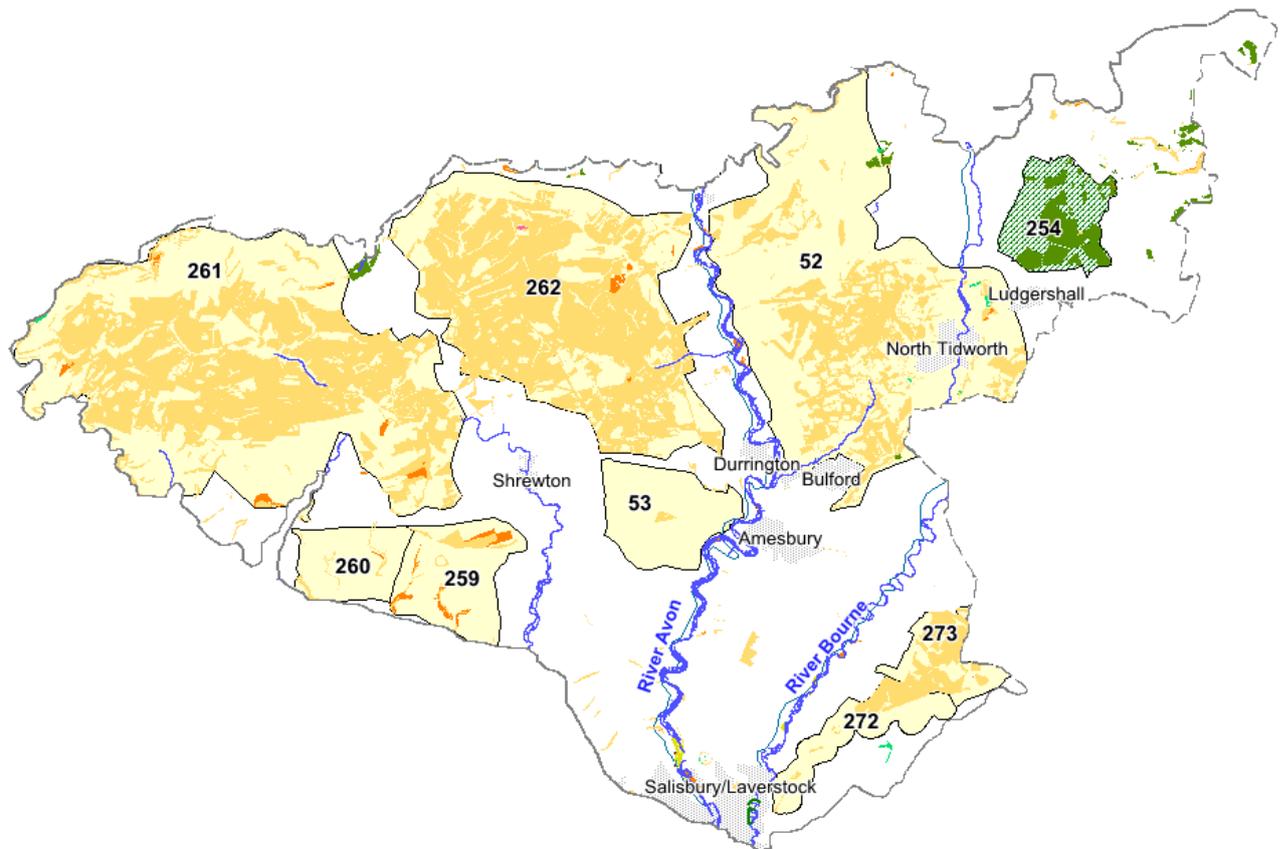


Area 08 – Salisbury Plain



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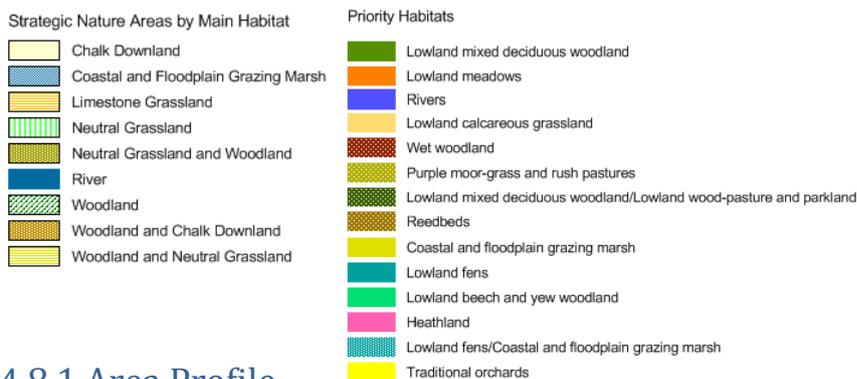


Figure 10: Salisbury Plain Landscape Biodiversity Area indicating priority habitats and the labelled, numbered Strategic Nature Areas within this

4.8.1 Area Profile

National Character Areas – [Salisbury Plain and West Wiltshire Downs \(132\)](#)

Landscape Character Types – High Chalk Plain (3), Chalk River Valley (5)

Landscape Character Areas – Salisbury Plain West (3A), Salisbury Plain East (3B), Salisbury Plain (3C), Borne Chalk River Valley (5C), Upper Avon Chalk River Valley (5D), Porton Down (3C).

AONBs – N/A (slight corner of NWAONB and CC&WWD AONB)

Related BAPs - None

SNAs – There are nine SNAs in the Salisbury Plain BAP Area as well as sections of three rivers; the Avon, the Bourne and the Wyle. See [here](#) for SNA targets for Area 08

Geology – The Salisbury Plain lies atop of a plateau of Upper and Middle Chalk which rises in the heart of Wiltshire, rising between the Vale of Pewsey to the north and the Wylve River Valley to the south. Landform is typical of the upland chalk with an open, rolling topography which slopes gently toward the south. The surface of the plain is dissected by dry valleys some of which link into the true river valleys such as the Avon, and the Till south of Tilshead. The dominant substrate is chalk in all but the river corridors of the Wyle, Avon and Bourne which represent areas of river alluvia and river terrace gravels.

Community Area Boards – Tidworth, Pewsey, Devizes, Amesbury, Westbury, Warminster, Southern Wiltshire Area Board, Salisbury, and South West Wiltshire Area Board

4.8.2 Background

The Salisbury Plain represents the largest area of unimproved chalk downland in northwest Europe with around 40% of the UK's estimated 41, 000 ha of lowland calcareous grassland in this area alone. It is internationally important for both its chalk grassland and chalk rivers, as well as for the many notable animal and plant species associated with both of these habitats. Salisbury Plain has been owned and managed by the Ministry of Defence since the start of the 20th century and since then has been the site for the UK's largest military training area. This area of the Plain has largely avoided the intensive agricultural practices of the last century and this has allowed it to maintain populations of rare and diverse plant communities, scarce invertebrate species and has seen it recognised as an internationally important site for breeding and wintering populations of birds including stone curlew, hen harriers and lapwing, as well as a focus for efforts to reintroduce the great bustard. Within the Military Training Area the army undertakes habitat management to enhance the priority habitats including scrub clearance and allowing tenant farmers to graze the grassland. The botanically and structurally diverse grasslands support outstanding assemblages of rare and uncommon chalk downland invertebrates including declining species of downland butterflies such as the Adonis blue and Duke of Burgundy.

Large areas of the wider plain are used for farming, both arable and livestock, generally with large fields and few trees or hedgerows. There are some shelter belts of conifers, clumps of deciduous woodland and scattered shrubs including juniper. Most habitations are restricted to the sheltered chalk valleys of the Upper Avon and the Bourne with large expanses of the plain left open for agriculture and military purposes.

The Rivers Bourne and the Upper Avon form two important chalk river valleys which cut through the chalk, creating strikingly different habitats to elsewhere on the Plain. Both rivers run southwards before feeding into the Salisbury River Avon system. The Bourne river corridor is characterised by lines of willows and the presence of water meadows, for instance at Porton Meadows SSSI. The upper and lower sections of the Upper Avon valley are steep and enclosed whilst the middle section is wider and more open. The valleys support an intricate mix of pastoral fields, woodlands and scattered settlements. Areas of wet and dry woodlands cling to the valley sides and are joined by a full network of hedgerows and hedgerow trees. There are a number of outstanding examples of lowland meadows along the valley such as those at Lower Woodford Water Meadows SSSI¹.

¹ Wiltshire Landscape Character Assessment, 2005

More concentrated areas of woodland are found in the northeast corner of the Plain, including at Collingborne, an extensive area of Forestry Commission plantation on an ancient woodland site that is being managed to remove non-natives and return it back to more natural mixed deciduous woodland. The woodlands in the surrounding area range from ancient woodland types to more recent mixed plantations and shelterbelts, with ash and field maple dominating the more calcareous soils and a mix of birch and pedunculate oak on the acidic clays.

4.8.3 Priority Habitats

Priority Habitats	Area (ha)
Lowland calcareous grassland	15662.72
Lowland mixed deciduous woodland	787.09
Lowland meadows	299.53
Rivers	137.89
Lowland beech and yew woodland	40.11
Coastal and floodplain grazing marsh	40.09
Lowland mixed deciduous woodland/Lowland wood-pasture and parkland	8.4
Heathland	5.43
Wet woodland	5.21
Reedbeds	3.08
Lowland fens/Coastal and floodplain grazing marsh	2.74
Purple moor-grass and rush pastures	2.11
Traditional orchards	0.46
Lowland fens	0.1
Total	16994.96

4.8.4 Priorities and opportunities for conservation

1. Chalk Downland

- Lowland calcareous grassland
- Chalk downland butterflies
- Farmland birds and arable plants

2. Rivers

- Chalk rivers

3. Woodland

1. Chalk Downland – SNAs 259, 260, 261, 262, 272, 52, 273, 53

Lowland calcareous grassland

With roughly 40% of the UK's lowland calcareous grassland within this single Landscape Biodiversity Area it is vital to implement appropriate management regimes to protect and enhance the internationally important areas of grassland on Salisbury Plain, Porton Down, and Parsonage and Wyle Downs NNRs. While most of the chalk grassland is protected within the Salisbury Plain SAC and SSSIs, there is a need to buffer and connect existing core areas against the effects of climate change. In addition, the quality of existing semi-natural habitat needs to be improved where this is unfavourable. The Salisbury Plain falls within a High Level Stewardship Scheme Target Area and

opportunities should be taken, via agri-environment options or other means, to implement grazing management on grasslands, provide nesting and foraging habitats for ground nesting and farmland birds, and establish conservation headlands that benefit birds and butterflies. There has been an extensive programme to restore grazing animals (cattle and sheep) to Salisbury Plain since the late 1990's, as well as a programme of removing coniferous and some broadleaved plantations in the same period. Opportunities should be identified to continue this process and to take steps to revert this land where possible back to calcareous grassland.

- Target priority areas identified through the Stepping Stones project where the data suggest appropriate habitat creation or restoration might provide the best contribution to enhancing ecological connectivity and thus offer significant biodiversity gain.
- Remove conifer plantation trees on former chalk grassland sites and revert to calcareous grassland through appropriate management and grazing
- Establish new stands of juniper on chalk grassland with appropriate grazing management regime and where this is failing – consolidate through planting.
- Implement / increase grazing on under grazed calcareous grassland sites via agri-environment schemes

Chalk Downland butterflies

The botanically and structurally diverse grasslands support outstanding assemblages of rare and uncommon chalk downland invertebrates including declining species of downland butterflies such as the Adonis blue and Duke of Burgundy. The downland butterflies that characterise the Salisbury Plain are all vulnerable to habitat fragmentation exacerbated by unfavourable land management, vagaries of the weather and the effects of climate change. Priorities for downland butterfly species include:

- 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 conservation projects and initiatives

- **RSPB's 'Wiltshire Chalk Country' Futurescapes project** - The RSPB's Futurescapes project seeks to identify opportunities and mechanisms for the creation and restoration of chalk grassland to reconnect Salisbury Plain, Porton Down and the Stonehenge World Heritage Site, establishing 'corridors' for wildlife to mitigate the effects of climate change. This represents a genuine landscape scale conservation initiative and opportunities should be identified to maintain and expand its momentum and scope.
- **'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 compiled detailed habitat data for over 125,000 hectares of land, 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, used the modelled networks to identify opportunity areas for increasing priority grassland connectivity, and has demonstrated how this model and associated datasets can be used to help target management and restoration on the ground within priority areas. In addition to this it is delivering onsite habitat enhancements to promote chalk grassland species including orchids and rare butterflies such as the Duke of Burgundy.

- **Butterfly Conservation's 'Duke of Burgundy project'** – Surveys have been conducted at Porton Down in Area 08, a known stronghold of the Duke of Burgundy, as part of a national project to survey sites where this rapidly declining species is still thought to occur. These surveys will be repeated in coming years to build up a picture of the distribution and abundance of this rare butterfly species and the information used to guide conservation efforts.

Farmland birds and arable plants

The Salisbury Plain is a hotspot for farmland birds, holding nationally important populations of species which have shown considerable declines in both population size and distribution in recent decades. This includes the stone curlew, an enigmatic species of chalk downland whose numbers of breeding pairs has been increasing on the plain following the introduction of targeted conservation projects by the RSPB. However, along with other farmland birds, this species is sensitive to land management practices, poor weather conditions and disturbance from walkers and farming operations.

The low intensity agriculture practices on the Salisbury Plain has made it a hotspot for brown hare and arable plants such as prickly poppy and pheasant's eye which have suffered particularly heavy losses believed to be primarily due to changes in farming methods. Nationally populations of arable plants have declined dramatically over the past 60 years, and are now viewed as the rarest group of plants in the UK. However, knowledge of arable plant populations is generally poor and more work is needed to identify priority areas for their conservation. Priorities for species associated to the farmed environment include:

- Increase uptake of stone curlew nesting plots (cultivated 2 ha plots) and Farmland Bird Package of options in Stewardship agreements to expand the core range of vulnerable farmland bird species.
- Increase uptake of Higher Level Stewardship to increase the amount of land managed as conservation headlands to expand the populations of declining farmland species.
- Creation of habitat strips away from the major roads (A303, A36 and A350) to provide hunting opportunities away from these busy roads for birds of prey such as barn owls and kestrels.
- Surveys to identify important sites/areas for rare arable plants

Existing conservation projects and initiatives

- **Wessex Stone Curlew project** – through this project the RSPB have worked with individual farmers, as well as partner organisations such as the MoD, Natural England, the National Trust and the Wildlife Trusts to create more suitable habitat for stone-curlews, both on

military land and in the farmed landscape. This work has largely involved creating nesting plots which are managed specifically for stone-curlews. These plots are available under the Environmental Stewardship schemes, and compensate the farmers to manage an area within a field that will encourage nesting stone-curlews safely away from agricultural operations.

- **North Wessex Downs and South Wiltshire Farmland Bird Projects** – These projects provide free help and advice for farmers, their agents and advisors, to create and manage habitat for farmland birds using Environmental Stewardship. Farmers are encouraged to include the Farmland Bird Package of options in Stewardship agreements, providing farmland birds with their three basic ecological requirements, the 'Big 3': Safe, in-field nesting habitat; Insect-rich habitat, to feed chicks in summer; Seed-rich habitat, for food over winter. This management also benefits other wildlife associated with arable farmland, in particular rare arable plants like shepherd's needle and animal species associated with farmland environments such as brown hare.
- **Reintroducing Great Bustard to Southern England** project – The Great Bustard Group along with project partners from the RSPB, Natural England and the University of Bath are working to reintroduce the great bustard onto Salisbury Plain. The project aims to establish a self-sustaining population of Great Bustards on Salisbury Plain and to formulate and promote agri-environment options to improve the suitability of the 'wider countryside' for great bustards.

2. Rivers – 775,776,777,778,782 (Avon) 779,789 (Bourne)

Chalk Rivers

The Rivers Till, Bourne and the Upper Avon all form part of the River Avon SAC and SSSI, a chalk river system which cuts through Salisbury Plain, shaping the landscape and supporting a range of habitats and species which are strikingly different to those found across the wider Plain. The unfavourable condition of the River Avon System SSSI is due to a number of factors including low water levels, presence of invasive species, siltation, water abstraction, pollution from diffuse sources (e.g. agricultural) and point discharges (e.g. some sewage treatment works). The recently published European Site Conservation Objectives for the River Avon SAC are to maintain and restore the population and distribution of species and habitats for which the SAC was designated. This includes a number of freshwater species including Desmoulin's whorl snail, Sea and Brook lampreys, Atlantic salmon, Bullhead, Water-crowfoots and Water-starwort.

- Contribute to the reduction in diffuse pollution through measures identified in the Hampshire Avon Nutrient Management Plan (Environment Agency and Natural England in prep)
- Support measures to ensure that water bodies achieve 'good ecological status' in line with the aims of the Water Framework Directive by 2015.
- Control invasive plant species, particularly Himalayan balsam and Japanese knotweed in line with the priorities of the Source to Sea project

- Plant riverside trees in line with the priorities of the Keeping Rivers Cool project to increase shading along waterways.
- Reduce silt laden runoff from agricultural land and highways
- Work with landowners and angling clubs to restore sections of river to a more natural state as part of the Wessex Chalk Streams Project.

Existing conservation projects and initiatives

- Catchment Sensitive Farming - The Salisbury/Hampshire River Avon system has been designated a Priority Catchment as part of the Catchment Sensitive Farming scheme. Although no Capital Grant Target Areas overlap with this Area there are a number of projects working to restore the natural function of the Hampshire Avon, including the River Avon Restoration Plan, the **Wessex Chalk Stream Project**, the Environment Agency'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 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 associated to this body of work.

3. Woodland

The woodland priority habitat in Area 08 is concentrated in the north east of the area around Collingborne and in the valleys carved by the tributaries of the River Avon. The Salisbury plain is largely unwooded and limited opportunities exist to re-establish large area of woodland due to the military use of the Plain, the extent of agricultural land and the grassland character of the Plain. Where coniferous plantations are cut down these should either revert to calcareous grassland or replanted with mixed deciduous trees depending on what is most appropriate. Hedgerows link areas of woodland and these vary in quality with some strong and full, whilst in other places they are low with many gaps. Priorities include:

- Secure favourable management of existing ancient woodland sites through promotion of woodland grant schemes such as England Woodland Grant Scheme (EWGS), agri-environment woodland options.
- Improve connectivity between areas of woodland by strengthening of the hedgerow network and strategic application of agri-environment hedgerow options and capital works.
- Take opportunities to revert areas of coniferous plantation to mixed deciduous woodland where appropriate.
- Buffer/extend ancient woodland sites with appropriate new woodland planting

Conservation initiatives

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

	<p>'Bees for Everyone'</p>	<p>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.</p>	<p>8, 9, 20</p>	<p>Click folder for project details</p> 	<p>Bumblebee Conservation Trust website</p>
	<p>Meadow research project</p>	<p>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 wetland communities change in response to wider environmental factors and to guide the management of floodplain meadows elsewhere.</p>	<p>1 - North Meadow and Gillingham Farm SACs</p>	<p>Click folder for project details</p> 	<p>Floodplain Meadows Partnership research page</p>
	<p>Great Western Community Forest</p>	<p>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.</p>	<p>1, 2, 3 & 5</p>	<p>Click folder for project details</p> 	<p>Click icon for GWCF webpage</p> 