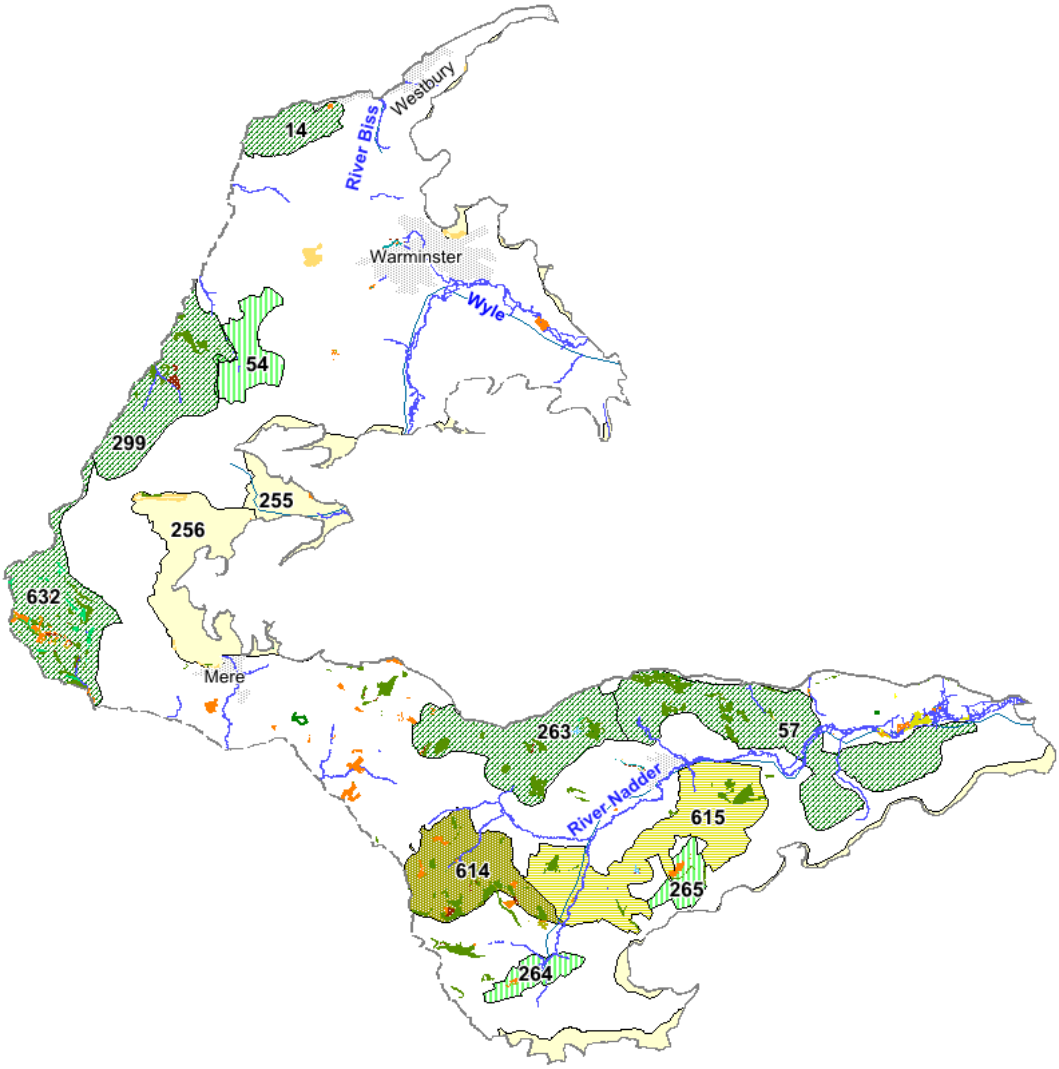
Area 10 - Warminster and the Vale of Wardour



Strategic Nature Areas by Main Habitat

- Chalk Downland
- Coastal and Floodplain Grazing Marsh
- Limestone Grassland
- Neutral Grassland
- Neutral Grassland and Woodland
- River
- Woodland
- Woodland and Chalk Downland
- Woodland and Neutral Grassland

Priority Habitats

- Lowland mixed deciduous woodland
- Lowland meadows
- Rivers
- Lowland calcareous grassland
- Wet woodland
- Purple moor-grass and rush pastures
- Lowland fens/Coastal and floodplain grazing marsh
- Eutrophic standing waters
- Lowland beech and yew woodland
- Lowland fens
- Lowland wood-pasture and parkland
- Lowland meadows/Coastal and floodplain grazing marsh
- Lowland dry acid grassland
- Coastal and floodplain grazing marsh

Figure 12: Warminster and the Vale of Wardour Landscape Biodiversity Area indicating priority habitats and the labelled, numbered Strategic Nature Areas within this Area.

4.10.1 Area Profile

National Character Areas –Blackmoor Vale and Vale of Wardour (133), little bit of Avon Vale (117)
Landscape Character Types – Greensand Terrace (6), Wooded Greensand Hills (7), Wooded Clay Vale (13), small area of Wooded Downland (2)

Landscape Character Areas – Fovant Terrace (6C), Donhead-Fovant Greensand Hills (7B), The Vale of Wardour (13A), Longleat-Stourhead Greensand Hills (7A), Kilmington Terrace (6B), West Wiltshire Downs Wooded Downland (2E), Warminster Terrace (6A).
AONBs – Cranborne Chase and West Wiltshire Downs AONB
Related BAPs – Center Parcs BAPs
Strategic Nature Areas – There are 12 SNAs in Area 10, as well as three rivers: the Biss, the Nadder and the Wyle. See here for SNA targets.
Geology – This Area represents a mosaic of underlying geology with Upper Greensands predominantly around the Warminster area, whilst the valleys of the south are dominated by Kimmeridge and Gault Clays. An area of Purbeck & Portland stone is present to the north of the River Nadder.
Community Area Boards – South West Wiltshire Area Board, Warminster, and Westbury

4.10.2 Background

The Warminster and Vale of Wardour Landscape Biodiversity Area encompasses a geologically and ecologically diverse corner of Wiltshire. Situated in the southeast corner of Wiltshire, the Vale of Wardour is an area of clay vale and wooded hills that contrasts greatly with the adjoining areas of open chalk downland to the north and east. The River Nadder, which runs northeast from Donhead St Mary towards Salisbury, and the River Wyle, which runs along the base of the Salisbury Plain escarpment to the north, form two of five chalk rivers which meet at Salisbury to form the Salisbury Avon and are designated as part of the Salisbury Avon SAC. Their clean waters are home to native brown trout, whilst lowland meadows and areas of purple moor grass and rush pasture can be found closely associated along their course.

Valley floors are composed of alluvium deposits from the rivers and these areas have been utilised as meadows, small pasture fields and arable land with hedgerows and mature trees. Alongside the alluvium deposits, sand and clay deposits overlie the chalk bedrock giving rise to a variety of soil types ranging from acid through to basic, which contrast greatly with the more or less homogenous chalk soils associated with the surrounding West Wiltshire Downs. This range of soil types supports a diverse mix of associated habitat types including wet woodland, conifer woodlands, and both neutral and calcareous grasslands. Sizeable patches of lowland mixed deciduous woodland are present, with extensive areas of ancient woodland types located around Longleat, Dilton Marsh and Stourton to the west and the Fonthill area to the east. The woodlands provide a rich habitat with a mix of native woodland species such as oak, filed maple and ash, as well as alder in the damper areas. The woodland floors have a rich flora of vascular plants, as well as exceptional communities of bryophytes and lichens in the wetter woodlands such as Bradley Woods SSSI.

A significant area of Purbeck and Portland stone is found in the Area north of the Nadder and this has led to the siting of over fifty stone quarries around the areas of Dinton, Teffont Eavis and Chilmark. Today many of these quarries represent important sites for wildlife such as Chilmark Quarries which has been designated a Special Area of Conservation for its importance as a hibernation site for protected species of bats including Greater and Lesser horseshoes, Barbastelles and Bechstein's.

4.10.3 Priority Habitats

Priority Habitats	Area (ha)
Lowland mixed deciduous woodland	593.09
Lowland meadows	168.13
Lowland calcareous grassland	79.02
Rivers	65.39
Lowland beech and yew woodland	38.94
Wet woodland	38.86
Coastal and floodplain grazing marsh	27.44
Purple moor-grass and rush pastures	23.85
Lowland meadows/Coastal and floodplain grazing marsh	10.44
Lowland fens	9.95
Eutrophic standing waters	5.7
Lowland fens/Coastal and floodplain grazing marsh	0.5
Lowland wood-pasture and parkland	0.33
Lowland dry acid grassland	0.05
Total	**1061.69**

4.10.4 Priorities and opportunities for conservation

1. **Woodland**
    - Lowland mixed deciduous woodland
    - Bats
2. **Woodland and neutral grassland**
    - Neutral grassland
3. **Neutral Grassland**
    - Unimproved neutral grassland
4. **Chalk Downland**
    - Lowland calcareous grassland and butterflies
5. **Rivers**
    - Chalk Rivers

1. Woodland –SNAs 14, 299, 632, 263, 57,

Lowland mixed deciduous woodland – SNAs 299, 632, 14, 263

Lowland mixed deciduous woodland represents the most abundant priority habitat in Area 10 with a significant tract of woodland, containing both ancient and wet woodland types, running in the clay vale along the county boundary from Longleat in the north to Stourton on the Somerset border. These woodlands are an important feature for climate change adaptation of woodland species, forming a continuous tract of habitat in which species can migrate in response to changing conditions. The unfavourable condition of some woodland sites in this area is the result of a lack of woodland management, high deer grazing pressure and presence of exotic species such as laurel and rhododendron. Priorities for woodland in this area include:

- Secure the favourable management of woodland sites, in particular ancient woodland sites, to promote age and structural diversity.
- Buffer ancient woodland sites with appropriate new woodland planting
- Maintain and improve connectivity between ancient woodland sites through hedgerow and woodland planting, and integrate them into the wider landscape
- Implement appropriate deer management strategies to promote natural regeneration of woodland, ground flora and coppice.

Existing projects and initiatives

- **Cranborne Chase and West Wiltshire Downs AONB** – The AONB is a protected landscape where work is determined by a statutory management plan. In line with the governments England Biodiversity Strategy Delivery Plan, AONB partnerships must integrate action to encourage and support new and existing large scale initiatives to improved ecological networks across the Area of Outstanding Natural Beauty (AONB) landscapes.
- **The Cranborne Chase Ancient Woodland Project** aims to link up, extend and improve areas of ancient semi-natural woodland within the AONB via improved woodland management and the planting native woodland species in strategically important areas. This integrated project aims to deliver benefits for both the priority semi-natural woodlands and also for those using this important resource.
- Opportunities exist in this Area to engage with the Selwood Living Landscape project across the Somerset border which encompasses the old hunting forest of Selwood from Frome in the north to Wincanton in the south. This project aims to restore and reconnect the landscape of Selwood, a connected patchwork of small hay meadows and pastures, ancient woodland, species rich hedgerows, ponds and the headwater streams of the Rivers Brue and Frome. By incorporating lessons learnt from this project we will be better equipped to implement similar, integrated woodland projects in West Wiltshire.

Bats

Several important sites for bats are present within Area 10 including Chilmark Quarries SAC, a disused quarry and cave system that is an important hibernation site for several rare species of bats including: Greater and Lesser Horseshoes, Barbastelle, and the largest known over-wintering site of Bechstein's bats in Britain. There have been significant issues relating to access at this site and the long-term safeguard of the hibernacula requires preventing the collapse of the underground voids and restricting unauthorised access and disturbance. It is important to work with owners of disused stone mines and quarries to create suitable hibernation and roosting sites for bats. The mosaic of woodland, grassland and open water provide valuable roosting sites for bats and link with similarly suitable habitats in Dorset, Somerset and west Wiltshire to extend foraging and commuting routes across the Wessex region. Priorities for bats include:

- Identifying and mapping important roosting sites and foraging grounds for the rarest species
- Achieve favourable condition of important hibernation sites by
- Maintaining mature and veteran trees, particularly those known to be used for roosting
- Identifying and favourably managing the next generation of mature / veteran trees

- Managing existing hedgerows and woodland used for foraging and commuting routes
- Hedgerow planting and woodland creation to improve connectivity between key roosting / foraging sites
- Maintaining the important mosaic of woodland, grassland and open water habitats which help support such a rich diversity of bat species

Existing projects and initiatives

- **West Wiltshire 'Batscapes' project** - West Wiltshire has been recognised as a key area for bats and via projects such as the proposed Wiltshire Batscapes Project, efforts are planned to improve habitats for bats in west Wiltshire and increase the level of bat monitoring. The aim is to take a strategic view of bat conservation across the area and, although not within a target HLS area, this project will help farmers within the Batscapes project area into Entry Level stewardships and, in the case of exceptional farms, Higher Level stewardship, where opportunities exist on these farms to enhance habitat for bats.

2. Woodland and Neutral grassland – SNA 614, 615

Scattered woodlands are found throughout the Vale of Wardour, alongside neutral grassland and lowland meadows on the river valley of the River Nadder In the clay vales, along the valley floor and in close association to the River Nadder system from Fovant east to Fonthill and Donhead St Mary, are areas of lowland meadow and wet woodland priority habitat. This mosaic of woodland and grassland supports a wide variety of bird, bat and invertebrate species.

- Maximise the biodiversity of woodland edge habitats with headlands of unimproved grassland and scattered scrub
- Maintain and extend the mosaic of woodland and neutral meadows through the application of agi-environment schemes to enhance existing sites and identify potential areas for reversion.

3. Neutral Grassland – SNAs: 265, 264, 54

Unimproved neutral grassland

In the clay vales, along the valley floors and in close association with the headwaters and course of the river system, are areas of lowland meadow and wetland habitats including fens. Areas of lowland meadow can be found in close proximity to the waterways in the headwaters of the River Nadder near Donhead St Mary and Antsy, and in the southwest of the county around Mere. Meanwhile areas of unimproved neutral grassland are also found within the Longleat estate, in close association with both broadleaved and coniferous woodlands. Neutral grassland sites are vulnerable to development and agricultural improvement. Sites are generally small and fragmented and although some have been afforded County Wildlife Site status, few are covered by any statutory designations. Many of these sites are at risk of agricultural improvement, development and neglect (scrub encroachment). Priorities for this habitat include:

- Informing landowners and managers where they own / manage important neutral meadow sites

- Identify clusters of neutral grassland sites and target action on areas within and between cluster areas to act as steeping stones
- Protect and secure favourable management of known neutral meadows
- Restore degraded meadows using seed of local provenance
- Enlarge existing neutral sites through habitat creation

4. Chalk downland – SNAs 256 & 255

Lowland calcareous grassland and butterflies

The area of lowland calcareous grassland in this Area 10 is a fraction of that in the adjoining Cranborne and West Wiltshire Downs Landscape Biodiversity Area, with the main concentrations restricted to the fringes of the West Wiltshire Downs around the Deverills. Invertebrate species, including a number of rare and charismatic chalk downland butterflies, occur here and these are particularly vulnerable to habitat fragmentation exacerbated by unfavourable land management, habitat loss and the effects of climate change. There is a need to expand and connect these areas of calcareous grassland to allow the movement of species in response to climate change and increase their resilience to environmental stressors The quality of existing semi-natural habitat needs to be improved where this is unfavourable and opportunities taken to strengthen the network of calcareous grassland sites through habitat creation and enhancement. Priorities for calcareous grassland in Area 10 are:

- Target arable land on chalk soils in the Stepping Stones and Wiltshire Chalk Country project areas for reversion to chalk grassland
- Use relevant options in Environmental Stewardship to implement / increase grazing on under-grazed calcareous grassland sites
- Increase the resilience of known populations by improving habitat quality at existing key butterfly sites.
- Link known colonies through arable reversion and creation of chalk grassland corridors and stepping stones.
- Co-ordinate survey and monitoring of key species

Existing projects and initiatives

- The '**Stepping Stones'** project is a partnership project between the North Wessex Downs AONBs, Cranborne chase and West Wiltshire Downs AONB, Natural England and the Wildlife Trust. The project seeks to restore the connectivity and quality of chalk habitats using butterfly populations as indicators of habitat connectivity. The project has compiled detailed habitat data for over 125,000 hectares, representing the majority of the Wiltshire chalk landscape stretching from Calne and Marlborough in the north to Mere and Salisbury in the south. The project has established the degree of isolation of priority grassland sites by modelling existing ecological networks, it has used these modelled networks to Identify opportunity areas for increasing priority grassland connectivity, and has demonstrate how this model and associated datasets can be used to help target management and restoration on the ground within priority areas.

- **Agri-environment schemes** – The area of chalk downland between Warminster, Tisbury and Mere falls within the Salisbury Plain and West Wiltshire Downs Higher Level Stewardship (HLS) Target Area. This represents an area where Natural England wishes to focus delivery of HLS to maximise environmental outcomes and value for money. This area includes important areas of chalk downland, species-rich grasslands, wetlands and woodlands. These habitats support a range of key species including butterflies, farmland birds and bats which rely on the presence of woodland, permanent pasture and hedgerows. Applications for HLS in these areas should include options to maintain/restore/create these habitats or provide habitat for the important species assemblages noted for these areas. The appropriate application of these schemes can enhance overall connectivity and provide a mechanism to protect and enhance the remaining priority habitats within this area

5. Rivers – SNAs: 669 – Biss; 678 – Wyle; 708, 781 - Nadder

Chalk Rivers

The Hampshire Avon represents an internationally important chalk rivers system that supports rich and diverse communities of plants and animals, as well as associated habitats including lowland meadows and rush pastures. The unfavourable condition of the River Avon System SSSI, which includes the Wyle and the Nadder, is due to a number of factors including inappropriate water levels, invasive freshwater species, siltation, water abstraction levels, and water pollution resulting from both diffuse discharges (e.g. agricultural runoff) and point discharges (e.g. some sewage treatment works). The Hampshire Avon has been identified as a Priority Catchment for work as part of the Government's Catchment Sensitive Farming Scheme which aims to support action by farmers and land managers to tackle diffuse water pollution from agricultural sources. Priorities for chalk rivers include:

- Support catchment scale projects which contribute towards achieving Natura 2000 objectives for the River Avon SSSI and help meet the requirements of the EU Water Framework Directive to achieve 'good ecological status' of water bodies by 2015.
- Encourage the take up of capital grants available for the Nadder and Wylye catchments under the Catchment Sensitive Farming scheme to reduce agricultural and pesticide runoff, reduce soil erosion by livestock and vehicles, and halt river sedimentation from runoff
- The systematic monitoring and control of invasive plant and animal species along the length of the Salisbury Avon and its tributaries, coordinated with the provision of some replacement planting or specialist management to encourage a more appropriate flora.
- Increase in the area of reedbeds, swamps and marsh habitats along the rivers to reduce run-off, increase the flood capacity of the river and provide habitat for riparian species.
- Work with riparian landowners to implement sympathetic management, particularly restoration & enhancement works, to restore natural processes to the river and enhance resilience to climate change.
- Co-ordinated monitoring of rivers to identify presence of invasive plants and signs of pollution incidents affecting riverine fauna and flora
- Support management to benefit populations of native freshwater species including water voles, brown trout, brook lampreys, bullhead, white-clawed crayfish and riparian bird species.

Existing projects and initiatives

- There are a number of projects working to restore the River Avon to a naturally functioning and self sustaining river system that exhibits the full range of characteristic habitats that benefit the distinctive chalk stream flora and fauna. These include the **Wessex Chalk Streams Project**, the EA's '**Keeping Rivers Cool'** project and the '**Source to Sea'** project (details of which are available in the Conservation Initiative section of the Area profile). As part of the **River Avon Restoration Plan** a 'Directory of Actions' has been produced to provide a common direction for the many parties who wish to safeguard the River Avon. It provides specific information for each SSSI river reach as well as suggested restoration options. The current level of conservation work focussed on this chalk river system provides an important opportunity to make real and lasting improvements across the full extent of the Hampshire Avon system. It is important to support and, where possible, extend these efforts to maximise the benefits resulting from this body of work.

4.10.5 Conservation Initiatives

Please see the attached table of current conservation initiatives within the particular Landscape Biodiversity Areas

Bumblebee Conservation Trust	'Bees for Everyone'	A project to raise public awareness of the importance of bumblebees and the problems that they face, and conducting active habitat management to safeguard, restore and create valuable bumblebee habitats.	8, 9, 10	Click folder for project details	Bumblebee Conservation Trust website
Floodplain Meadows Partnership	Meadow research project	Floodplain Meadows Partnership (based at the Open University) has been monitoring the plants, soils and water of key floodplain meadows for many years. This information is used to develop our understanding of how these rare plant communities change in response to wider environmental factors and help guide the management of floodplain meadows elsewhere.	1 - North Meadow and Clattinger Farm SACs	Click folder for project details	Floodplain Meadows Partnership research site
Swindon Borough Council	Great Western Community Forest	The purpose of GWCF is to create a multi-purpose forest throughout Swindon from the centre of the town and into the surrounding countryside. Multi-purpose forestry encompasses the creation and use of a diverse natural and built environment including trees and woodland, grassland, wetlands, hedgerows, ponds and rivers.	1, 2, 3 & 5	Click folder for project details	Click icon for GWCF webpage