry regenerating heathland within a predominantly wooded common. The site has good invertebrate interest; Stedham Common; The River Rother encompasses the river, several tributaries and adjoining habitat (woodland, carr and marshy grassland). The wet woodlands are of particular botanical interest with species such as Alternate-leaved Golden-saxifrage and Large Bitter-cress, and there is a large population of the nationally rare Desmoulin's Whorl Snail at Selham Fen; Woolhouse Farm Meadows consists of three wet meadows and some mature trees. The site has a diverse flora owing to areas with a damp or acidic influence, including Bog Pimpernel, Lesser Stitchwort and Ragged-Robin.

Archaeology: There are several Scheduled Ancient Monuments in this area, mostly are bowl barrows except for the Roman road which runs through Iping Common.

Targets:

There is potential to restore heathland in areas such as Midhurst Common SNCI.

BAP Species: 57 BAP Species have been recorded in this area

08:12 Heyshott

This strip of the Wealden Greensand ridge has extensive heathland on which the West Sussex Heathland project has been focusing attention for some years. The boundary of the area follows the roads to the south and the historic heathland interest to the north. Rhododendron is a considerable problem in this area. There is great potential from heathland creation in this area.

Joint Character Area: Wealden Greensand.

Geology: The majority of Heyshott BTA sits on sandstone, with some areas of mudstone running through.

Biodiversity:

- The whole BTA is within the **Sussex Downs** AONB.
- There are two SSSIs within the BTA: **Ambersham Common** is one of the best remaining sub-atlantic heathlands in West Sussex supporting a rich invertebrate assemblage and diverse community of breeding birds. There is a small raised bog which grades into wet heath, as well as areas of acidic marshy grassland, dry heath and broadleaved woodland. Sand Lizard was re/introduced to the site in 1970 and is still breeding; **Lavington Common** is a good example of sub-Atlantic heath which supports an outstanding community of spiders including 22 uncommon species. Several uncommon plants can be found including Oblong-leaved Sundew, White Beak-sedge and Cotton-grass in the wetter areas.
- There are four SNCIs within the BTA: **Duncton Common** is a small wet heath within a Pine plantation. A large population of Bog Asphodel survives here; **Graffham Common and Fir Toat** is a conifer plantation containing patches of heathland in which County rarities such as Marsh Clubmoss can be found. The site has a variety of invertebrates and mosses, and a good population of Adders; **Heath End Sand Pit** supports one of the largest Sand Martin colonies in West Sussex; **Middle Heath Copse Bog** consists mainly of Alder and Birch carr, with Hazel and Oak in the drier areas along with numerous ancient woodland indicators. The site also has a rich bird fauna.

Archaeology: There are numerous barrows, all Scheduled Ancient Monuments, in this target area.

Targets:
Heathland restoration and corridors linking existing Heathland sites.

BAP Species: 29 BAP Species have been recorded in this Biodiversity Target Area

08:13 Snapes Wood and Verdley Copse Plain

This area is dominated by ancient woodland and modern wood pasture, there is a small patch of existing heathland yet a large part of the area was historically of a heathy nature. The area is extended north-east by a Barbastelle flightline which travels along streams towards Ebernoe. Verdley Wood is an important area for Butterflies.

Joint Character Area: Wealden Greensand and Low Weald

Geology: Snapes Wood and Verdley Copse BTA lies on a mixture of Weald clay mudstone and Hythe sandstone, with clay, silt, sand and gravel deposits throughout.

Biodiversity:

- The BTA lies within the Sussex Downs AONB and contains Northpark Copse to Snapelands Copse SSSI, which contains an outstanding bryophyte and fern community surviving as relicts of a time when mild, wet Atlantic conditions covered the whole county.
- Lurgashall Mill Pond and Old Mill Farm meadows SNCI is one of the best sites in the County for breeding and wintering waterfowl. There is a marsh, which has populations of a scarce snail (*Zenobiella subrufescens*) and herb-rich meadows, with species such as Salad Burnet and Sneezewort, and one of which contains ant hills.

Archaeology: There are no Scheduled Ancient Monuments in this area.

Targets;
Woodland management for Butterfly conservation and Barbastelle corridor enhancement.

BAP Species: 19 BAP Species have been recorded in this Biodiversity Target Area

08:14 Black Down

Black Down is an extensive area of Heathland that lies on high ground overlooking the West Weald. It is the highest point in Sussex. A large part of the area is owned and managed by the National Trust who have done extensive tree clearance work in order to restore the heathland of Black Down. There are Ancient Woodlands in the western part of the BTA.

Joint Character Area: Low weald and Wealden greensand

Geology: The majority of the BTA lies on Hythe Formation sandstone, with a small area of atherfield clay formation and weald clay formation mudstone running along the eastern edge.

Biodiversity:

- Black Down BTA is within the Sussex Downs AONB
- The BTA includes Black Down SNCI is includes remnants of dry and wet heathland and bog. The moss flora is reasonably rich and uncommon plant species found include Hare's-tail Cottongrass and Bog Asphodel.

Archaeology: There are no Scheduled Ancient Monuments in this area.

Targets:
Heathland restoration.

BAP Species: 13 BAP Species have been recorded in this Biodiversity Target Area

08:15 Barlavington, Coates and Rother

The Northern Edge of this BTA runs along the Rother where there is considerable opportunity for wetland habitat creation. Just South of the River is Burton Pond Nature Reserve, owned and Managed by Sussex Wildlife Trust. The majority of this area is within the ownership of the Barlavington Estate. The area lies on a important in-migration route for otters.

Within the area there are significant amounts of heath at Lords Piece and Coates Common. Historical evidence shows that in the past the area had more extensive Heathland. There is also the site of a medieval pasture parkland at Burton Park. There are numerous ancient woodlands in this area.

Joint Character Area: Wealden greensand

Geology: The majority of this target area lies on Folkestone Sands interspersed with some mudstone. Alluvium and river terrace deposits of sand, gravel, clay and silt.

Biodiversity:

- Most of the BTA is in Sussex Downs AONB.
- There are two SSSIs: Burton Park comprises an extensive area of open water surrounded by Alder carr, wet heath and marshy grassland. There is a rich invertebrate fauna and the site is of considerable importance for its water bird community; Coates Castle consists of three block of land containing the entire known remaining British population of the Field Cricket.
- Burton and Chingford Ponds LNR is a mosaic of woodland, heathland and parkland set around two large lakes. The site has good numbers of waterbirds and dragonflies.
- There are four SNCIs within the BTA: Black Pond Copse consists of a small area of Alder woodland and parkland including some large Sweet Chestnuts; Chingford Common consists of two connecting ponds, marginal vegetation and woodland, including carr. The lake is important for dragonflies (having 14 species recorded) and for breeding and wintering birds; Coates Sand Pit is designated on account of its Sand Martin colony, it also has importance for butterflies and several uncommon plant species are present including the nationally rare Red-tipped Cudweed for which the SNCI is its only West Sussex site; Hammer Moor and woodlands west of Coates Castle contains botanically rich semi-natural woodlands including areas of Alder carr, and unimproved marsh. The site is noted for its fungi and mollusc interest.

Archaeology: There are five Scheduled Ancient Monuments in this area, all of which are bowl barrows.

Targets:
Heathland restoration and creation and wetland creation.

BAP Species: 56 BAP Species have been recorded in this Biodiversity Target Area

08:16 Ebernoe with watercourse flightlines

This Biodiversity Target Area is centred on Ebernoe Common. Ebernoe is a site of international importance, particularly for its bat and lichen communities. This area, including Butcherlands field and environs around the Ebernoe SSSI (and SWT Reserve) forms one of the four core areas of the West Weald Landscape project. The area is extended from the SSSI boundary to capture potential and known bat flight lines and wooded areas around Ebernoe.

Joint Character Area: Low weald

Geology: Ebernoe with watercourse flightlines BTA is on a mosaic of Weald Clay, sandstone and mudstone with areas of limestone at the north and west of Bittles Field wood.

Biodiversity:

- The western most part of the site is within the Sussex Downs AONB
- Ebernoe Common SAC, NNR and SSSI is a good example of structurally diverse ancient woodland, most extensive being Beech high forest. Gaps in the canopy allow a diverse ground flora with species such as Yellow Pimpernel and Wood Millet. Thirty species of butterfly have been recorded including Wood White and Brown Hairstreak, and the site is important for breeding birds, lichens, and the rare Barbastelle and Bechstein's bats.
- Shillinglee Lake SSSI is a large lake on acidic Weald clays with important flora including four nationally uncommon plant species.
- There are six SNCIs within this BTA: Bittles Field is an ancient semi-natural woodland just east of Ebernoe Common SSSI. A rich ground flora can be found including many ancient woodland indicators and six species of orchid; Colhook Common is part of a registered common containing woodland, Bracken and scrub. Ponds on the northern part of the common have well-developed margins and there are areas of grassland with an acidic influence; Furnace Meadow consists of neutral grassland, stream and scrub, including the uncommon Small-flowered Sweet-briar; Kymmings Hill Farm meadows and woodland contains a mosaic of several species-rich meadows with wetter areas, abandoned orchards, and Oak, Ash, Field Maple wood. Notable species include Dyer's Greenweed and Devil's-bit Scabious in the meadows, and Wild Service Tree in the woodland, with the orchards containing abundant lichens; Piper's Kiln and Mercers Copses, and Dogkennel and Wassell Mill Hangers consists mostly of Oak and Hazel woodland with a ground flora that is generally rich, particularly alongside the stream that runs through the site. Several wet meadows and marshy areas are also present with species such as Meadowsweet and Pepper-saxifrage; Steers Common is a registered common which is mostly Beech, Oak and Ash wood. Clearings have a good neutral grassland flora including Sneezewort and Adder's-tongue, and Nightingales breed at the site.

Archaeology: There is one Scheduled Ancient Monument in this area, which is Ebernoe Brick and Tile Works.

Targets:
Barbastelle bat flight line restoration is important as well as general habitat enhancement and creation of more habitat linkages and high quality habitat.

BAP Species: 61 BAP Species have been recorded in this Biodiversity Target Area

08:17 Chiddingfold Complex

This area represents one of the four core areas of the West Weald Landscape Project. The aims of the project are reflected in the choice of boundary for this area. The core of the area contains the Chiddingfold Complex SSSI but the area is extended to include adjacent wooded and agricultural landscapes, and streams. The project aims to enhance the areas around the SSSI particularly for specific bird, bat and butterfly species. This area extends north in to Surrey.

Joint Character Area: Low weald.

Geology: Chiddingfold Complex BTA has a solid geology mosaic of Weald Clay formation sandstone and mudstone, interspersed with Paludina Limestone.

Biodiversity:
Chiddingfold Forest SSSI consists of a mixture of woodland types ranging from ancient oakwoods to coniferous plantations. There are several good specimens of Wild Service Tree, and Greater Butterfly Orchid is found in several areas. The well developed ride system ensures a good invertebrate and botanical variety including Broad-leaved Helleborine and Lesser Skullcap. Over 500 species of Lepidoptera have been recorded including several rare, endangered and vulnerable species. Chiddingfold Forest is also notable for its woodland bird community which includes Nightingale and Hawfinch.
There are two SNCIs within the BTA: Sparrwood Hanger and Roundwyck Copse complex consists of several wooded stream valleys and a number of unimproved meadows. The woodland is mostly well-structured Oak and Field Maple with a diverse community of mosses and liverworts. Much of the grassland is characteristic of ancient meadows with species such as Pepper-saxifrage and Adder's-tongue; Weald Barkfold Copse and Barkfold Hanger consists of predominantly Oak woodland, with some areas of rich ground flora including Sanicle, Tutsan and Moschatel.

Archaeology: There are no Scheduled Ancient Monuments in this area.

Targets: Lowland grassland and woodland restoration as well as hedgerow and watercourse enhancement.

BAP Species: 20 BAP Species have been recorded in this Biodiversity Target Area

08:18 The Mens and Buffer

The Mens is an important ancient woodland site owned and managed by the Sussex Wildlife Trust. It is considered a core area by the West Weald Landscape Project. This BTA includes not just the Mens, but also many of the woodlands and streams around it. To the East it extends to the Arun encompassing a stretch to the North that is considered suitable for wetland restoration. The area is important for rare bats.

Joint Character Area: Low weald and Wealden Greensand.

Geology: Most of The Mens and buffer BTA lies on Weald clay, mudstone and sandstone.

Biodiversity:

- The southern half of site is within Sussex Downs AONB.
- The Mens SAC and SSSI runs through the site. This is an extensive area of mature Beech woodland with a good structural diversity and rich in lichens, bryophytes, fungi and saproxylic invertebrates. The site also has an important population of Barbastelle bats and supports a diverse community of breeding birds.
- There are three other SSSIs: Bognor Common Quarry contains exposures of Fuller's Earth in the Hythe Beds; Coppedhall Hanger contains exposures that provide detailed evidence on paleoclimate, depositional environments and origins of the detritus; Upper Arun consists of 13km of the River Arun that supports an outstanding assemblage of breeding dragonflies including the Scarce Chaser and Club-tailed Dragonfly.

Archaeology: There are no Scheduled Ancient Monuments in this area.

Targets:

The targets for this area reflect the overall targets of the West Weald Landscape Partnership. Enhancement of the core forest area (The Mens SAC) and enhancement of a buffer around the core forest area, where the interconnections of woodlands by rews and hedgerows is crucial for the rare bat populations, known to exist there. Wetland restoration may be possible in the northern section of this area, on the Adur.

BAP Species: 31 BAP Species have been recorded in this Biodiversity Target Area

08:19 Ford to Houghton

This extensive stretch of the River Arun floodplain provides key opportunities for wetland and river restoration and the enhancement of floodplain grazing marsh. The area is also strategically important for water voles following a recent re-introduction at the Arundel Wildfowl and Wetland Trust.

Joint Character Area: Coastal plain and South Downs

Geology: The majority of the site is on chalk, with a small area of clay, silt and sand to the south of the area. Raised marine deposits of clay, silt, sand and gravel throughout, with some alluvium deposits found in the north of the site.

Biodiversity:

- The southern half of the Ford to Houghton BTA is included within the Sussex Downs AONB.
- There are two SSSIs: Arun Banks, an upper tidal stretch of the River Arun and on abandoned meander loop which contains a range of habitats including extensive reedbed. The diverse flora includes the locally uncommon Marsh-mallow; Arundel Park SSSI is contained within this BTA. This is one of the most important sites in the country for invertebrates including 15 endangered species, and it also has a diverse breeding and wintering bird community. The site is an old deer park consisting of a series of spurs and valleys, with chalk grassland and a variety of woodland types. Uncommon species include Box, Stinking Hellebore and Field Fleawort.
- Arun Valley, Watersfield to Arundel SNCI contains a section of the River Arun surrounded by an extensive tract of wetland which is important for breeding and wintering birds. There is also a good network of ditches and the site supports many rare and declining species including Black Poplar, Marsh Fern and Marsh-mallow.

Archaeology: There are two Scheduled Ancient Monuments in this area, one is Burpham Camp in the east of the area and the other is canal associated with Amberley Chalkpits in the north of the area.

Targets:
River and stream rehabilitation, expansion of wetland habitats of high value

BAP Species: 29 BAP Species have been recorded in this Biodiversity Target Area

08:20 Arundel Park

This medieval parkland area contains a matrix of chalk grassland, ancient woodland and ancient pasture parkland. To the west the site is bounded by the traditional park extent and to the east it is taken to the edge of the flood zone of the River Arun. This area also includes the Ancient Woodland Complex of Rewell Wood.

Joint Character Area: South Downs.

Geology: Arundel Park BTA lies on chalk with clay, silt, sand and gravel alluvium deposits.

Biodiversity:

- The entire BTA is within the Sussex Downs AONB
- Arundel Park SSSI is contained within this BTA. This is one of the most important sites in the country for invertebrates including 15 endangered species, and it also has a diverse breeding and wintering bird community. The site is an old deer park consisting of a series of spurs and valleys, with chalk grassland and a variety of woodland types. Uncommon species include Box, Stinking Hellebore and Field Fleawort.
- Rewell Wood Complex and Arundel Park SNCI

Archaeology: There are two Scheduled Ancient Monuments in this area: one is the war dyke entrenchment and the other is Arundel Castle.

Targets:

Chalk grassland restoration. There is scope in Rewell Wood for pearl bordered Fritillary enhancement, and in Arundel park for the enhancement of woodland birds.

08:21 Houghton to Coldwaltham

The area includes large extents of the Arun floodplain's grazing marsh, with some fen, floodplain woodland and reedbed. It also includes one of the only sections of non embanked, tidal floodplain in the whole catchment. Much of the tidal floodplain is heavily embanked and freshwater habitats occupy most of the floodplain at the upper limit of the tidal saline influence. The area is important for its proximity to the confluence of the Western Rother and Arun rivers, and is an important in-migration route for otters from Hampshire. Low density populations of water voles are also known to be in the area.

The area has two Sussex Wildlife Trusts reserves and RSPB land and extends off the floodplain to cover the geological 'island' of Coldwaltham.

Joint Character Area: Wealden greensand and South Downs.

Geology: The majority of Houghton to Coldwaltham BTA is on mudstone and sandstone, with upper greensand calcareous sandstone and siltstone, and chalk found in the south of the site.

Biodiversity:

- Part of the BTA is within the Sussex Downs AONB.
- The BTA includes part of Arun Valley designated a Ramsar site and SPA, for its series of wet meadows, alluvial grazing marsh and former raised peat bog, that is well used by wintering and breeding birds. Several rare species are present including Pea Mussel and Greater Water Parsnip. The site encompasses Amberley Wild Brooks SSSI, an extensive area of alluvial grazing marsh dissected by drainage ditches. There are several uncommon invertebrates, a rich dragonfly assemblage and several rare fungi and plants. Waltham Brooks SSSI is also within Arun Valley, and supports a species-rich community of aquatic plants including one nationally rare species.
- There are two SNCIs in the BTA: Arun Valley, Watersfield to Arundel contains a section of the River Arun surrounded by an extensive tract of wetland which is important for breeding and wintering birds. There is also a good network of ditches and the site supports many rare and declining species including Black Poplar, Marsh Fern and Marsh-mallow; Watts Farm Meadow consists of seven small species-rich meadows, crossed by streams or drains, with area sof scrub and some drier grassland. The marshy grassland contains species such as Star Sedge, Ragged-Robin and Southern Marsh-orchid.

Archaeology: There is one Schedule Ancient Monument in the area which is Greatham Bridge and one that is partly in the area, which is Hardham Priory.

Targets:

Wetland restoration and river rehabilitation where appropriate. Enhancement of woodland and hedgerow network. Reedbed, floodplain grazing marsh and fen creation, enhancement and restoration.

BAP Species: 44 BAP Species have been recorded in this Biodiversity Target Area

08:22 Parham to Fittleworth

This area sits directly at the confluence of the Arun and Western Rother rivers and encompases floodplain and wetland habitats of high importance including reedbed, fen and grazing marsh. Water abstraction from the aquifer at Hardham is currently under investigation but it is thought to have an impact on the wider wetland area. The area is a know migration route of otters between Hampshire and the Arun catchment and the area has potential to be of importance to water voles.

It extends South-east off the floodplain to include Parham Park, a medieval pasture parkland which is rich in the biodiversity associated with such a habitat. It also includes Hurston Warren, a SSSI Heathland and the only floating bog in Sussex.

Joint Character Area: Wealden greensand.

Geology: Parham to Fittleworth BTA lies on a mosaic of sandstone and mudstone.

Biodiversity

- The southern section of this BTA is included within the Sussex Downs AONB.
- Arun Valley is designated a Ramsar site and SPA, for its series of wet meadows, alluvial grazing marsh and former raised peat bog, that is well used by wintering and breeding birds. Several rare species are present including Pea Mussel and Greater Water Parsnip. The site encompasses Pulborough Brooks SSSI, managed for centuries as flood meadows.
- Parham Park SSSI is a medieval deer park on Folkestone Sands that has one of the richest epiphytic lichen floras in the region. The site contains woodland, a relict lowland raised bog, Alder carr and a number of ponds and ditches. Two rare beetles can be found as well as one of the largest heronries in Sussex.
- Part of Wiggonholt Common SNCI contains an area of heathland, secondary woodland and Bracken. There are a number of uncommon plants including Bird's-foot, Subterranean Clover and Smooth Cat's-ear, and the site is also of importance for its invertebrate fauna.

Archaeology: There are two Scheduled Ancient Monuments in this target area, one is Swan Bridge at Pulborough and the other is a bowl barrow at Wiggonholt Common.

Targets:

Wetland and river rehabilitation, creation and restoration. Enhancement of hedgerow and woodland networks. Heathland restoration at Hurston Warren and at the RSPB site of Wiggonholt.

BAP Species: 61 BAP Species have been recorded in this Biodiversity Target Area

08:23 Patching & Clapham Downs

The southern boundary of this area is the A27. These Ancient woodlands are based on a Downland geology and have expanses of lowland calcareous grassland running through them and on their edges. Angmering Park in the centre of Patching wood is a remnant of a medieval wood pasture.

Joint Character Area: South Downs.

Geology: The majority of the Patching and Clapham Downs BTA lies on chalk, with an area of clay, silt and sand along the southern edge.

Biodiversity:

- Most of the BTA is included in the Sussex Downs AONB
- There are seven SNCIs within the BTA: Clapham Wood is an extensive ancient, semi-natural woodland with a rich ground flora including Sanicle, Wild Strawberry and Early Purple Orchid. Tuberous Comfrey is also recorded from the site, which is a rare species in the county; Conyers Bank is a small field with a typical unimproved chalk grassland flora including Yellow Wort, Harebell and Small Scabious; Long Furlong and Church Hill comprises a steep north and west-facing slope supporting a mosaic of chalk grassland, scrub and woodland; Poling Copse is a large block of ancient, semi-natural woodland, consisting mostly of Hazel coppice with Ash and Oak, although Sycamore and Birch are also frequent; The Gallops and No Man's Land consists of areas of chalk grassland within a mosaic of ranker grassland, scrub and secondary woodland. The higher quality areas of grassland include species such as Yellow Oat-grass, Fairy Flax and Kidney Vetch; The Sanctuary is a south-facing coombe and slope containing a mosaic of chalk grassland, scrub and secondary woodland. The site is important for birds and invertebrates, and Meadow Clary occurs here in one of only two sites in West Sussex; Warningcamp Hill and New Down contains species-rich chalk grassland supporting two uncommon plants in West Sussex; Burnet Rose and Small-flowered Buttercup. An old chalk pit at the site supports a variety of bryophytes and lichens.

Archaeology: There are four Scheduled Ancient Monuments in this area; a prehistoric linear boundary on Wepham Down; a cross dyke on Barpham Hill and two deserted Medieval settlements.

Targets:

Chalk grassland restoration

BAP Species: 18 BAP Species have been recorded in this Biodiversity Target Area

08:24 Central Downs Arun to Adur

From the banks of the Arun at Amberley this area runs for 15 miles across the Downs following the calcareous geology and some lengths of the South Downs Way National Trail. The area encompasses some the Ancient Woodlands, so characteristic of this part of Sussex with ancient undisturbed soils and their unique downland woodland ecology. On meeting the Adur at Stenning the area heads south as far as Applesham Farm, where is extends down to the Adur floodplain.

Joint Character Area: South Downs.

Geology: The site lies on chalk.

Biodiversity

- The majority of the BTA is in Sussex Downs AONB.
- There are two SSSIs: Amberley Mount to Sullington Hill contains some of the richest chalk grassland in Sussex as well as areas of Juniper scrub. There is a good community of Lepidoptera including some rare species such as Juniper Carpet Moth; Chanctonbury Hill consists of the uncommon Field Maple variant of the calcareous Beech, Ash, Pedunculate Oak woodland. There are also areas of chalk grassland, and the habitat mosaic supports over 66 species of breeding bird including Nightingale.
- There are six SNCIs: Amberley Chalk Pits and Hacketts Copse contains a range of habitats spanning the succession from bare chalk to deciduous woodland, and is also of geological importance. There is a rich chalk flora with notable species including Fly Honeysuckle, White Helleborine and Fly Orchid. The site has also had rare spiders, snails and fungi recorded and the cliffs provide roost space for bats with six species recorded; Heath Common contains remnants of wet and dry heath, several ponds and relict ancient base-rich woodland rich in lichens and ferns. With ongoing management it is hoped that uncommon plants such as Marsh Clubmoss and Bog Ashphodel may reappear; Kithurst Hill lies on the steep, north-facing escarpment of the South Downs. The site is mostly wooded with Ash and Hazel with small areas of species-rich grassland. There are a number of bryophytes and butterflies including several rare and notable species; Steyning Coombe and Steyning Round Hill are important areas of unimproved downland with herb-rich sward including interesting species such as Vervain, Common Gromwell and Dropwort. At least 27 butterfly species have been recorded, and the site has records for rare species of lichen, moss and snail; Sullington Hill supports chalk grassland on north and east-facing slopes. There are areas of encroaching scrub, including Juniper and a small area of semi-natural woodland; Washington Chalk Quarry is an area of open downland; some of which is very species-rich and scattered scrub, along with a collection of disused chalk pits. Seven species of orchid have been recorded, along with 29 species of butterfly including a large colony of Chalkhill Blue.

Archaeology:

There are several Scheduled Ancient Monuments in this area including lime kilns and engine sheds which are associated with Amberley Chalkpits in the far west of the area, cross dykes, lynchetts and barrows, and unenclosed Iron Age urnfield also in the western half of the area; and several more cross dykes and barrows in the eastern half along with

a hill fort and Romano-Celtic temple at Chanctonbury Ring and barrows, ditches and cross dykes at Steyning Round Hill.

Targets:
Chalk grassland and wetland creation. Farming that is sympathetic to farmland birds.

BAP Species: 44 BAP Species have been recorded in this Biodiversity Target Area

08:25 Lower Adur Arun Watershed

This area, at the foot of the South Downs, is an important watershed between two Sussex catchments, the Adur and the Arun, and represents the chalk headstreams of the two catchments. The southern limit of this area is dictated by the edge of the chalk geology and the northern edge follows the conurbations of Storrington, Sullington and West Chiltington. The area has a mosaic of heathlands and woodlands, including Sullington Warren, and there is evidence that the heathy character was once more extensive. The watershed contains an area identified to be rich in arable plants.

Joint Character Area: Low weald, South Downs and Wealden Greensand.

Geology: The Lower Adur Arun Watershed lies on sandstone and mudstone with an area of upper greensand calcareous sandstone and siltstone to south.

Biodiversity

- The southern half of the site is within the Sussex Downs AONB
- Chantry Mill SSSI is within this BTA. The site has interesting geology and provides the best available exposure of the unusual “iron-grit” horizon which characterises the Gault/Folkestone Beds junction in this part of Sussex.
- Heath Common SNCI is within this BTA. This site has moderately rich remnants of wet and dry heath, several ponds and some relict ancient base-rich woodland. The area is rich in lichens and ferns and some interesting flora including Beak Sedge, Oblong-leaved Sundew and Dodder.

Archaeology: There are several Scheduled Ancient Monuments in this area which relate to the tumuli on Sullington Warren.

Targets:

Sensitive land management on the watershed is crucial, particularly if the passage of Otters between catchments is to be encouraged. Expansion of existing hedgerow networks is desirable as is the enhancement of tributary streams. The areas of historic heathland represent some opportunity for heathland re-creation.

BAP Species: 26 BAP Species have been recorded in this Biodiversity Target Area

08:26 Findon Downs

Bordering the urban area of Worthing this BTA contains the well known downland hill fort of Cissbury ring (A SSSI owned and managed by the National Trust). The area extends further to cover neighbouring areas of chalk grassland.

Joint Character Area: South Downs.

Geology: Findon Downs BTA lies on a solid geology of chalk with clay, silt, sand and gravel deposits.

Biodiversity:

- The majority of the site is within Sussex Downs AONB.
- Cissbury Ring SSSI is within the BTA. The site consists of chalk grassland and scrub, which supports a good butterfly and bird community.
- There are two SNCIs within the BTA: Tenants Hill and Reservoirs has several areas of species-rich chalk grassland with notable species including Bladder Campion, Horseshoe Vetch and Autumn Gentian. An area of Hawthorn scrub is important for breeding birds including Willow Warbler and Yellowhammer; Worthing and Hill Barn Golf Courses encompass large areas of unimproved chalk grassland, neutral grassland, scrub and woodland. Interesting flora includes Round-headed Rampion and Juniper with several uncommon birds and butterflies such as Dark-green Fritillary and Corn Bunting also found.

Archaeology: There are two Scheduled Ancient Monuments in this area, one is Cissbury Ring hillfort (in Cissbury Ring SSSI) and the other is a bowl barrow just to the west of the hillfort.

Targets:

Chalk grassland restoration and the promotion of farming practice sympathetic to downland birds.

BAP Species: 26 BAP Species have been recorded in this Biodiversity Target Area

08:27 Knepp Estate with fluvial extensions

At the core of this BTA is an area of 5,000 acres which is set to be the only area of 're-wilding' in Sussex, including over 3km of river and floodplain restoration. Opportunities exist for the expansion and restoration of floodplain and wetland habitats and re-naturalisation of stream networks.

The BTA extends beyond the boundaries of the Knepp Estate and follows the tributary flood zones into neighbouring land.

Joint Character Area: Low weald.

Geology: The site consists of primarily mudstone with areas of sandstone running through the central section. Clay, silt, sand and gravel deposits including alluvium.

Biodiversity:
There are three SNCIs: Horsham Common, Alder Copse, Coate's Furzefield and Constable's Furze consists of a diverse woodland complex, streams and a small herb-rich meadow. Notable species on site include Early-purple Orchid, Wych Elm and Sneezewort. The woo land also supports a good community of birds and butterflies; Kneppmill Pond is a large area of open water with well-developed marginal vegetation and extensive tall fen. The d site is of county importance for breeding and wintering birds and includes a heronry. Eight species of dragonfly have been recorded including Variable Damselfly and Ruddy Darter; the site includes a stretch of the River Adur, which has diverse emergent and aquatic vegetation, including several local species, and its tributary, Lancing Brook.

Archaeology: There is one Scheduled Ancient Monument in this area, which is Knepp Castle.

Targets:

- Restoration of large areas of headstream and main river, floodplain woodland and floodplain meadow, expansion of woodland and hedgerow networks including large area of wild grazing, reduction in intensive (arable) farming.

- Experimental and innovative approach to habitat management

BAP Species: 25 BAP Species have been recorded in this Biodiversity Target Area

08:28 Shoreham Estuary and Beach

This area is dominated by saltmarsh, grazing marsh and mudflat and its associated brackish communities. Shoreham Beach has a LNR and SNCI that has some of the best vegetated shingle in the county despite high visitor pressure. There is also a saline lagoon and estuary (RSPB Reserve and SSSI) important for wading birds. Shoreham Airport dominates the western side of this site and the area is bounded by the A27 to the north and the urban areas of Shoreham to the east and Lancing on the west.

Joint Character Area: Coastal Plain.

Geology: Shoreham Estuary and Harbour BTA lies on Newhaven chalk with areas of clay, silt and sand along the coastal area.

Biodiversity:

- The BTA includes the Adur Estuary SSSI, which is a significant area of saltmarsh supporting an unusual plant community. The intertidal mudflat area is an important area for wading birds, particularly Redshank, Dunlin and Ringed Plover (the area often hold over 1% of the British population of this bird, making this area a nationally important site for this species).
- The area includes two SNCIs which are both LNRs too. Widewater Lagoon SNCI & LNR is a classic example of an isolated spit lagoon with areas of shingle vegetation and saltmarsh along it's southern edge. The lagoon is brackish and the depth depends on seasons and tides, and is used by wintering birds such as Pochard and Redshank and was the last site for the Anemone (*Edwardsia ivelli*). Shoreham Beach SNCI & LNR, is notable for it's specialised vegetated shingle community which is very rare in West Sussex, and of particular interest is the presence of Starry Clover (*Trifolium stellatum*).

Archaeology: There are two Scheduled Ancient Monuments within the boundary: Shoreham Fort and Shoreham Airfield Dome Trainer.

Targets:
Mudflat, Grazing Marsh, Reedbed, Vegetated Shingle and Saltmarsh. Widewater Lagoon has deteriorated, therefore needs management and its water quality monitored.

BAP Species: 25 BAP Species have been recorded in this Biodiversity Target Area

08:29 Adur to Newtimber including Mill Hill

This large BTA runs from Mill Hill and Old Erringham Farm in the West along the edge of the chalk to Saddlecombe, Devils Dyke and Waterhall in the East. The majority of the chalk downland in this area is owned and managed by the National Trust. There is a high density of existing Lowland Calcareous Chalk grassland BAP habitat. There are several chalk springs that flow from this downland block about which little is known.

Joint Character Area: South Downs.

Geology: Chalk including Seaford, Lewes, new pit, zig zag, west melbury marly. Clay, silt, sand and gravel, and clay with flints.

Biodiversity:
The BTA is within Sussex Downs AONB.
There are 13 SNCIs: Beeding Hill to Newtimber Hill; the chalk grassland near Saddlescombe Farm consists of a sedge-rich sward with areas of developing scrub; Mill Hill is a good example of unimproved herb-rich downland. Part of the site has a rich bryophyte flora and the whole site is of County significance for butterflies with 25 species known to have bred, including the uncommon Dark-green Fritillary; Coney Wood is one of the largest areas of woodland in Brighton and Hove with several notable woodland species including Stinking Iris, Ramsons and Alder Buckthorn; Cow Down consists of two north-east facing coombes on the chalk escarpments, which is species-rich in places but also being encroached by scrub. Plants include Common Rock-rose, Hairy Violet and Spring Sedge; Green Ridge supports areas of rough grassland and hedgerow between two wooded sites (Coney Woods and Three Cornered Copse); Lower Standen; Mill Hill is a good example of herb-rich chalk grassland, with areas of scrub and secondary woodland. The site is significant for its butterfly species including Brown Argus and Dark-green Fritillary. The site is also a LNR; Offham Hill is a disused chalk quarry at the eastern end of the Clayton to Offham Escarpment SSSI. There is rich grassland in places and the site is believed to be of interest for butterflies; Old Erringham Farm valley includes a shallow valley with rich chalk grassland, storm damaged woodland, three ponds and a disused quarry. There is a White-letter Hairstreak colony on the Elms in the woodland; Pond Brow consists of two small areas of chalk grassland supporting a typical flora including Restharrow and Large Thyme; Shoreham Beach contains a shingle flora which is increasingly rare in West Sussex. As well as the presence of this community, the presence of Starry Clover provides additional interest; Three Cornered Copse supports a range of habitats including scrub, hedgerow and broad-leaved woodland; Truleigh Hill to Southwick Hill consists of fragments of chalk grassland, and the Chalkhill Blue butterfly can be found throughout the site; Waterhall Complex supports a mosaic of habitat including chalk grassland, dense and scattered scrub.

Archaeology: There are several Scheduled Ancient Monuments in this area, the most predominate in the landscape is Devil's Dyke hillfort, and others include a post-Medieval stock enclosure, cross dykes, barrows, two deserted Medieval settlements, a motte and bailey castle and a Romano-British farmstead.

Targets:
Chalk Grassland restoration and farming practices that promote farmland birds.

BAP Species: 52 BAP Species have been recorded in this Biodiversity Target Area

08:30 North Bramber Floodplain

This is extensive area of wetland potential has the River Adur running through it, though it is embanked. There are many small ditches and some grazing marsh in the area. Despite its proximities to Bramber and Steyning this area retains much tranquility. The boundary of this area follows a wetland potential map using elevation and slope contributed by the Environment Agency/RSPB.

Joint Character Area: Low Weald.

Geology: The North Bramber Floodplain lies on sandstone to the north and mudstone to south, with a lot of clay, silty, peaty and sandy alluvium deposits.

Biodiversity:
The River Adur water meadows and Wyckham Wood SNCI almost covers the whole of this BTA. Wyckham Wood, one of the few woodlands on the floodplain of the River Adur, is of particular importance on account of its heronry. The water meadows have mostly been improved but some of the ditches are of great botanical interest. This wetland area is also of importance to birds and dragonflies.

Archaeology: There are several Scheduled Ancient Monuments in this area, all of which are related to the salt industry.

Targets:
Wetland restoration.

BAP Species: 13 BAP Species have been recorded in this Biodiversity Target Area

08:31 Crooked Moon to Thundersbarrow

This area runs across the A27 from Rest and Be Thankful up to Thundersbarrow hill. The North of the area has a significant amount of lowland calcareous grassland. A large proportion of this BTA is owned and managed by the National Trust.

Joint Character Area: South Downs.

Geology: Crooked Moon to Thundersbarrow lies mostly on chalk with an area of clay-with-flints in the southeast corner.

Biodiversity:

- The majority of the BTA is within Sussex Downs AONB.
- Southwick Hill consists of dense scrub and unimproved grassland. Several rare species can be found including Bastard Toadflax and Red Star-thistle. The presence of a small amount of Heather suggests chalk heath was formerly developed here; Oakdene, Southwick Hill supports relict downland grass and scrub communities and the rare Red Star Thistle is found on site.

Archaeology: There is one Scheduled Ancient Monument in this area which is a Martin Down style enclosure, bowl barrow, Iron Age hillfort, Romano-British Village and associated field system on Thundersbarrow Hill.

Targets

Chalk grassland restoration and land management sympathetic to Downland wildlife with appropriate interpretation.

BAP Species

8 BAP Species have been recorded in this Biodiversity Target Area:

Note 08:32 Brighton & Hove Urban Green Network is a Local BOA

08:33 Benfield to Hangleton

This area stretches from Devil's Dyke farm where there is some existing lowland calcareous grassland, south across the A27 to Hangleton golf course and deep into Brighton. The rural area is linked right into the city of Brighton and Hove and rural and urban intermesh through the Brighton and Hove green network. There is some lowland calcareous grassland that is extant in the urban part of this BTA.

Joint Character Area: South Downs.

Geology: Benfield to Hangleton BTA lies on chalk.

Biodiversity:
- The BTA is within Sussex Downs AONB
- Benfield Hill LNR has south and east-facing chalk grassland and scrub. The site also supports a large population of glow-worms.
- Benfield Valley SNCI is a large and diverse site with features of interest including one of the largest areas of woodland in Hove, mature Elm trees and grassland.

Archaeology: Benfield Valley SNCI contains part of an ancient Saxon hedgeline. There are no Scheduled Ancient Monuments in this area.

Targets:
Chalk Grassland restoration and urban land management that is sympathetic to downland wildlife with appropriate interpretation and public access.

BAP Species: 16 BAP Species have been recorded in this Biodiversity Target Area

08:34 The St Leonards Watershed

This area is bordered to the North by the Crawley road running between Horsham and Crawley, whilst to the East the urban fringes of Crawley provide the area perimeter. Heading east around the edge of Horsham the boundary heads south to encompass Chesworth Farm and Dene Park. The Southern section of this BTA captures the tributaries of three Sussex catchments, the Arun, the Adur and the Ouse. To the West the area extends to the urban fringe of Crawley, enclosing Buchan Country Park and more centrally St Leonard's Forest. Heathland and Woodland comprise the principle priority interest of the North of this site with the watershed of the three tributaries, woodland, pasture parkland and a landscape rich in species rich hedgerows to the South.

Joint Character Area: High weald and Low weald.

Geology: The St Leonard's Watershed BTA lies on Weald clay, sandstone and siltstone interbedded, and mudstone in the northern section.

Biodiversity:

- Much of the BTA is in High Weald AONB.
- There are three SSSIs within the BTA: Buchan Hill Ponds consists of three ponds which are the best example in West Sussex of Wealden hammer ponds on acid Tunbridge Wells sands. The ponds are fringed by marginal fen and Alder carr. Seventeen species of dragonfly have been recorded including the Hairy Dragonfly and Brilliant Emerald; St Leonards Forest includes the remnants of a formerly more extensive deciduous forest, and retains relict flora from the 'Atlantic' period. There is a good community of bryophytes and woodland birds; St Leonards Park Ponds consists of species-rich ponds and fringing vegetation. There are a number of uncommon bryophytes and a wide range of dragonflies.
- Buchan Country Park is a large site containing woodland, heath and meadow. Adjacent to this site is Target Hill Park LNR, which is a large area of grassland, scrub and Birch woodland on a former refuse tip.
- There are five SNCIs: Boyds Wood and Furzefield Copse are two botanically rich woodlands that encompass a range of woodland types both ancient semi-natural and recent broadleaved plantation. Part of the site is ancient gill woodland that has a rich bryophyte and fern flora along the stream banks; Buchan Country Park consists of an area of woodland with an increasing area of heathland, a small meadow and three large lakes. Ivy-leaved Bellflower and Wild Daffodil can be found as well as some uncommon moths and rare dragonflies, including Brilliant Emerald; Leechpool and Owlbeech Woods is a large area of woodland consisting mainly of Oak and Beech, with a Pine plantation. A number of streams run through the woodlands, and there are good populations of birds, amphibians and reptiles; Old Deer Park, Leonardslee lies in an old deer park and is one of the best surviving relicts of St Leonard's Forest. There are ancient parkland trees with a good lichen community, dry and wet heathland, and a bog that contains an assemblage of species no longer found in any other site in West Sussex; St Leonard's Forest is a large area of coniferous and deciduous plantation with heathy rides and glades. There are important breeding birds including Crossbill, Nightjar and Firecrest, and a number of scarce butterflies and dragonflies.

Archaeology: There is one Scheduled Ancient Monument at Chesworth Farm (chapel and house).

Targets:
St Leonard's Forest SNCI and the surrounding area has huge potential for heathland restoration. The watershed of the three catchment is an area where agricultural practice, sensitive to wildlife is extremely important.

BAP Species: 51 BAP Species have been recorded in this Biodiversity Target Area

08:35 Woods Mill Stream to Adur

This area encompasses a landscape that captures the waterflow from the chalk streams of the Downs around Poynings, down the Woods Mill stream to the wet grassland of the Adur River. There are small pockets of ancient woodland, reedbed and meadow in the Sussex Wildlife Trust reserve at the heart of the area.

Joint Character Area: Low Weald and South Downs.

Geology: Woods Mill Stream to Adur BTA lies on Weald clay formation mudstone to the north with sandstone to the south.

Biodiversity:

- Part of this BTA sits in the Sussex Downs AONB.
- Part of the River Adur water meadows and Wyckham Wood SNCI is in this BTA. Wyckham Wood, one of the few woodlands on the floodplain of the River Adur, is of particular importance on account of its heronry. The water meadows have mostly been improved but some of the ditches are of great botanical interest. This wetland area is also of importance to birds and dragonflies.
- Hoe Woods SNCI sits centrally in the BTA, it was designated for its ancient woodland, which is dominated by Oak and has a Hazel coppice. It boasts a good assemblage of woodland plant and bird species. The area includes a lake which supports a number of dragonfly and damselfly species (19 species have been recorded), and five out of the six British amphibian species including the Great Crested Newt. Hoe Wood SNCI is part of the Sussex Wildlife Trust reserve, Woods Mill, which in addition to the features of the SNCI also has some smaller ponds, a reedbed and rough wet grassland which is currently being grazed by cattle.

Archaeology: There are no Scheduled Ancient Monuments in this area.

Targets:
Wetland restoration and grazing marsh restoration.

BAP Species: 80 BAP Species have been recorded in this Biodiversity Target Area

08:36 Rusper Ridge

This area, west of Crawley, is a landscape dominated by small ancient woodlands. The area is bounded to the South by the Horsham to Crawley Railway line and to the North by tributaries of the river Mole

Joint Character Area: Low weald.

Geology: Rusper Ridge BTA lies on Weald Clay with veins of limestone and sandstone.

Biodiversity:

- Two SSSIs are found in this BTA: House Copse is a small isolated semi-natural woodland of Small-leaved Lime and Hornbeam, previously managed as coppice under Oak standards, and is almost unknown elsewhere in Southern England; Warnham is a brick pit which exposes the lower Weald Clay Group above the Horsham Stone.
- There are three SNCIs within the BTA: Brookhurst Wood and Gill, and Morris's Wood is a Hornbeam dominated woodland situated predominantly on or adjacent to stream valley sites. There is a rich ground flora in places, with a good variety of mosses and liverworts, and a number of butterflies using the woodland rides; Hyde Hill has a diversity of habitats including semi-natural woodland, hedgerows, streams and grassland. There are a number of uncommon species including Wild Service Tree, Midland Hawthorn and Violet Helleborine. The site is also important for butterflies with 26 species recorded including White Admiral; Kilnwood Copse is an Oak and Hornbeam woodland of variable structure, with Small-leaved Lime distributed throughout. There is a variety of mosses and liverworts, and two small ponds although there are a number of non-native species surrounding these.

Archaeology: There are no Scheduled Ancient Monuments in this area.

Targets:
Woodland management and the promotion of an integrated landscape, with small woods and hedgerows connecting woodlands and tributaries.

BAP Species: 6 BAP Species have been recorded in this Biodiversity Target Area

08:37 Ifield Brook

This area links several existing County Wildlife Sites, all of which are important for wetland biodiversity. To the south-east the area extends in to the urban area of Crawley and to the north-east to the area of Gatwick Airport. The target area follows the line of a watercourse which has potential for in channel and floodplain enhancement.

Joint Character Area: Low weald.

Geology: The majority of the Ifield Brook BTA lies on mudstone with a small vein of limestone to the south.

Biodiversity:
There are three SNCIs contained in this BTA: Ifield Brook Wood and meadows contains several herb-rich meadows enclosed by thick hedges, Ifield Brook and an area of woodland. There are several species of butterfly and numerous birds including Kingfisher and Nightingale; Ifield Pond is a large pond of considerable local importance on account of its birdlife, dragonflies and amphibians. There is also a small semi-natural woodland included in the site with a rich ground flora including Opposite-leaved Golden-saxifrage and the scarce Marsh Violet; Willoughby Fields is a large site containing unimproved grassland with wet flushes, and a network of hedgerows and small copses of relict ancient woodland with species such as Ramsons and Moschatel.

Archaeology: There are no Scheduled Ancient Monuments in this Target area.

Targets:
Interconnection of wetland habitats, restoration of riverine features and the opportunity to work with Crawley communities through the Gatwick Greenspace Project.

BAP Species: 10 BAP Species have been recorded in this Biodiversity Target Area

08:38 Gatwick Woods

This area is dominated by the Gatwick Airport landscape but contains a small amount of ancient woodland amongst agricultural land where the opportunities for biodiversity gain and landowner liaison are tangible.

Joint Character Area: Low weald.

Geology: Gatwick Woods BTA lies on Weald clay formation mudstone.

Biodiversity:
Horleyland Wood SNCI is contained within the BTA. This site is a good example of ancient coppice-with-standards Bluebell Wood, with a canopy consisting predominantly of Oak, Birch and Ash. There is abundant dead wood, and a pond which adds habitat diversity.

Archaeology: There are no Scheduled Ancient Monuments in this area.

Targets:
Woodland management, hedgerow management and planting, and pond creation. Good opportunities for community work through the Gatwick Greenspace Project.

BAP Species: 1 BAP Species has been recorded in this Biodiversity Target Area

08:39 Tilgate and Furnace Green

Extending into the Urban area of Crawley the Tilgate Park area is bounded to the South by the A23. The area of the Park is largely wooded, with some of the site owned by the Forestry Commission. There are some small heathy patches to the west of the site and in the East some areas that were heathy historically (1st Epoch maps)). This area extends into the urban area of Crawley at Furnace Green.

Joint Character Area: High weald.

Geology: Tilgate and Furnace Green lies predominantly on sandstone and siltstone with a small area of mudstone to northwest.

Biodiversity

- Tilgate Forest LNR is largely wooded, with patches of heathland and scrub.
- Tilgate Park SNCI is an important site by virtue of its size and variety of habitats. The site includes a variety of woodland including mixed woodland, Pine plantation and Alder carr. There are also areas of damp heathland and acid grassland with species such as Purple Moor-grass, Tormentil and Heath Bedstraw.

Archaeology: Tilgate Forest LNR has mine-pits associated with the medieval iron industry. There are no Scheduled Ancient Monuments in this area.

Targets:

Heathland restoration and woodland management for biodiversity. The urban part of this BTA should be managed for both wildlife and their more traditional recreational use.

BAP Species: 11 BAP Species have been recorded in this Biodiversity Target Area

08:40 Worth Forest

The area falls on the watershed between the Ouse and Surrey catchments. Worth Forest is one of the Ancient Forests of the High Weald Forest Ridge, and as such one of the 'forest maidens' of the Weald Ridge Project. This large BTA is bordered to the North by the A23 and contains extensive heathland patches within its wooded matrix. To the South of the area there is land owned by the Forestry Commission. There are several Ghyll woodlands running through this area and it is bounded to the South by Tributaries of the Ouse.

Joint Character Area: High Weald.

Geology: Worth Forest BTA lies on Tunbridge Wells Sandstone and Grinstead Clay.

Biodiversity:

- The BTA is within High Weald AONB
- Worth Forest SSSI consists of ancient Wealden ghyll woodland with Oak, Birch and areas of Alder, and a rich lichen community. There are a number of ferns and mosses including two locally uncommon 'Atlantic' mosses, as well as Small-leaved Lime.
- Oaken Wood, Stony Plats and High Lines SNCI consists of Oak and Hazel woodland, with wetter Alder wood alongside the numerous streams. The site has good communities of birds, butterflies and bryophytes.

Archaeology: There are no Scheduled Ancient Monuments in this area.

Targets:
Heathland restoration

BAP Species: 14 BAP Species have been recorded in this Biodiversity Target Area

08:41 Lower Adur Ouse Watershed

This area is a watershed between the tributaries of the Adur and the Ouse rivers. The area consists of a patchwork of ghyll woodlands, small ancient woodlands, streams and ponds, against an agricultural backdrop. There are small areas of modern wood pasture and a large area of medieval wood pasture in the south of the area. The area could play an important role in the migration of key mammal species between river catchments.

Joint Character Area: High Weald.

Geology: The Lower Adur Ouse Watershed lies on sandstone, siltstone and mudstone.

Biodiversity:
The BTA is within High Weald AONB.

Archaeology: There are no Scheduled Ancient Monuments in this area.

Targets:
Sympathetic land management of watershed area to include expansion of existing shaw and hedgerow networks, rehabilitation of tributary streams and pond restoration.

BAP Species: 6 BAP Species have been recorded in this Biodiversity Target Area

08:42 Stanmer & Ditchling Downs

This area is dominated by the South Downs, from the steep scarp to the north heading south in to the urban area of Brighton. The area contains Stanmer Park which has historic interest as well as ancient woodland, and it is a popular destination for day visits and, more frequently, large Brighton events. There are many community projects based in Stanmer Park. To the far South the area includes Hollingbury and the Downs around Moulsecombe. These areas contain chalk grassland relicts, but is predominantly agricultural land on the urban fringe. There are some important arable plant areas on the urban fringe.

Joint Character Area: South Downs.

Geology: Stanmer and Ditchling Downs lies on chalk.

Biodiversity:

- Most of the BTA is within Sussex Downs AONB, with only a small area to south excluded.
- There are two SSSIs: Clayton to Offham Escarpment is an extensive chalk grassland with a good representation of woodland and scrub. Orchids are well represented, including Musk Orchid, Burnt Orchid and Fragrant Orchid, and there is a good community of breeding birds; Wolstonbury Hill is species-rich chalk grassland with several uncommon species including Fly Orchid.
- There are three LNRs in the BTA: Stanmer Park and Coldean is a historic 18th century landscaped park with ancient beech woodland and chalk grassland; Wild Park LNR is a large site consisting of chalk grassland, scrub, woodland and amenity grassland, important for resident and migrant birds.
- There are five SNCIs within the BTA: Hollingbury Industrial Estate contains a mosaic of scrub, trees and species-rich grassland including species such as Kidney Vetch and Adonis Blue; Pangdean downland consists of herb-rich chalk grassland, with areas of storm-damaged Beech woodland and an area of chalk heath-a very rare habitat in Sussex; Pangdean Farm consists of two areas of chalk grassland with a rich flora including Round-headed Rampion and Dwarf Thistle; Pyecombe Bank is an area of south-facing chalk grassland with increasingly rich ground flora since the introduction of grazing and scrub clearance. Adonis Blue butterfly breeds on the site; Tenant, Lain and Moon's Gate Woods in an area of semi-natural ancient woodland, which is rare in Brighton and Hove.

Archaeology: There are many Scheduled Ancient Monuments across this landscape, predominantly barrows and earthworks, and also a Hill Fort. Wild Park LNR contains an Iron Age hill fort with bronze burial mounds.

Targets:

Chalk Grassland restoration, and opportunities for sensitive land management on the important Brighton aquifer. Opportunities for community involvement, and also farmland bird conservation efforts.

BAP Species: 96 BAP Species have been recorded in this Biodiversity Target Area

08:43 East Brighton Downs

This is a large BTA that links the urban chalk grasslands of the City of Brighton and Hove to the classic rural chalk grasslands overlooking the Ouse. Running from Whitehawk, Sheepcote valley past Bevandean and beyond, this area contains extensive blocks of chalk grassland. There is much farmland in between these blocks and the area generally has high visitor pressure from Brighton residents. The area extends North East to Kingston and stretches west to beyond Rottingdean and Telscombe to Peacehaven. There are many areas of significant arable plant populations in this area.

The area encompasses the chalk cliffs and platform that run from Brighton Marina to Peacehaven

Joint Character Area: South Downs.

Geology: This area sits on Seaford, Lewes, New pit and Newhaven chalk. Gravel, sand, silt and clay, some clay with flints.

Biodiversity:

- The majority of the BTA is within Sussex Downs AONB.
- Castle Hill SAC, NNR, SSSI and LNR is one of the best examples in East Sussex of unimproved chalk grassland. The variation of plant and animal communities with aspect and slope is of special ecological interest, and scarce species include Burnt Orchid and one of the largest colonies of Early Spider-orchid in the UK.
- There are two other SSSIs: Brighton to Newhaven has some rare and uncommon plants on the cliff face and cliff-top chalk grassland, such as Sea-heath and Hoary Stock, although its main interest is geological; Kingston Escarpment and Iford Hill comprises two separate areas of chalk downland on steep scarp that are important for their habitat and rich invertebrate fauna.
- There are three other LNRs: Beacon Hill, which has a range of chalk grassland plants and butterflies; Bevendean Down, a cluster of chalk grassland, scrub and woodland which supports several uncommon butterflies; Whitehawk Hill contains relict chalk grassland supporting colonies of Adonis and Chalkhill Blue butterflies.
- There are 34 SNCIs: Abinger Road Open Space supports woodland, rough grassland and hedgerow; Balsdean Downland East is species rich chalk grassland; Balsdean Bottom Downs contains three blocks of chalk grassland with species such as Basil Thyme and Betony; Balsdean Downland North contains an area of chalk grassland with species such as Horse-shoe Vetch and Autumn Gentian; Balsdean Downland West is an area of chalk grassland particularly notable for Fly Honeysuckle, Red Star Thistle and Frog Orchid; Bexhill Road, Woodingdean supports a range of habitats including chalk grassland, scrub and rough grassland; Bostle Bottom is an area of species-rich chalk grassland; Breaky Bottom Downs is a southwest-facing down with species typical of calcareous and neutral grassland including Horseshoe Vetch and Hairy Rock-cress; Brighton Marina is important for the diversity of marine habitats and species it supports; Cattle Hill supports an area of ancient, species-rich chalk grassland; Cold Coombes is a large site adjacent to Kingston Escarpment and Iford Hill SSSI, which contains patches of species-rich chalk grassland. Coombe Farm consists of grazed chalk grassland, with notable species including Common-spotted Orchid and Chalk-hill Blue; Cowley Drive Paddocks is a

substantial area of chalk grassland with notable species including Strawberry Clover and Red Star Thistle; Halcombe Farm is an area of species-rich chalk grassland and scrub on a south-facing slope. Meadow Clary and Common Gromwell are recorded from the site; Happy Valley supports a range of habitats including woodland, scrub and chalk grassland; High Hill Pasture supports an area of ancient, species-rich chalk grassland; Kingston Escarpment is adjacent to Kingston Escarpment and Iford Hill SSSI, and contains species-rich chalk grassland, as well as areas of acid grassland. Species of interest include Fragrant Orchid and Hariy Rock-cress; Looes Barn Woodland is an area of scrub and woodland noted for its breeding birds including a specially protected species; Loose Bottom consists of two small areas of unimproved grassland with species such as Horseshoe Vetch and Burnet Rose; Mount Pleasant, Ovingdean contains ancient species-rich chalk grassland; Newhaven Cliffs is adjacent to Brighton to Newhaven Cliffs SSSI. Sand and clay overlying the chalk results in a more neutral or acid sward, with species such as Hairy Sedge and Lesser Hawkbit; Ovingdean Road Horse Paddocks is important as it supports a large population of a nationally rare species; Peacehaven Grasslands-Site 1 is a strip of north-facing unimproved chalk grassland, with a diverse flora and a number of butterflies; Peacehaven Grasslands-Site 2 is a long strip of south-facing species-rich grassland, which has degraded somewhat due to a lack of management; Peacehaven Grasslands-Site 5 is a small remnant of chalk grassland on a north facing hill side. There is a good array of calcareous species, and a number of invertebrates including Chalk-hill Blue; Quarry Field is species-rich chalk grassland with a small, disused quarry in the centre of the site. Species of interest include Fragrant Orchid, Autumn Gentian and Chalk-hill Blue; Roedean School Bank supports an area of chalk grassland with species such as Wild Thyme and Pyramidal Orchid; Sheepcote Valley is a large area of chalk grassland with areas of scrub increasing habitat diversity; St Wulfrans Woods; Whiteway Lane contains a mosaic of chalk grassland and scrub, which provides good bird nesting habitat; Wilson Avenue is important as a buffer of semi-natural habitat to the adjacent LNR; Wivelsfield Road Grassland is species-rich chalk grassland; Woodingdean Cemetery is of biodiversity importance, being semi-natural woodland which is uncommon in this part of Brighton and Hove; Woodvale, Extra-mural and Downs Cemeteries contain a diversity of habitats including mature trees, dense scrub, relict chalk grassland and a pond.

Archaeology: There are several Scheduled Ancient Monuments in this area including the Whitehawk Camp causewayed enclosure, a Romano-British settlement at Highdale Hill, the Castle Hill earthworks, and many barrows and cross dykes. Beacon Hill LNR has areas of archaeology and Rottingdean Windmill and Whitehawk Hill LNR contains a Neolithic causeway.

Targets:
Chalk grassland restoration and promotion of farming practices that are sympathetic to arable plants and birds.

BAP Species: 96 BAP Species have been recorded in this Biodiversity Target Area

08:44 Lewes Brooks & Ouse Valley

At the North of this area lies the local Nature Reserve Lewes Railway Lands. To the East lies Lewes Brooks, an area of wet grassland, some of which is managed by RSPB. Further South the Ouse is heavily embanked, which is currently protecting freshwater habitats in a tidal floodplain. The area around Itford has good ditch ecology being particularly rich in Dragonflies.

Joint Character Area: South Downs.

Geology: Lewes Brooks and the Ouse Valley BTA sits on chalk with an area of gault formation mudstone in the north of the area.

Biodiversity:

- Most of this BTA is within Sussex Downs AONB.
- A majority of the northern part of the area is in the Lewes Brooks SSSI which was designated for its mosaic of ditch networks, which vary in salinity so support a rich diversity of invertebrates, of particular note are the variety of water beetles and also several rare molluscs.
- At the south end of the area there are two SNCIs; Tide Mills SNCI is a saltmarsh area with a creek which is an important feeding ground for wading birds and wildfowl, the SNCI also has a vegetated shingle beach and a chalk embankment which supports a variety of common downland plants. There is also an uncultivated field there which supports ground-nesting birds, such as Redshank and Ringed-Plover. Newhaven Refuse Tip SNCI is an area of distrubed ground, with meadows and brackish ditches which support several saltmarsh plant species. The disturbed area is a mosaic of habitats and supports several rare plant species.

Archaeology: There are no Scheduled Ancient Monuments in this area.

Targets:

Expansion of wetland habitats, reedbed and grazing marsh. Investigation of potential for river restoration.

BAP Species: 56 BAP Species have been recorded in this Biodiversity Target Area

08:45 Seaford to Eastbourne Downs

To the centre of the area lies the main tidal reaches of the Cuckmere river including one of the only non-embanked tidal sections of the river. Investigations are currently underway into the potential to restore the estuary of the Cuckmere river to its historic course. The existing estuary with its associated coastal habitats is already an important route for migrating birds.

This area is an important and iconic coastal site with its Chalk platform (heritage coast), Chalk cliffs, Vegetated shingle, Saline lagoons and Saltmarsh (all at Seven Sisters Country Park).

The downland on either side of the Cuckmere has lowland calcareous grassland scattered through it and is bounded to the West by the Ouse and to the East by Eastbourne. The Chalk Geology dictates the Northern Boundary of this site.

Joint Character Area: South Downs.

Geology: Seaford to Eastbourne Downs BTA lies on chalk (Seaford Newhaven, Holywell, zigzag and Lewes).

Biodiversity:

- The majority of this BTA lies within Sussex Downs AONB.
- Lullington Heath NNR and SSSI is contained in the BTA. This site contains both chalk grassland and chalk heath with a diverse flora including Salad Burnet, Basil-thyme and Burnt Orchid. Areas of scrub, which are predominantly gorse are valuable for breeding birds including Nightingale, and the grassland supports chalk grassland butterflies such as Silver-spotted Skipper. There are also two dew ponds on the site which increase the habitat diversity.
- The BTA includes five other SSSIs: Firle Escarpment an extensive stretch of chalk grassland which includes several rare species such as Felwort, Clove Pink and Early Spider Orchid; Folkington Reservoir is a covered reservoir whose banks support a rich chalk grassland flora with abundant orchids. The site is the only known locality in the county for Hairy Mallow; Seaford to Beachy Head which supports chalk grassland, chalk heath, chalk cliffs and Greensand reef (which also has geological interest). The site has large areas of chalk foreshore with interesting algal and invertebrate communities, and the lagoon system created by the Greensand reef contains several species rare for the region; Wilingdon Down is an area of species-rich chalk grassland on steep slopes at the eastern end of the South Downs. There is a good representative flora including Round-headed Rampion and Burnt Orchid; Wilmington Downs contains species-rich chalk grassland with species such as Salad Burnet, Chalk Milkwort and Round-headed Rampion. The site contains several rare and notable invertebrates, and a significant number of lichens and mosses including the country's only known location of one rare moss.
- Seaford Head LNR includes unimproved chalk grassland, scrub, maritime cliff slope, vegetated shingle, saltmarsh, a pond and a wave-cut platform.
- Seven Sisters Country Park is a large site with a range of habitat including saline lagoon and downland. Uncommon species include Early Spider Orchid.

- There are 17 SNCIs: Beddingham Hill is the upper part of a small coombe containing species rich chalk grassland, and the rare moss *Cryphaea heteromalla* is reported on site; Bishopstone Downs consists of two blocks of chalk grassland, with a neutral influence in places. The site is known to support the nationally notable Large Robber Fly; Blackcap Farm consists of several areas of unimproved grassland, and several scarce Coleoptera have been recorded on site; Blackstone Down is an extensive escarpment, and whilst there is much dense scrub and Tor Grass, areas of species-rich chalk grassland and chalk heath persist. Notable species on site include Large Thyme, Round-headed Rampion and Common Spotted Orchid; Blatchington Reservoir supports species rich calcareous grassland around the sides and top of the reservoir, including a variety of grasses, Common Centaury and a population of Bee Orchid; Cranedown and Middle Brow adjoins Wilmington Downs SSSI with notable species including Chalk Milkwort, Autumn Lady's Tresses and Bastard Toadflax; Denton Hill Downs consists of three north-facing downs with a calcareous and neutral sward. Species of interest include Autumn Lady's Tresses, Chalk Milkwort and Horseshoe Vetch; France and Short Bottom is made up of three areas of grassland currently dominated by Tor Grass. Much of the area is species poor, however there are patches of species such as Common Rock-rose and Round-headed Rampion; Friston Forest is a large Beech and Pine plantation, which although reasonably species poor contains some important plants, including Yellow Bird's-nest and Pheasant's-eye. The woodland rides provide habitat for many Lepidoptera including Clouded Magpie moth, and the site is significant for beetles. There is also a heronry, and several dew ponds support a Great Crested Newt population; Highwood Meadows consists of two small unimproved fields of a calcareous and neutral nature. Adders have been recorded on the site and a dead Grey Long-eared bat was found outside the house adjacent to these fields in 1996; Red Lion Down consists of herb-rich grassland adjacent to Firle Escarpment SSSI, with a range of chalk and neutral flora including Fairy Flax and Lady's Bedstraw. The site is reported to hold good numbers of Fragrant Orchid; Seaford Head occurs on the western side of Beachy Head and consists of unimproved chalk grassland with some ranker areas. Species of interest include Early Dog-violet and Clustered Bell-flower; Tarring Neville Downs is an extensive area of downland of variable quality. Species of note include Bastard Toadflax and Autumn Lady's Tresses; Tilton Down; Well Bottom is a shallow coombe of calcareous and neutral grassland, with the nationally scarce Chalk Hill Eyebright believed to occur on the site; Wilingdon and Home Bottom are two areas of chalk grassland of variable quality. Species found include Clustered Bellflower, Mouse-ear Hawkweed and Common Milkwort; Wilmington Down, Deep Dean and Ewe Dean Fragments consists of three, varied areas of chalk grassland, separated by and adjacent to Wilmington Downs SSSI.

Archaeology:

There are many Scheduled Ancient Monuments in this area, mostly comprised of barrows, including bowl, round, long and saucer barrows. Itford Hill Settlement and Pook's Dyke, and Hill fort and barrows at Seaford Head in the western side of the area and cross dykes, flint mines, barrows, a Neolithic causewayed enclosure, many field systems, the barracks at Cuckmere Haven and a camp near Belle Tout lighthouse.

Targets:

Restoration and expansion of reedbed networks. Enhancement of spring fed meadows, fen and grazing marsh. River rehabilitation and restoration with associated tidal habitats.

Chalk Grassland restoration on the Downs and the promotion of sympathetic land management on the arable and pasture of the Downland landscape.

BAP Species: 105 BAP Species have been recorded in this Biodiversity Target Area

08:46 Lewes Downs

The Lewes Downs covers the Sussex Wildlife Trust Reserves of Malling Down and Southerham as well as the National Nature Reserve of Mount Caburn. The internationally recognised area is famed for its species rich chalk grassland. The area has been extended north to follow the geological extent of the chalk, and to the west and South is bordered by roads and the urban edge of Lewes.

Joint Character Area: South Downs.

Geology: Lewes Downs BTA sits on chalk.

Biodiversity:

- This BTA is within Sussex Downs AONB
- Lewes Downs is an isolated block of species-rich chalk grassland with an important assemblage of rare and scarce orchids including Burnt Orchid and Musk Orchid. This has resulted in its designation as an SAC, in addition to being a NNR and a SSSI. The site is also important for its rich invertebrate fauna and an important breeding community of downland birds including Corn Bunting and Grasshopper Warbler.
- Two SSSIs Southerham Machine Bottom Pit and Southerham Works Pit are important for the diversity of fossil fishes found.
- Cuilfail Down and Southerham Farm SNCI is a series of unimproved grasslands on steep slopes on the East Sussex Downs, with species such as Squinancywort, Dwarf Thistle and Marjoram.

Archaeology: There are several Scheduled Ancient Monuments in this area, including barrows, a hill fort, an entrenchment and a Medieval settlement.

Targets:

Chalk grassland restoration and sensitive and management with particular concern for arable bird species.

BAP Species: 45 BAP Species have been recorded in this Biodiversity Target Area

08:47 Mid Ouse Floodzone

This area, upstream of Lewes is severely affected by flooding. The Ouse is heavily embanked here with some historic meanders still evident in the landscape. The area is agricultural with some existing wet grassland.

Joint Character Area: Low weald.

Geology: Mid Ouse Floodzone BTA lies on Weald clay mudstone, sandstone, siltstone and mudstone to the north with chalk and marly chalk influence in the south.

Biodiversity:

- Offham Marshes SSSI is an alluvial grazing marsh which supports large amphibian populations, and several scarce dragonflies, beetles and flies.
- There are four SNCIs: Barcombe Reservoir is a large fresh water body on which 150 bird species have been recorded including rare species such as Osprey and Slavonian Grebe; Disused Railway Line, South Malling contains chalk grassland with scattered scrub which makes it good invertebrate habitat, and the site is known to be of interest for hoverflies; Marshy Fields and Lake by Wellingham Farm consists of a lake and a series of fields with drains. The fields support marshy grassland used by wading birds; St Peter's Old Church is an unimproved grassland site with a number of grasses and sedges. Herbs are also diverse including Pepper Saxifrage and Lady's Bedstraw, and gravestones provide good lichen habitat.

Archaeology: There are no Scheduled Ancient Monuments in this area.

Targets:
Potential for large scale river, reedbed, grazing marsh and wetland restoration, and for enhanced use of floodplain to store floodwater threatening Lewes.

BAP Species: 44 BAP Species have been recorded in this Biodiversity Target Area

08:48 Western Ouse Streams and Ashdown Forest

The north of the area is dominated by the European protected heathland, Ashdown Forest, which consists of a matrix of open heath, ancient woodland, ghyll woodland and wetlands. The southern part of the area captures the eastern Ouse and its headwaters, south towards the confluence with the River Uck. In the southern area smaller patches of heathland exist alongside many ponds and modern wood pasture. The area is an important watershed between the Medway and Ouse systems and is likely to be important for the migration of key species between catchments.

Joint Character Area: High Weald and Low Weald.

Geology: Western Ouse Streams and Ashdown Forest BTA lies on interbedded sandstone and siltstone.

Biodiversity:

- Much of the BTA lies within High Weald AONB and the site contains Forest Way Country Park; a linear park which forms an important green lane, and Old Lodge LNR.
- The BTA includes the Ashdown Forest, designated as an SAC, SPA and SSSI. Ashdown Forest is one of the largest single continuous blocks of heathland, semi-natural woodland and valley bog in the region. Alongside typical heathland species are less common species such as Petty Whin and Ivy-leaved Bell Flower, and aquatic habitats on the site provide habitat for a range of invertebrates including many uncommon beetles, moths and butterflies. There are also large populations of reptiles and heath nesting birds including Curlew and Nightjar.
- There are 13 SNCIs within this BTA: Brown Knoll Farm Meadow is unimproved acid grassland at the edge of Ashdown Forest, supporting a rich plant community; Courtland Wood is an ancient woodland dominated by Oak over Hazel. The canopy is reasonably dense resulting in a less rich ground flora, however there are numerous bryophytes along a small stream that bisects the site; Piltdown Common is a mosaic of heathland, grassland, scrub and woodland. There is also a large pond which is good for water beetles and Common Toad; Butchers Wood is an ancient woodland consisting of Hazel coppice and Oak, with a large population of Wild Daffodil. Along the stream boundary, sandstone outcrops have a good bryophyte assemblage including several rare species; Hugget's Wood and The Toll is a small woodland on either side of a shallow valley, consisting mainly of Hornbeam and Hazel coppice. Wetter areas contain Alder and Opposite-leaved Golden Saxifrage; the land at Isfield Church consists of rush pasture crossed by several shallow drains. There is an area of wet woodland containing Marsh Marigold and Black Poplar, and the whole site is rich in fungi; Lake Wood is an ancient woodland site surrounding a large boating lake. The site is typical Wealden woodland, and supports a diverse bird population and Dormouse. The lake is bordered by sandstone outcrops and several rare lichens and bryophytes can be found. There is also a small cave which is used as a bat hibernaculum; Pound and Furzefield Wood consists of Furzefield Wood, primarily a Pine plantation, and Pound Wood, believed to be ancient in origin. Pound Wood in particular supports less common species including Adder's Tongue and Silver-washed Fritillary; Sheffield Forest Complex is a large woodland managed for commercial forestry. The site does however contain specialised Atlantic bryophytes and ferns, as well as a number of ghylls cut into the sandstone; Sheffield

Park Garden contains a mosaic of habitats and retains many features of ancient pasture-woodland. There are many ancient Oak, Ash, Sweet Chestnuts and Beech (including pollards), and these support important communities of lichens, bryophytes and invertebrates; Shortbridge Stream Meadow is part of a series of fields along Shortbridge Stream. The site consists of an area of marshy grassland and swamp with species such as Sneezewort and Gypsywort; Stephens Farm Meadow is an unimproved damp grassland site containing species such as Sneezewort and Devil's-bit Scabious. There is a small pond in the meadow and a stream-fed lake with diverse vegetation and a large number of frogs; Wapsbourne Wood is an area of ancient woodland predominantly containing over-grown Sweet Chestnut. The ground flora is quite sparse however there is a patch of the uncommon Solomon's-seal and a number of ancient woodland indicators.

Archaeology:
There are numerous Scheduled Ancient Monuments in the Ashdown Forest part of this area. Brown Knoll Farm Meadow has ridge and furrow across the upper slopes, which remains from traditional ploughing in the middle ages. The land at Isfield Church was the original location of Isfield and the earthworks of an 11th Century motte and bailey are still visible. Sheffield Park Garden was landscaped by "Capability" Brown during the 18th Century.

Targets:
There are opportunities within this area for large scale floodplain woodland, floodplain meadow and river restoration. The water quality of headstreams and tributaries could also benefit from stream restoration and increased woody cover. Heathland maintenance and restoration, and wetland creation against a backdrop of high visitor pressure are also options. Enhancement of habitat for key heathland species and expansion of hedgerow networks is also important.

BAP Species: 103 BAP Species have been recorded in this Biodiversity Target Area

08:49 River Uck and its Headwaters

Uckfield is a town that has suffered extreme flood-events in recent years, and this area is considered important for flood-alleviation. The area itself whilst containing many tributaries of the River Uck and has a scattering of ancient woodland, ghyll woodlands and lowland meadows. The River Uck passes through the urban area of Uckfield and through the agricultural land of the Low Weald until the confluence with the River Ouse north of Lewes.

Joint Character Area: High weald and low weald.

Geology: River Uck and its Headwaters lie on siltstone, mudstone and sandstone. There are various superficial deposits of clay, silt, sand and gravel in the river valley.

Biodiversity:

- The eastern side of the BTA is within High Weald AONB.
- There are two SSSIs within the BTA: Buxted Park is an old deer park consisting of a variety of unimproved communities with parkland trees and areas of woodland. The grassland is of an acidic nature with species such as Heath Bedstraw and Hairy Sedge. In addition there are areas of marshy grassland, fen communities, and neutral grassland. The park is found to be exceptional for invertebrates especially beetles and flies which thrive on the marshlands, riverbanks and deadwood; Stockland Farm Meadows consists of two grazed meadows and a hay field on Wadhurst clay. Over 80 plant species have been recorded including Pepper-saxifrage and Cowslip, and a small pond provides additional interest with five amphibian species present.
- There are five SNCIs within the BTA: Cantersand Meadows includes two meadows with a typical neutral community including Oxeye Daisy and Sweet Vernal-grass moving to a more acidic area with Tormentil and Devil's-bit Scabious. There is also an area of species-rich gill woodland with abundant bryophyte interest; Hadlow Down Churchyard supports species-rich grassland including large patches of acid grassland and heather. The churchyard also has several Yews which appear to be of considerable age; Popeswood Marsh is probably a unique example of this habitat type within the county. The site consists of the flushed central slopes with species such as Common Yellow Sedge (*C. Demissa*), Marsh Pennywort and high bryophyte cover. The presence of Bog Pimpernel is also of interest; the Southern Part of Hadlow Deep Wood is predominated by old Hornbeam coppice, with areas of Ash and Oak. A stream crosses through the woodland, and the sides are botanically rich with species such as Wood Sorrel and Yellow Archangel. The presence of a heronry adds to the interest of this site; Wildings and Scolcus Wood Complex is a large area of ancient woodland with Sweet Chestnut, Birch and Oak amongst the dominant species. There are numerous streams crossing the site, which have a rich bryophyte and lichen flora, and patches of Opposite-leaved Golden-saxifrage.

Archaeology: Buxted Park SSSI has evidence of ridge and furrow from cultivation. There a few Scheduled Ancient Monuments in the area, mostly related to Medieval features and there is evidence of iron working in more recent centuries.

Targets:
Wetland creation, river restoration and rehabilitation, lowland and floodplain meadow creation, expansion of hedgerow networks and floodplain woodland creation.

BAP Species: 30 BAP Species have been recorded in this Biodiversity Target Area

08:50 Cuckmere Ouse Watershed

This area is dominated to the southeast by the SSSI of Arlington Reservoir. The rest of the area is included for its role as a watershed between the Cuckmere and Ouse rivers. It is comprised of Low Weald agricultural land with streams and a small ancient woodlands. There are opportunities for river rehabilitation on the Cuckmere river within this section.

Joint Character Area: Low Weald.

Geology: The Cuckmere Ouse Watershed lies on Weald clay and gault formation mudstone with a vein of lower greensand sandstone.

Biodiversity:

- Arlington Reservoir is both a SSSI and LNR, and is an important ornithological site, particularly for wintering birds.
- The BTA contains Ludlay Coppice SNCI, a small woodland dominated by Hazel coppice with Oak and Ash standards. There ground flora includes occasional ancient woodland indicators such as Moschatel, Primrose and Yellow Pimpernel.

Archaeology: There are no Scheduled Ancient Monuments in this area.

Targets:

Sympathetic land management of an important watershed. Expansion of shaw and hedgerow networks. River rehabilitation along Cuckmere river.

BAP Species: 16 BAP Species have been recorded in this Biodiversity Target Area

08:51 Wilmington Woodlands and Watershed

This area traverses the Pevensey and Cuckmere watershed and includes a large ancient woodland of Abbots & Wilmington Wood which dominates the south. To the east the area is bounded by the A22 yet follows a small stream connecting the area to Pevensey Levels. Other small ancient woodlands exist within the area, as well as modern wood pasture.

Joint Character Area: Low Weald.

Geology: Wilmington Woodlands and Watershed BTA lies on Weald clay mudstone with claystone.

Biodiversity:
There are four SNCIs within this BTA: Abbots and Wilmington Woods is a plantation consisting mostly of Oak, Corsican Pine and Hemlock. Amongst the ground flora, the nationally rare Spiked Rampion can be found. The woods also used to be an important site for Lepidoptera, however the interest has diminished significantly although with appropriate management it may be possible to restore some of this interest; Beatons Wood is a typical example of a Wealden Bluebell wood with dominant species Ash, Oak, Birch and Hornbeam. Large carpets of the usually western Wood-sorrel can be found in some areas, and two ponds are present which are known to support all three species of newt; Bramble Grove is a small woodland which contains ancient boundary features including a bank and ditch system, and green lane. Small-leaved Lime can be found at the site, along with a good ground flora including Wood Melick and Wood Millet; Michelham Priory is important in terms of its wildlife, history and archaeology. The moat supports particularly good habitat with diverse aquatic and marginal vegetation, and the site as a whole supports many species of Odonata, birds and lichens.

Archaeology: There are two Scheduled Ancient Monuments in this area: Michelham Priory and the Medieval Farmstead at Downash.

Targets:
Sympathetic land management to enhance biodiversity value of existing habitats of value. Expansion of hedgerow networks from existing woodland areas and an increase in area of high value habitats. Some potential to restore and rehabilitate watercourses and to restore wetlands for improved water quality.

BAP Species: 14 BAP Species have been recorded in this Biodiversity Target Area

08:52 Eastbourne Brooks

This wetland area is confined by the urban extent of Eastbourne. The area comprises open water, reedbed and wet grassland.

Joint Character Area: Low Weald and Pevensey Levels.

Geology: The Eastbourne Downs BTA lies mainly on mudstone and sandstone, with an area of chalk to the south.

Biodiversity:
There are no designated sites within this BTA.

Archaeology: There are no Scheduled Ancient Monuments in this area.

Targets:
Wetland habitat restoration appropriate to heavy visitor pressure. Expansion and improvement of Sustainable Urban Drainage (SUDS) function of area.

BAP Species: 22 BAP Species have been recorded in this Biodiversity Target Area

08:53 Pevensey Levels

Pevensey Levels is a site of international importance for its wetland ecology that is badly afflicted by the invasive aquatic weed, floating pennywort.

Joint Character Area: Pevensey Levels

Geology: Pevensey Levels BTA lies on siltstone, mudstone and sandstone.

Biodiversity:

- Pevensey Levels represents one of the largest and least fragmented lowland wet grassland systems in the region. The low lying grazing meadows are intersected by a complex system of ditches which support a variety of important wetland communities. As such the site is designated a Ramsar site, NNR and SSSI. There are many rare, vulnerable or endangered invertebrates including the Fen Raft Spider, and the site is the only known British site for some species. There is also an important assemblage of breeding and wintering birds including Lapwing and Yellow Wagtail.
- There are four SNCIs within the BTA: Cooden Cliffs consists of low, steep clay cliffs with patches of fine grassland and some maritime species including Thrift and Sea Lavender; Langney Levels consists of a network of drainage channels within a field system, with the most mature field having a typical neutral flora such as Meadow Barley and Crested Dog's-tail. The site has potential for a good aquatic invertebrate community; Shingle Beach at Norman's Bay comprises shingle flora on the top of the beach and herb-rich grassland on the landward slopes; Sovereign Harbour Beach retains some of the plant species and habitat which once existed extensively over the shingle system of the Crumbles, including typical shingle species such as Sea Fern-grass and Yellow Horned-poppy.

Archaeology: There are two Scheduled Ancient Monuments within this area, one is a Medieval moated site and the other is the remains of Northeye Village.

Targets

A strategy for floating Pennywort will be published at the end of 2008, which may guide work on this site. Without consideration of the Pennywort problem, wetland restoration work will be limited in its success. Ditch restoration in the areas not affected by the invasive weed would be to benefit aquatic macrophytes, the fen raft spider and BAP molluscs.

BAP Species: 39 BAP Species have been recorded in this Biodiversity Target Area

08:54 Medway, Ouse and Rother Watershed

The Ouse, Rother and Medway headwaters all meet in this area of small ancient woodlands and ghyll woodlands. To the east the ancient woodland sits on heathland. There is a high density of ponds in the eastern area. This watershed between three catchments could have an important role to play in the migration of key species between river catchments.

Joint Character Area: High Weald.

Geology: The Medway, Ouse and Rother Watershed BTA lies on sandstone, siltstone and mudstone.

Biodiversity:

- The entire BTA is within High Weald AONB
- There are three SNCIs within the BTA: Colesgrove Wood Complex is a block of ancient woodland adjacent to Nap Wood SSSI. Most of the site consists of Sweet Chestnut coppice with some Birch and Hornbeam. The site also contains several derelict ponds and a small area of grassland with species such as Sneezewort, Upright Hedge-parsley and Wild Angelica; Entryhill Wood Complex is a large site consisting of a variety of woodland including Oak and Ash over Hazel, Sweet Chestnut coppice and conifers. The site includes several wooded stream valleys with banks rich in flora, bryophytes and ferns; Lakestreet Wood and Devil's Gill consists of two small ancient woodlands and a number of ponds. Storm damage has left numerous clearings and the damp areas have favoured flora such as Ragged-Robin and Perforate St-John's-wort.

Archaeology: There are no Scheduled Ancient Monuments in this area.

Targets:

Heathland restoration and possible woodland restoration. There will be opportunities to enhance quality of the ponds in the eastern parts of the area. Rehabilitation and re-naturalisation of headstreams and watercourses, along with the extension of shaw and hedgerow networks will be important.

BAP Species: 18 BAP Species have been recorded in this Biodiversity Target Area

08:55 Eridge and Broadwater

The southern part of the area is dominated by Eridge Park SSSI containing modern and medieval wood pasture. The Sussex Wildlife Trust reserve of Eridge Rocks containing sandstone outcrops rich in bryophytes and lichens is adjacent to the SSSI. Adjacent to the SWT Reserve, the RSPB reserve of Broadwater Forest (at the north of the BTA) has extensive heathland restoration taking place. Woodland management in the form of Rhododendron clearance is an important aspect of woodland restoration in this part of Sussex. There is a Woodland Trust reserve in the northeast of the area called Hargate Forest.

Joint Character Area: High Weald.

Geology: Eridge and Broadwater BTA lies on sandstone (lower Tunbridge Wells), siltstone and mudstone.

Biodiversity:
The far south of the BTA is within High Weald AONB. Eridge Park SSSI is within the BTA. The site consists of parkland and ancient woodland, containing one of the richest epiphytic lichen floras of any park in Britain. There are also diverse communities of invertebrates and birds, and the remnants of a dry heath community.

Archaeology: There are two Scheduled Ancient Monuments in this area: High Rocks Camp and Hill fort & 19th Century Folly on Saxonbury Hill.

Targets
Rhododendron management, heathland restoration and management at the sandstone outcrops for cryptograms.

BAP Species : 57 BAP Species have been recorded in this Biodiversity Target Area

08:56 Pevensey, Rother & Cuckmere Watershed

In this area three Sussex catchments meet. In the agricultural landscape several small ancient woodlands are found, including Ghyll Woodlands. A heathland remnant is all that remains of a once more heathy landscape as demonstrated by the first epoch maps.

Joint Character Area: High Weald.

Geology: Pevensey, Rother, Cuckmere Watershed BTA lies on sandstone, siltstone and mudstone.

Biodiversity:

- The BTA is within High Weald AONB.
- There are three SNCIs within the BTA: **Dabchick Cottage Meadow and Woodland** runs alongside Wilingford Stream with Willow and Alder frequent over a mixture of fen vegetation and the ground is carpeted with Sphagnum moss in parts; **Fosters Meadow** is a small neutral grassland surrounded by tall hedges. The site supports a good population of Common Twayblade with occasional Common Spotted Orchid; **Three Cups Corner Meadow** consists of acid grassland with a spring in the centre of the field giving rise to a boggy flush. There is a rich plant community including Bog Pimpernel, Bog Asphodel and Common Cotton-grass. The site is also of importance of birds.

Archaeology: There is one Scheduled Ancient Monument in this area, which is Holy Trinity Priory.

Targets:
Sympathetic land management is important in such a watershed

BAP Species: 12 BAP Species have been recorded in this Biodiversity Target Area

08:57 Romney Marsh Area

This part of Sussex is very heavily designated for its wildlife value, with extensive SSSIs, LNRs and County Wildlife Sites. It also contains sites of international importance for wildlife. The main habitat features of this area have a maritime influence and include vegetated shingle, reedbed, mudflat and saltmarsh, saline lagoons and grazing marsh. These features have made the area extremely important for birds (wintering, breeding and non-breeding). The area is bounded by the sea to the south, the Royal Military Canal to the west and the A259 to the north-east. The area is a stronghold for Water voles in the County as well as hosting a large number of rare plants. There is a Sussex Wildlife Trust reserve, Castle Water, in the centre of the area which is an important site for reedbed species, including Bittern.

To the far south-west this area extends along it's SSSI beach to Hastings Country Park, managed as a LNR by Hastings Borough Council. The Country Park boasts extensive soft cliffs which provide a unique habitat, most notably for invertebrates and vegetation.

Joint Character Area: Romney Marsh.

Geology: BTA RX lies mostly on Hastings sandstone, siltstone and mudstone, with extensive beach and tidal flat deposits of clay, silt, sand and gravel.

Biodiversity:

- The western end of the BTA is within High Weald AONB
- Dungeness to Pett Level SPA is designated on a count of its international importance for migratory birds. The site supports a number of Annex I species including Marsh Harrier, Peregrine Falcon and Aquatic Warbler.
- Dungeness is the UK's largest shingle structure and retains large areas of intact parallel ridges with characteristic vegetation zonation. In addition to this there are areas of saltmarsh, freshwater marsh, open water and grassland, and as such it is designated as a SAC containing Dungeness SSSI, Rye Harbour SSSI and Rye Harbour LNR. In addition to the vegetation communities present, the site also has a large Great Crested Newt population and supports nationally important communities of plants, birds and invertebrates, including rare species such as the endangered Least Lettuce. The site is of international importance for coastal geomorphology.
- Hastings Cliffs are an area of actively eroding soft cliff that includes the most southerly exposures of the lower Hastings Beds. The site is designated as a SAC for its vegetated sea cliffs, and encompasses the Hastings Cliff to Pett Beach SSSI and Hastings Country Park LNR. A number of habitats are represented including woodland, predominantly ancient in origin, maritime grassland and vegetated shingle, and there are several rare lichens, bryophytes, Coleoptera and vascular plants including Sea Pea and Yellow Vetch. The site is also important for its geological and fossil interest.
- Dungeness, Romney Marsh and Rye Bay SSSI contains a mosaic of important habitats including saline lagoons, sand dunes, vegetated shingle, standing water and basin fens. The lowland ditch systems support Water Vole, and the site is regularly used by at least 40 birds typical of shingle beaches and saltmarshes. The site is also notable for its invertebrate assemblage and its populations of Great Crested Newt.
- Fairlight Country Park is within the BTA.

- There are three SNCIs within the BTA: Camber Sands is the only extensive area of sand dunes in East Sussex, and the SNCI accounts for two small areas not designated SSSI. The site also contains a small area of vegetated shingle; Pett Levels, west of the Royal Military Canal includes two areas of ditch systems which are rich in aquatic and marginal vegetation. There are also two lengths of old sea cliff, which are mostly now wooded; Shingle Beach, Dog's Hill contains extensive mats of the notable Sea Pea, and retains some relict ridge structure;

Archaeology: Hastings Country Park LNR has the remains of an Iron Age cliff castle situated on the East Hill. There are three Scheduled Ancient Monuments, the Royal Military Canal, a Martello Tower and Camber Castle.

Targets:
Wetland habitat creation and restoration of previous arable land at Hastings Country Park. Working with landowners to improve conditions for Water voles.

BAP Species: 144 BAP Species have been recorded in this Biodiversity Target Area

08:58 Coombe Haven and Marline

This target area contains Filsham Reedbeds (the largest reedbed in Sussex and a Sussex Wildlife Trust reserve) and also Combe Haven SSSI. To the north of Filsham reedbed lies a large expanse of fen, reedbed and wet woodland, and within the SSSI there are existing areas of farmland with high value for wildlife (fen, woodland etc).

Around the SSSI lies agricultural land rich in arable plants with a scattering of ancient woodlands. To the north-east the area extends in to two extensive ancient woodlands; Marline Valley (also an SWT Reserve) and Queens Wood which extends in to the urban area of Hastings.

Joint Character Area: High Weald.

Geology: Combe Haven and Marline BTA lies on geology of sandstone (Lower Tunbridge Wells), siltstone and mudstone.

Biodiversity:

- There are two SSSIs within the BTA: Combe Haven is an extensive site with a variety of habitats including alluvial meadows, drainage ditches and ancient woodlands. Several uncommon species prevail on the site including Marsh Violet, Hairy Dragonfly and Variable Damselfly. The site also contains Filsham Reedbed LNR; Marline Valley Woods SSSI is a substantial area of ancient woodland on Wadhurst Clay and Lower Tunbridge Wells sandstone dominated by a nationally uncommon woodland type. The presence of a ghyll adds to the interest of the site, containing 61 species of bryophyte. This site also contains Marline Wood/Valley LNR.
- The BTA contains five SNCIs: Disused Railway, Bexhill contains a variety of habitats including woodland, scrub and tall herbs. Scrubby areas are important for birds and the area presents an important corridor. Combe Wood is particularly species rich, containing 32 ancient woodland indicators; Disused Railway, Crowhurst includes woodland, species-rich grassland and two disused pits. Patches of calcareous grassland occur with species found including Wild Carrot and Pyramidal Orchid; Old Filsham Golf Course is an area of semi-improved grassland with developing scrub, and a mosaic of wetter habitats including reedbed. The site is integral to an overall network of habitats in the local area; Wishing Tree consists of a reservoir with marginal vegetation, and semi-natural woodlands and meadows. The habitat matrix found here makes this site significant in the Borough; Woodland Complex at Buckholt Farm consists of several ancient woodlands predominantly Hornbeam coppice with Oak, Ash, Birch and Sweet Chestnut. There are several derelict ponds around the site, and bisecting streams are lined with Alders and many bryophytes.

Archaeology: There are no Scheduled Ancient Monuments in this area.

Targets:

Reedbed creation, floodplain, wetland and river rehabilitation and restoration, woodland management and re-creation/regeneration (including floodplain woodland).

BAP Species: 50 BAP Species have been recorded in this Biodiversity Target Area

08:59 Rother, Brede and Tillingham Woods

The River Rother floodzone is an area that is rich in opportunity for wetland restoration. However its tributaries and those of the Brede and Tillingham flow through the heavily wooded landscape of the high Weald. Much of this landscape is being looked at in great detail by the Rother Woods Project, where the important butterfly populations of the area are being conserved by a woodland management approach. The woodlands that are selected in this target area are considered priorities for biodiversity action. Also within this area are many lowland meadows, which have been surveyed by the Weald Meadows Initaitive based at the High Weald AONB Unit.

Joint Character Area: High weald and Romney marsh.

Geology: Rother, Brede and Tillingham Woods BTA lies on sandstones, siltstones and mudstones of the Ashdown Beds.

Biodiversity:

- Some of this BTA is within the High Weald AONB.
- There are two SSSIs in the BTA: Dallington Forest is an area of ancient woodland with steep sided ghyll that supports a rich Atlantic flora including Wood Fescue Grass and Cornish Moneywort. A meadow to the north of the site has species characteristic of wetter areas such as Ragged-Robin and Meadowsweet; Wilingford Meadows consists of a series of unimproved meadows, with the geology of the site presenting a mosaic of calcareous, acid and neutral grassland types. Notable species include Adder's-tongue Fern, Green-winged Orchid and Dwarf Thistle.
- There are seven SNCIs withing the BTA: Blackbrooks comprises of a mosaic of woodland communities, with both ancient woodland and conifer plantation present. The woodland is reportedly a site for the rare Coral-root Bittercross and Thin-spiked Wood Sedge; Brede Valley consists of a plain with an extensive ditch system which supports a great diversity of submerged, floating and emergent aquatic plants. The site is important for birds particularly warblers, and the invertebrate community includes many nationally scare species; Chantry, Lordine and Wattshill Woods are three contiguous woodlands along a stream valley, dominated by mature Hornbeam coppice and Oak, as well as areas of Sweet Chestnut coppice. The richest ground flora can be found in rides with species such as Yellow Pimpernel and Early Purple Orchid; Clay, Ten Acre and Newbridge Wood consists predominantly of neglected Hornbeam and Hazel Coppice, with an area of Small-leaved Lime found which indicates the ancient origin of the site; Green Wood is a large area of ancient woodland with Oak and Beech coppice occurring throughout. The ground flora is variable with numerous ferns in the several stream valleys on site; Henhurst Farm Woodland and Meadows includes semi-improved fields with a moderate species assemblage including Common Twayblade. There are also wooded stream valleys, shaws and copses which all appear ancient in origin; Powdermill Reservoir, Brede High Woods and Hurst Wood Complex includes the reservoir, which is used by numerous bird species, and surrounding woodlands. Large areas of Brede High Woods have been coniferised, with other areas being of a more mixed composition including Hornbeam, Alder and Oak. Dodder and Greater Broomrape have been recorded in the past as well as 33 butterfly species including Grizzled Skipper and Pearl-bordered

Fritillary. Areas of Hurst Wood Complex contain a diverse ground flora including Yellow Archangel and Wood Anemone.

Archaeology: There are several Scheduled Ancient Monuments in this area; Robertsbridge Abbey, Romano-British sites at Bodiam Bridge, Bodiam castle with associated earthworks, crofts and millpond, as well as a WW2 pillbox and the Ashburnham iron furnace site which is in the west of the area.

Targets:
Woodland management, with a particular emphasis on butterfly conservation. Lowland meadow restoration and wetland restoration and creation.

South East England Biodiversity Forum

08:60 Burgess Hill Green Crescent

The Burgess Hill Green Crescent is the urban Greenspace around the North, West and South the conurbation of Burgess Hill as defined by Mid Sussex District Council. It is managed by a large and active community group, formally friends of Bedelands Farm.

Joint Character Area: Low Weald

Biodiversity:
Bedelands Farm, in the North East of the site is an SNCI, with grassland and woodland around the urban fringe

Targets:
Community involvement is key to this area and the targets include improvement of the quality of the existing semi natural habitat in particular the Grasslands, woodland and streams

South East England Biodiversity Forum

08:61 Lower Cuckmere Reaches

Surrounded by Downland and met by the Seven Sisters chalk cliffs this BTA. Much of the land in the East of this BTA is owned by the BNational Trust. The area consists of aged Victorian embankments, holding back the River Cuckmere off its flooplain. A recent decision by the Environment Agency to reduce the coastal sea defences in the South of this BTA will lewad to the development of floodplain grazing marsh, mud flat and salt marsh in this area with discussions around the re-instatement of old meanders still to be completed. As the River meets the Coast there is a large Saline Lagoon and some vegetated shingle. The soft Cliffs of Seven sisters and the famous, littoral chalk platform are a habitat characteristic of this iconic stretch of coastline

Joint Character Area: South Downs

Biodiversity:
This BTA is entirely within the Seaford to Beachy Head SSSI and the Seaford Head LNR is also within this BTA

Targets:
This BTA will in time show the development of Grazing Marsh, floodplain and Saltmarsh. The Saline Lagoon and Vegetated shingle may well change in character as the marine influence of the site increases.

08:62 Grattons Park

Grattons Park is a historic park, with remenants of wood pasture. It is in Crawley, disceted by a major road and to the West bordered by the railway line.

Joint Character Area: High Weald

Biodiversity:
The Target Area contains Grattons Park Local Nature Reserve and an SNCI

Targets:
Restoration of pasture Parkland, Woodland lake and grassland management.

08:63 Ardingly Reservoir

This area contains not just Ardingly Reservoir, a large water body in the heart of the High Weald, but also much of the surrounding Woodlands. In the North East of the site lies the National Trust Property of Wakehurst Place, famed for, amongst other things, its rich cryptogram diversity on its sandstone outcrops. These are included in the Francis Rose Nature Reserve.

Joint Character Area: High Weald

Biodiversity:
Ardingly Reservoir sist within the Ardingly Valley Local Nature Reserve with the Wakehurst and Chiddingly SSSI in the North East of the Area.

Targets:
Woodland mosaic management for the continued benefit of Biodiversity

08:64 Lidsey Rife

Lidsey Rife is an area of flooplain North East of Bognor consisting of flooplain grazing marsh and arable land. The area is of particular note for birds.

Joint Character Area: Coastal Plain

Biodiversity:
There are no designated or County sites in this area, but some existing Floodplain Grassland

Targets:
Management of the didtches to ensure a good wetland flora and improved condition of floodplain grazing marsh

08:65 Bewl Water

This reservoir is the largest expanse of open water in Sussex. It is situated partly within Rother District, Wealden District and Kent. It was created by damming a water course, the River Bewl and flooding its three main tributary stream valleys.

Joint Character Area: High Weald

Biodiversity:
This body of inland water is an extremely important for large numbers of waders and wildfowl during the winter and as a stopping point during migration. The Sussex Ornithological Society have recorded an amazing variety of bird species here. A total of 171 recorded species includes rare visitors such as Great Northern Diver, Smew, Black-winged Stilt, and Grey Phalarope and high wintering numbers of Great Crested Grebe, Little Grebe, Cormorant, Wigeon and Teal. Great Crested Grebe and Common Tern breed here and there are usually good numbers of migrating waders such as Spotted Redshank, Greenshank, Wood Sandpiper and Common Sandpiper. Ospreys occur here throughout the summer. The reservoir also provides habitat for dragonflies. 20 species are regularly recorded here, which constitutes over half of the number of British species. Golden-Ringed, Hairy and Downy Emerald Dragonflies can be found here; species which are not widespread in Sussex. Another particularly notable species is the Black Darter and the Beautiful Demoiselle is also regularly recorded here.

The reservoir is used for water sports and fishing. This means that there is considerable human activity on the water creating disturbance to the birdlife, especially during the summer months. In recognition of this, the lower section of one of the arms of the reservoir has been declared a Nature Reserve. This area is closed off to sports and fishing.

The whole BTA is within the Bewl Water Reservoir SNCI.

Targets:
Continued management of the water body to enhance Wildlife

08:66 Western Rother

The site consists of the River Rother, several of its tributaries, and adjoining areas of woodland, carr, marshy grassland and rough pasture. Local variations in the river and its vegetation occur as it flows east from the Hampshire border to its confluence with the Arun near Pulborough. This variation, and the quality of the adjoining habitats, makes the site extremely important for wildlife.

Joint Character Area: Low Weald

Biodiversity:
Many of the wet woodlands along the Rother are of great botanical interest, supporting the uncommon Alternative-leaved Golden-saxifrage (*Chrysosplenium alternifolium*) and Large Bitter-cress (*Cardamine amara*). Its streams are generally dominated by Alder, with marshy vegetation. Several are important mollusc sites.

The rich fauna includes breeding Grey Wagtail and Kingfisher, fish such as Brown Trout, Grayling, Perch, Stone Loach and Minnow, and both Banded and Beautiful Demoiselle damselflies.

The whole of this stretch of the Rother is an SNCI and the BTA extends into the floodplain of the river to embrace wet woodlands, and floodplain grassland

Targets:
Wet woodland creation, floodplain Grassland creation and management. Erosioon is a big problem along the Rother due to the sandy nature of the substrate. Erosion prevention meanures are important here.

08:67 Copthorne Common

The site is located on the southern edge of Copthorne. It comprises two contiguous areas of common land, the larger of which is managed as a golf course, but still has valuable areas of semi-natural habitat. The main interest of the site is its heathland, but it also has a mosaic of grassland types and areas of woodland.

Joint Character Area: High Weald

Biodiversity:
Most of the common is a golf course, with closely-mown fairways often demarcated by areas of mixed woodland. However, the main interest of the site is its fragmented heathland, which is probably a remnant of the original flora. It often forms a mosaic with acid grassland.

The remaining areas are either grassland or are wooded. The fairways are generally reseeded and heavily mown, so are herb-poor, but rougher grassland has a variety of herbs and sedges, including scattered heathland species.

A large proportion of the site is SNCI, but this BTA extends South to include areas of Ancient Woodland.

Targets:
Heathland management should have the highest priority. Care should be taken to avoid contamination with fertilisers used on the greens, to avoid mowing and prevent encroachment by scrub or Bracken. The heath component may be increased by spreading Heather seed. Intensive management should be confined to greens and reseeded fairways.

08:68 Great Wood Area

Great Wood is an Ancient Woodland Site managed by the Forestry Commission. The Woodland itself contains classic Ghyll streams. The BTA extends South towards Telham Hill. This BTA was proposed by the High Weald Unit.

Joint Character Area: High Weald

Biodiversity:
The area is of interest in particular for butterflies.

Targets:
Woodland ride management. Hedgerow restoration and grassland management.

08:69 Hastings Fringe

This target area skirt across the North of the conurbation of Hastings and contains many small woodlands, areas of grassland and a r density of headgerows. The poteThere are also several Ghyll Woodlands, classic of this area of Sussex, that cross the BTA. Their Atlandtic Flora making this habitat

Joint Character Area: High Weald

Biodiversity:
There are numerous SNCIs within this Target Area and one SSSI

Targets:
The target in this area should be around linking existing woodland patches and establishing wildlife Corridors through the area and then linking these into the urban environment of Hastings.

08:70 Bexhill Fringe

Skirting the urban area of Bexhill and bringing together two catchments this area is made up of predominantly woodland and agricultural land. The area is rich in hedgerows.

Joint Character Area: High Weald

Biodiversity:
Woodland and grassland species

Targets:
The target in this area should be around linking existing woodland patches and establishing wildlife Corridors through the area and then linking these into the urban environment of Bexhill.

08:71 Cuckoo Trail Habitat Link

Most of the Cuckoo trail is in the ownership of Wealden District Council or East Sussex County Council.

Joint Character Area: High Weald

Biodiversity:
A habitat management plan has been prepared fro most of the Cuckoo Trail and is being implemented by WDC and ESCC. Cuckoo Trail rangers are employed by ESCC to manage this narrow linear Country Park for leisure and wildlife. The Cuckoo Trail passes through two major towns and penetrates a third urban area. It has important benefits for urban wildlife and also for the northward migration of species responding to global climate change. The use of the Cuckoo trail to enhance networks of natural habitats is supportable in the light of planning policy and guidance. It will, be particularly important in the conservation and enhancement of wildlife habitats in the area between Hailsham and Polegate.

Targets:
Linking and enhancement of existing habitats along the course of the trail. Community involvement would be a benefit.

08:72 Heathfield Habitat Link

One issue that the Cuckoo Trail faces, as a habitat link for the northward migration of species in response to climate change, is that the old railway line enters a tunnel just South of Heathfield High Street and emerges the other side of the town. It is therefore necessary to look at the options for continuing the habitat links to the East and West of Heathfield.

Joint Character Area
High Weald

Biodiversity
The Link to the West passes from the Cuckoo Trail, through the adjacent Lower Theobalds Farm (which has been proposed by its owner as a possible new SNCI) and through an area rich in ancient woodland to the South and West of Heathfield. The 1.3-hectare Heathfield Jubilee Park forms part of this link, is owned by the Town Council and is currently managed for wildlife conservation and leisure. The link then passes through the large area of ancient woodland known as Tilsmore Wood, lying to the North-West of Heathfield, and rejoins the Cuckoo Trail to the North of the town. Areas of Tilsmore Road have been under recent management to restore heathland in this large area of mostly Plantations on Ancient Woodland Sites (PAWS) woodland.

The proposed Habitat Target Link to the East of Heathfield links the Cuckoo Trails to Heathfield Park SSSI passing to the North and East of Horam and through Sapperton Wood (a large semi-natural ancient woodland). Heathfield Park is an SNCI with open parkland, veteran trees, ancient semi-natural woodland unimproved pasture. The Park is a large area that dominates the geography of East Heathfield &, together with habitats in Old Heathfield, forms an excellent core for a Habitat Target Link to the East of Heathfield. Aggregations of mostly ancient semi-natural woodlands to the North of Heathfield Park complete the link with the Cuckoo Trail across the A265.

Targets
The habitats of this target area are a mosaic and the sympathetic management of this mosaic is the primary target of the area. Increasing the ‘permeability’ of the landscape for Wildlife.

08:73 Pevensey and Cuckmere Valley Link

This Target area straddles the cuckoo trail and is an area in which may enhancements for wildlife are possible, amongst, the woodlands, streams and small developments of this area of Sussex.

Joint Character Area
High Weald

Biodiversity
A report on the Habits Corridors at North Hailsham/Hellingly was compiled by Ann Hillman in 2003. Mrs Hillman is a licensed bat worker and now Parish Tree Warden. Since the compilation of that report planning permissions and appeals decisions have laid down a strong pattern for development and open spaces for biodiversity conservation in this locality. This Biodiversity Target Area includes land on four major development sites to the West and North-West of Hailsham including one that has already been built, one under construction and two in the early phases of preparation for construction following grants of planning permission. All of these sites have important biodiversity areas and native planting built into them that will contribute to this link between the Pevensey Levels Ramsar site and the Cuckmere Valley. Such areas may have biodiversity value in their own right but their value will be increased considerably when they are connected to major natural networks like the Cuckoo Trail and the Cuckmere Valley.

There is an SNCI in the North East of this site.

Targets
Habitat connectivity and enhancement of the existing biodiversity is the main target ofg this area. Creative ways to encourage wildlife would be useful to ensure that developments take place with biodiversity in mind.

08:74 Cuckmere Habitat Link

This target area follows the mid reaches of the Cuckmere, eastward towards the Pevensey catchment. It covers the natural floodplain of the river.

Joint Character Area
High Weald

Biodiversity
The River Cuckmere is defined as main river by the Environment Agency. They have a duty to conserve and enhance the rivers environment under the various Water Acts and also a duty to have regard to the purposes of biodiversity conservation under the NERC Act. It is therefore likely that this important habitat will be subject to river management that takes biodiversity into consideration. Taking this into account, and considering the North-South orientation of this target area, it is likely that the River Cuckmere will be proved to be an important habitat corridor for the movement of wildlife in response to climate change. This habitat links the South Downs Target Areas, through the proposed Pevensey and Cuckmere Valley Link, with the internationally important Pevensey Levels wetland. At some point in the future the Lower Cuckmere Valley may become a new wetland, likely to be of at least national importance. The two important wetlands of Pevensey and Lower Cuckmere will then have a freshwater/wetland network link (as well as the marine link that already exists)

Targets
River corridor restoration, by liaison with individual landowners and piecemeal management changes along the river would see the biodiversity of this target area enhanced.

08:75 Wooton Manor Grasslands Link

This small Target are has several small Ancient Wodlands/Shaws within it, but is predominantly composed of agricultural land and some hedgerows.

Joint Character Area
High Weald

Biodiversity
Some of the park in this BTA appears to be well-established meadow that is likely to provide a good opportunity to link the Seaford to Eastbourne Downs and the Wilmington Woodlands and Watershed Target areas. Small, scattered ancient woodlands and ditches with a network of ancient hedges augment the habitat links

Targets
Creating woodland and hedgerow linkages across this agricultural area, enhancing and creating meadows.