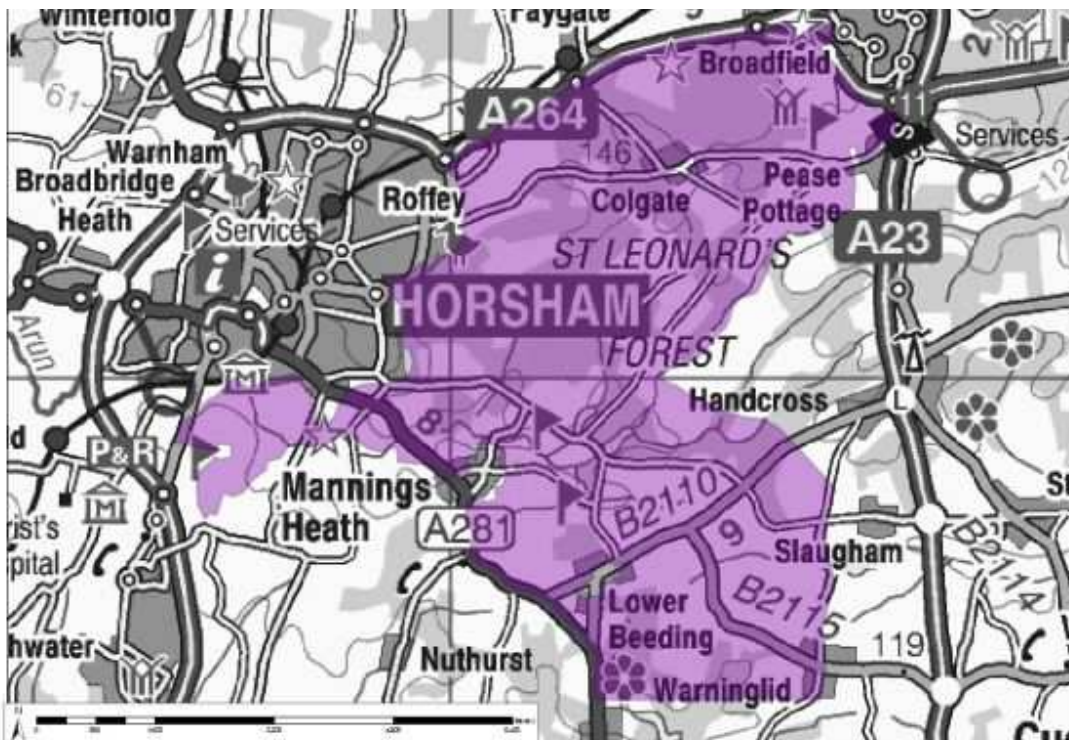


The St Leonards watershed Biodiversity Opportunity Area

Joint Character Area High Weald and Low Weald

Geology The BOA lies on Weald clay, sandstone and siltstone interbedded, and mudstone in the northern section.



The Biodiversity Opportunity Areas (BOAs) are the regional priority areas of opportunity for restoration and creation of Biodiversity Action Plan (BAP) habitats. They are a spatial representation of BAP targets and are areas of opportunity, not constraint. The BOAs are the property of the South East England Biodiversity Forum www.sebiodiversity.org.uk. Contains Ordnance Survey data Crown copyright and database right 2010

The St Leonards watershed has been recognised as a Biodiversity Opportunity Area (BOA) as it represents a priority area for the delivery of Biodiversity Action Plan (BAP) targets. It is one of 75 such areas across Sussex. The BOA covers approximately 4057 hectares.

This BOA is bordered to the north by the road 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. Gill streams in this BOA are the source of the River Arun, with the River Ouse also arising in this BOA. The southern area is in the watershed of the River Adur, with the northern area in the River Mole watershed. To the west the area extends to the urban fringe of Crawley, enclosing Buchan Country Park and more centrally St Leonards Forest. Heathland and woodland comprise the principle priority interest of the north of this site with the watershed of the three tributaries, woodland, wood-pasture and parkland, and a landscape rich in species-rich hedgerows to the south.

BAP Habitat

Lowland heathland including wet and dry communities

Species-rich hedgerows providing connectivity through the landscape

Species-rich ponds and fringing wetland habitats with good dragonfly representation

Wood-pasture and Parkland including ancient parkland trees with good lichen communities

Woodland including areas with relict Atlantic flora and important communities of bryophytes and woodland birds

BAP Species 92 species recorded, with the following in the last ten years:

Species	Habitat Requirements
Grey Dagger <i>Acronicta psi</i>	Hedgerows, parks, woods and gardens, Hawthorn and Blackthorn
Knot Grass <i>Acronicta rumicis</i>	Meadows, gardens and hedgerows, larvae feed on a range of herbs
Beaded Chestnut <i>Agrochola lychnidis</i>	Woodland rides, scrub, hedgerows and open country
Green-brindled Crescent <i>Allophyes oxyacanthae</i>	Woodlands, hedgerows and gardens, larvae feed on a number of trees and bushes including Hawthorn and Blackthorn
European Eel <i>Anguilla anguilla</i>	Sea, freshwater rivers, eutrophic standing waters, moderate water quality
Slow-worm <i>Anguis fragilis</i>	Open habitats, gardens, heathland, cliff, mixed deciduous woodland, structural variation
Tree Pipit <i>Anthus trivialis</i>	Newly planted conifers or open heath, mixed deciduous woodland
Dusky Brocade <i>Apamea remissa</i>	Woodland, marsh, chalk and other grassland
Deep-brown Dart <i>Aporophyla lutulenta</i>	Chalk grassland and moorland
European Water Vole <i>Arvicola terrestris</i>	Rivers, ponds, canals and drainage ditches, reedbeds, fens, grazing marsh, banks, slow-flowing waters
Centre-barred Sallow <i>Atethmia centrugo</i>	Woodland and hedgerows, larvae feed on Ash and Sallow
Common Toad <i>Bufo bufo</i>	Scrub, rough grassland, fens, reedbed and wet woodland, dense ground vegetation or litter, ponds, large water bodies
Nightjar <i>Caprimulgus europaeus</i>	Heathland, moorland, open woodland, recently felled conifer plantations, mosaic of bare ground, low vegetation, scrub and trees
Mottled Rustic <i>Caradrina morpheus</i>	Suburban areas, Nettle and Dandelion
Lesser Redpoll <i>Carduelis cabaret</i>	birch and alder woods, most common in the north in the summer
Small Heath <i>Coenonympha pamphilus</i>	Dry grassland, heathlands, short turf, parks and gardens
Small Square-spot <i>Diarsia rubi</i>	Prefers damp and marshy places
Small Phoenix <i>Ecliptopera silaceata</i>	Woodland, open habitats including commons and gardens, willowherbs
Reed Bunting <i>Emberiza schoeniclus</i>	Wetlands including reedbeds, tall rushes and wet grassland with good vegetation cover, gardens, farmland, hedgerows, ditches
Dusky Thorn <i>Ennomos fuscantaria</i>	Woodland, parkland, Ash
Hedgehog <i>Erinaceus</i>	Woodland, farmland, urban areas, hedgerows

<i>europaeus</i>	
Eyebright <i>Euphrasia pseudokernerii</i>	Unimproved species-rich calcareous grassland, open sward
Ghost Moth <i>Hepialus humuli</i>	Grassy areas, hillsides, waste ground
Rustic <i>Hoplodrina blanda</i>	Gardens, grassland and heathland, docks, plantains
Juniper <i>Juniperus communis</i>	Chalk grassland, heathland, maritime cliffs, exposed areas, rocky slopes, unshaded locations
White Admiral <i>Limenitis camilla</i>	Woodlands, sunny glades, Bramble, Honeysuckle, partially-shaded locations
Wood Lark <i>Lullula arborea</i>	Heathland, woodland, mosaic of scattered trees, bare ground, short vegetation and taller vegetation, open seed-rich areas
Marsh Clubmoss <i>Lycopodiella inundata</i>	Bare, trampled, poached ground, damp but not wet, peaty or sandy margins of lakes, pools, flushes and tracks
V-Moth <i>Macaria wauaria</i>	Gardens, allotments, <i>Ribes</i> species.
Dot Moth <i>Melanchra persicariae</i>	Gardens, verges, waste ground
Broom Moth <i>Melanchra pisi</i>	Open woodland, shrub, heathland, Broom, Bracken
Bastard Balm <i>Melittis melissophyllum</i>	Woodland edges, scrub edge, hedgebanks, high humidity, partial shade
Rosy Minor <i>Mesoligia literosa</i>	Grasslands particularly in coastal areas
Bechstein's Bat <i>Myotis bechsteinii</i>	Closed canopy woodland, wooded streams, hedgerows
Shoulder-striped Wainscot <i>Mythimna comma</i>	Gardens, damp habitats, marshes and fens, Cock's-foot.
Grass Snake <i>Natrix natrix</i>	Water, reedbed, ponds, heathland, grazing marsh, gardens, fish, amphibians
Tree Sparrow <i>Passer montanus</i>	Farmland, woodland edges, hedgerows with mature trees, wetland edges
Wood Warbler <i>Phylloscopus sibilatrix</i>	Mixed deciduous woodland, even age-canopy, little understorey, patchy ground cover
Pillwort <i>Pilularia globulifera</i>	Beside still or slowly flowing non-calcareous water, heathland, sometimes a submerged aquatic
Grizzled Skipper <i>Pyrgus malvae</i>	Grassland, quarries, embankments, woodland rides, larvae feed on Agrimony and <i>Potentilla</i> species, requires warmth and shelter
Shaded Broad-bar <i>Scotopteryx chenopodiata</i>	Chalk grassland and a range of open habitats, larvae feed on vetch and clover
White Ermine <i>Spilosoma lubricipeda</i>	Gardens and hedgerows
Buff Ermine <i>Spilosoma luteum</i>	Woodland, parks and gardens
Brown Hairstreak <i>Thecla betulae</i>	Hedgerow - blackthorn
Feathered Gothic <i>Tholera decimalis</i>	Rough grassland and downland, larvae feed on grass blades
Blood-Vein <i>Timandra comae</i>	Gardens, fields and waste ground
Turtle Dove <i>Streptopelia turtur</i>	Woodland edges, hedgerows and open land with scattered bushes
Cinnabar <i>Tyria jacobaeae</i>	Meadows, wasteland, road verges and downland
Adder <i>Vipera berus</i>	Open heathland, woodland and moors, fens, cliff
Oak Hook-tip <i>Watsonalla binaria</i>	Oak woodland and parkland, larvae feed on oak
Common Lizard <i>Zootoca</i>	Open woodland, moorland, heathland, fens, sand dunes, rocks,

Invasive Non-native Species 13 species recorded, with the following in the last ten years

Red Valerian *Centranthus ruber*
New Zealand Pigmyweed *Crassula helmsii*
Nuttall's Waterweed *Elodea nuttallii*
Japanese Knotweed *Fallopia japonica*
Shallon *Gaultheria shallon*
Harlequin Ladybird *Harmonia axyridis*
Giant Hogweed *Heracleum mantegazzianum*
Himalayan Balsam *Impatiens glandulifera*
American Mink *Mustela vison*
Winter Heliotrope *Petasites fragrans*
Cherry Laurel *Prunus laurocerasus*
Rhododendron *Rhododendron ponticum*
False-acacia *Robinia pseudoacacia*

Designated Sites

Buchan Hill Ponds SSSI 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 SSSI 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 SSSI consists of species-rich ponds and fringing vegetation. There are a number of uncommon bryophytes and a wide range of dragonflies.

Buchan Country Park SNCI an area of woodland with an increasing area of heathland, a small meadow and three large lakes. Ivyleaved Bellflower and Wild Daffodil can be found as well as some uncommon moths and rare dragonflies, including Brilliant Emerald.

Leechpool and Owlbeech Woods SNCI is a large area of woodland consisting mainly of Oak and Beech, with a large area of heathland following clearance of most of 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 SNCI 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 SSSI 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.

Opportunities Identified

- Heathland management, restoration and creation
- Woodland management and restoration, including gill woodland
- Meadow management, restoration and creation
- Pond management, restoration and creation
- Education and community engagement, including links to health
- Control of non-native invasive species - Rhododendron, Bracken and Cherry Laurel
- Landowner advisory and agri-environment schemes
- Exploring markets for natural products
- Sensitive management to protect tributaries of the Adur, Arun, Mole and Ouse rivers
- Development of a local grazing scheme
- Identification and protection of archaeological features such as minepits, trackways and boundaries

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