

Dorset Biodiversity Audit 2021



By *Dorset Environmental Records Centre*
For the Dorset Local Nature Partnership



Dorset Environmental Records Centre

At DERC we have been collating data on the wildlife of Dorset since 1976. DERC is an independent charity supported by the Dorset Wildlife Trust, Dorset Council, BCP Council, Dorset County Museum and the Environment Agency. Our role is to work to improve the data available on Dorset's wildlife and habitats. Much of this information comes from voluntary recorders, DERC surveys, ecological consultants and the recording groups in Dorset. Our thanks to them all.

If you have any comments on the Audit or information on Dorset species, the staff at DERC would be pleased to hear from you. Please contact DERC, c/o Dorset History Centre, Bridport Road, Dorset, DT1 1RP
(01305) 225081 derc@dorsetcouncil.gov.uk www.derc.org.uk



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The Audit is supplemented by a Species Audit. The Excel spreadsheet, including the criteria for selection and status codes, is available online.

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Acknowledgements

This document would not be feasible without considerable contributions from many individuals and organisations during the past four decades. It is a summary document based upon the work of many.

The report has been produced and edited by DERC: Jon Corkill, Bryan Edwards, Rhiannon Rogers, Carolyn Steele and Alison Stewart. We are especially grateful for contributions from: Annabel King, Andrew Brown, Imogen Davenport, Stuart Roberts, Bill Shreeves, Chris Spilling, Philip Temple and Robin Walls.

Introduction

Welcome to the 2021 Dorset Biodiversity Audit.

This is the fourth Biodiversity Audit for Dorset and it is a great testament to the hard work of all who have contributed, both through survey work, data collation, data analysis and report writing, that we now have this series of documents to refer to.

An Audit is ‘a systematic and independent examination’ and this seems all the more necessary at the moment given the recent changes within Dorset (with the formation of two Unitary Authorities from the nine former Councils) and the far greater changes happening nationally and globally with the process of leaving the European Union and the more recent Coronavirus pandemic. I know I’m not alone in placing even greater value on our natural environment at the moment and it is very apparent how much we all rely on the green and wild spaces around us, whatever happens on the national and international stage.

The Audit has been produced by the Dorset Environmental Records Centre whose work underpins just about everything those of us involved in nature conservation do. DERC’s daily work of collating and analysing baseline information enables us to monitor change and be confident about what is happening to the habitats and species around us. Through this we can accurately assess how our natural environment is responding to pressures including development, climate change, population increase and changes in agricultural practice.

With change comes opportunity and there are some significant changes taking place in our legislative framework. The draft Environment Bill brings together measures to ensure biodiversity is included from the earliest point in any development project and strengthens the biodiversity duty on Local Planning Authorities to ensure that they don’t just ‘have regard’ to biodiversity but have a duty to ‘further’ biodiversity through conserving and enhancing, taking this a crucial step beyond previous legislation. For the first time the government has mandated that 10% net gain must be achieved for all development, strengthening existing planning policy and, importantly, developing a metric to calculate this precisely and help increase certainty that it will be delivered. We will also see Local Nature Recovery Strategies and Nature Recovery Networks taking shape across the country, with Dorset’s work on these already underway.

The draft Agriculture Bill sets out how land managers will be expected to place wildlife at the heart of what they do, enshrining the principle of ‘public money for public goods’ and widening the remit of land management to include natural capital as well as biodiversity. The new Environmental Land Management Scheme (ELMS) is being developed and the Dorset AONB Team is involved in tests and trials to inform delivery. These changes present tremendous opportunities but at the same time reflect the ever-increasing threats to our natural and semi-natural countryside.

It will not be possible to monitor and enforce these changes without excellent baseline data and the Dorset Audit provides a vital source of this information, summarising the latest data on our natural and semi-natural habitats. This time the Audit has been extended to include marine habitats. This reflects the huge advances made in declaring marine conservation sites around the UK coastline in recent years, and our increased awareness of the value of these habitats.

Previous Audits have highlighted great steps forward in recording statutory site boundaries and areas of priority habitat. This Audit comes at a time when the focus is firmly on the next stage: how sites are connected on a landscape scale, where opportunities exist to strengthen this network and to protect and enhance strategically important areas. DERC has been instrumental in providing the data for our Dorset Ecological Networks (existing and higher potential) maps to help ensure that we know and value what we

have and put all our efforts into conserving and enhancing areas which will provide the biggest gains for wildlife. These in turn will be used to produce the first Local Nature Recovery Strategy for Dorset, as set out in the draft Environment Bill, and put Dorset at the forefront of national change and progress.

Annabel King

Natural Environment Team Leader
Dorset Council

The Framework of the Audit

This Audit builds upon the work of the previous Dorset Biodiversity Audits. It is intended to set out clearly and concisely where we have data. It also identifies where some of the gaps are. This is particularly noticeable with habitat data, where we are currently unable to provide habitat maps. Some habitats, for example all hedgerows and ponds, are widespread. Mapping all hedgerows and ponds across Dorset is a huge undertaking and data is more likely to be acquired through smaller projects such as the Purbeck Pond Project. The Dorset Biodiversity Audit provides an opportunity to bring together data gathered through different organisations and present it as a summary for the county.

Habitat Accounts

The list of Priority Habitats has been changed and expanded since the last Audit. The data presented here is the most current data available in DERC. We now have maps for more habitats including traditional orchards, ponds and coastal floodplain grazing marsh.

Each habitat account includes:

- A Strategy reference – this refers to the relevant section in the Dorset Biodiversity Strategy (Dorset Biodiversity Partnership, 2003)
- Distribution map of the habitat in Dorset;
- A selection of sites (with open access where possible);
- Key species – Priority Species associated with the habitat;
- Characteristic species – species commonly seen within the habitat.

A summary of Priority Habitats found in Dorset is included at the start of this section.

Marine habitat data is covered by a separate report.

Species List

The species list can be downloaded separately as an Excel file. It has been reviewed with comments from county recorders and other local experts.

The Dorset Biodiversity Audit has been produced by DERC on the best available information. It is a statement of the data held at DERC at the current time. This information will continue to be revised and updated, but we believe that the data within this document is robust and will assist in decision-making.

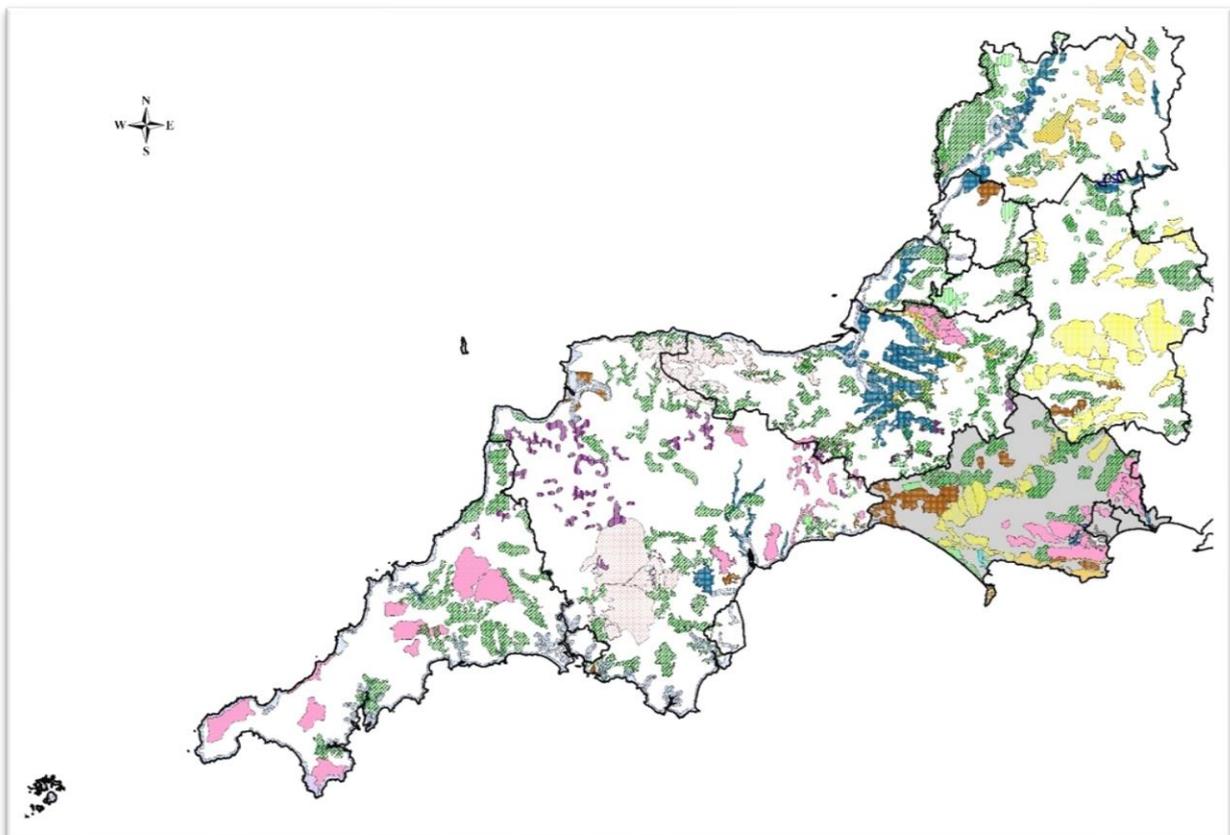
Strategic Nature Areas

Within this report biodiversity has been presented by habitat and by species. However, it is also important to consider wildlife, not just at a local scale, or even a county scale, but also at a landscape and regional scale. The South West Regional Biodiversity Partnership did this through the development of the South West Nature Map, by looking at the best areas in our region to conserve, create and connect habitats.

Nature Map was created in collaboration and consultation with many individuals and organisations. The result was a regional map with landscape scale blocks of land, referred to as Strategic Nature Areas. Each SNA will contain a mosaic of habitats, including areas of high biodiversity. Where previously attention may have been concentrated on sites, Nature Map encourages a broader approach looking at opportunities for restoration and re-creation of a range of habitats within these SNAs.

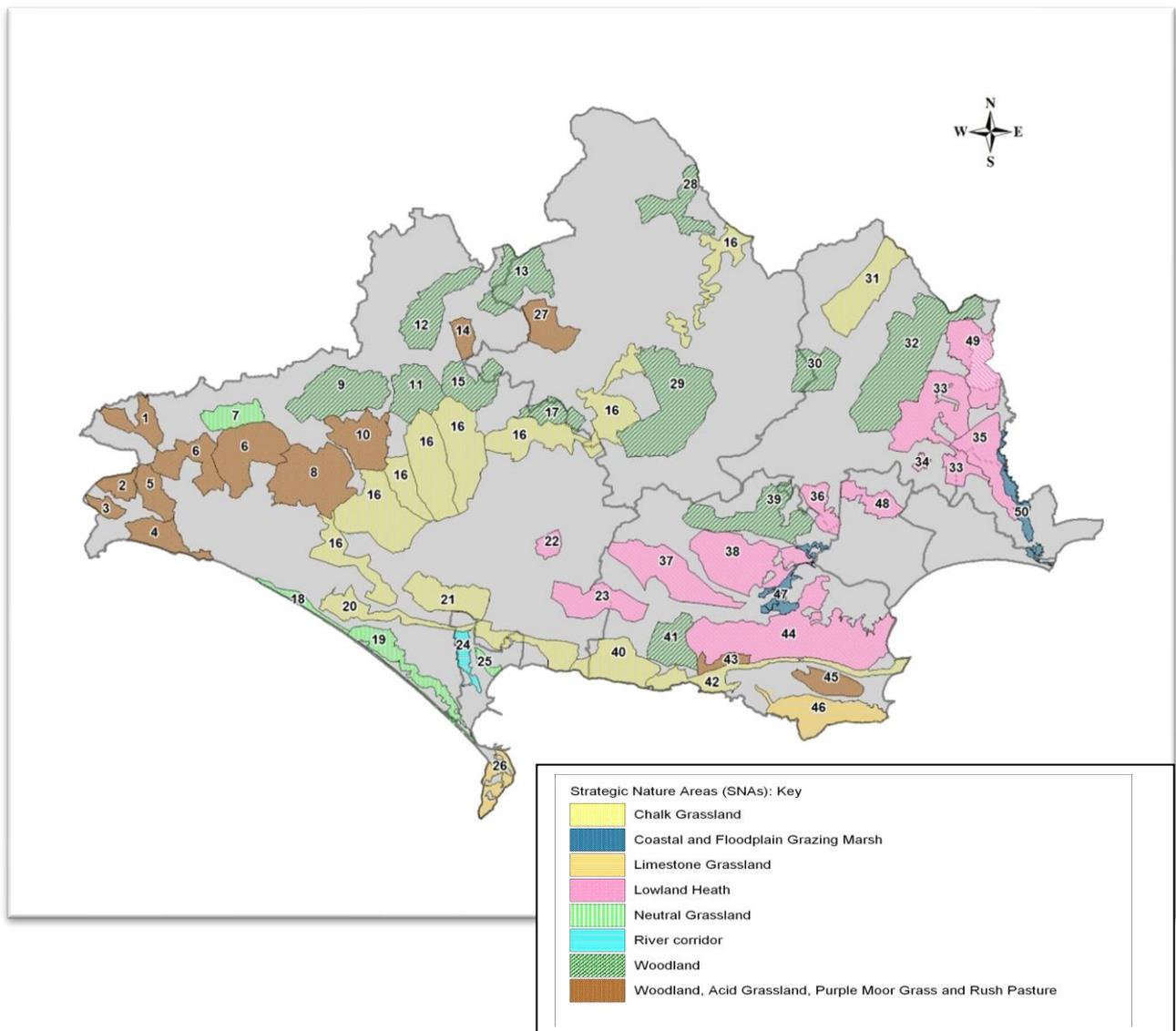
It is important to recognise that there is an abundance of biodiversity outside any designated area (including SNAs). This is clearly shown on the maps in the Local Authority Accounts where Priority Habitats are mapped both within and beyond the SNAs. But Nature Map does provide a focus for looking at potential areas for work at a larger scale.

Map 1. The distribution of Strategic Nature Areas within the South-west



Nature Map was produced through Biodiversity South West, which is no longer active. However the Nature Map was always intended to be a long term vision, with broad areas of opportunity mapped, to be refined locally as local initiatives become active. The map can be viewed on-line on Biodiversity South West website: www.biodiversitysouthwest.org.uk/.

Map 2. Strategic Nature Areas in Dorset



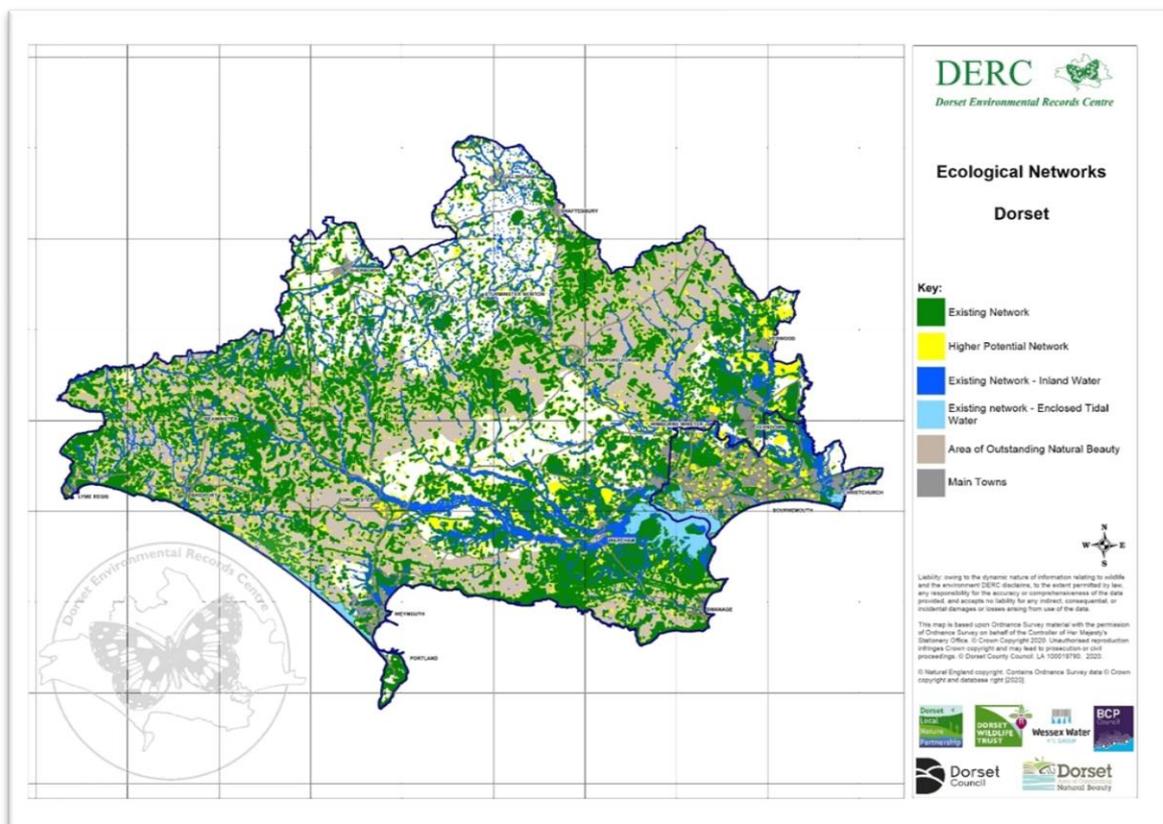
Code	SNA Name
1	Thorncombe
2	Wyld Warren
3	Wootton Fitzpaine
4	Golden Cap
5	Marshwood Vale
6	Beaminster
7	Upper Axe Vales
8	Kingcombe/Powerstock
9	Melbury
10	Upper Frome
11	Batcombe
12	Sherborne
13	Stourton Caundle
14	Ryewater Farm
15	Glanvilles Wotton
16	Dorset Chalk
17	Melcombe Park
18	Cogden-Bexington
19	Fleet hinterland
20	South Dorset Ridge
21	Maiden Castle
22	Puddletown Forest
23	Winfrith-Warmwell
24	Wey Valley-Radipole
25	Lodmoor
26	Isle of Portland
27	Deadmoor Common
28	Duncliffe
29	Milton Abbas
30	Chetterwood
31	Pentridge
32	Cranborne
33	East Dorset Heaths
34	Ferndown Common
35	East Dorset Heaths - South
36	Upton Heath
37	Puddletown Road
38	Wareham Forest
39	Lytchett Matravers
40	Lulworth Chalk
41	Lulworth Woodlands
42	Purbeck Ridge
43	Povington Meadows
44	Purbeck Heaths
45	Corfe Valley
46	Purbeck Limestone
47	Poole Harbour fringe
48	Canford Heath
49	Ringwood Forest
50	Avon Valley

Ecological Networks

Sites of wildlife importance in England have been lost or damaged at an alarming rate over the last 70 years. Those that remain are smaller and more isolated, and often in less favourable management regimes. This has meant that wildlife species have in general declined, with only those species with very generalist requirements and highly adaptable to our modified environments doing well.

In 2010, an independent review of England's wildlife sites and ecological networks, chaired by Professor Sir John Lawton, concluded unequivocally that England's collection of wildlife areas does not represent a coherent and resilient ecological network capable of responding to the challenges of climate change and other pressures. The review made 24 recommendations but summarised what needed to be done in just four words: more, bigger, better and joined. Government has adopted the suggested approach, and the concept of an ecological network is now embedded in the National Planning Policy Framework (NPPF) (2019), Natural Environment White Paper (2011) and Biodiversity 2020 (2011). Ecological networks are a key tool for developing and a delivering a Nature Recovery Network as set out in the Government's 25 Year Environment Bill (2018), Nature Networks (NE Evidence Handbook 2020) and Local Nature Recovery Plans (included in the Environment Bill (2020)).

Priority Habitats such as those identified in the Dorset Biodiversity Audit form a crucial part of the ecological network, alongside corridors and stepping stones of semi-natural habitat, sites under restoration and areas of high potential for restoration or habitat creation. Dorset Local Nature Partnership has worked with DERC and others to produce and update ecological network maps for Dorset, alongside guidance on their use. Both are available on the Dorset LNP website¹.



¹ www.dorsetlnp.org.uk/dorsets-ecological-networks/

Natural Capital and Ecosystem Services Mapping

Natural capital means “that part of nature which directly or indirectly underpins value to people, including ecosystems, species, freshwater, soils, minerals, the air and oceans, as well as natural processes and functions.” (Natural Capital Committee, 2019). In combination with other types of capital (financial, social etc), natural capital forms part of our wealth; that is, our ability to produce actual or potential goods and services into the future to support our wellbeing.

Natural capital provides a range of ‘ecosystem services’ including for example water quality, pollination, flood alleviation, carbon sequestration and enjoyment and wellbeing, both mental and physical. Each natural site or habitat can and usually does provide multiple benefits. Ecosystems services are often grouped as follows:

- Supporting services, such as nutrient cycling, oxygen production and soil formation. These underpin the provision of the other ‘service’ categories.
- Provisioning services, such as food, fibre, fuel and water.
- Regulating services, such as climate regulation, water purification and flood protection.
- Cultural services, such as education, recreation, and aesthetic value.

All of the habitats and species featured in the Dorset Biodiversity Audit are part of our natural capital. Both nationally and locally there have been initiatives to map natural capital and ecosystem services – both existing and potential. These make use of data such as that within this Audit, and take it a stage further by assigning value, for example to map where natural habitats *currently* best provide these services, and where they *could* provide this function if habitats are created or restored. Such initiatives are reliant on the quality of the data which is used in terms of both accuracy and currency. Maintaining up to date baseline information on habitat and species distribution and quality is crucial.

HABITAT ACCOUNTS

Table 1. Priority Habitats in Dorset

	All Dorset	DC	BCP
	2020	2020	2020
Priority Habitat	Area(ha)	Area(ha)	Area(ha)
Coastal Floodplain & Grazing Marsh	655	460	195
Coastal saltmarsh	476	376	100
Coastal sand dunes	93	90	3
Coastal vegetated shingle	101	100	0
Lowland beech and yew	34	34	0
Lowland calcareous grassland	3286	3286	0
Lowland dry acid grassland	663	565	98
Lowland fens (excluding Valley mires)	47	45	2
Lowland fens (including Valley mires)	665	656	9
Lowland heathland	5529	4669	860
Lowland meadows	702	663	38
Lowland mixed deciduous woodland	4401	4288	112
Maritime cliff and slope	670	670	0
Ponds (of High Ecological Quality)	7	7	0
Purple moor grass	532	500	32
Reedbeds	289	272	18
Saline lagoons	511	511	0
Traditional Orchards	67	67	0
Wet woodland	585	553	32
Wood pasture and parkland	590	590	0

The data presented here and in the following accounts is the most current data available in DERC. This includes data from Wild Purbeck NIA heathland mapping in 2013 and ongoing SNCI surveys. New data sources include the National Forest Inventory and more recent aerial photographs have helped improve mapping, particularly for woodland sites.

There have been small changes in all areas compared with the previous Audit. Many of these are due to improved habitat mapping rather than genuine changes on the ground, particularly for woodland. Others reflect real change, such as the increase in the area of mapped heathland following clearance of conifers on the Purbeck Heaths. We have also produced maps for traditional orchards, ponds and coastal floodplain grazing marsh for the first time. Comments on changes are given under each habitat section.

HABITAT ACCOUNTS

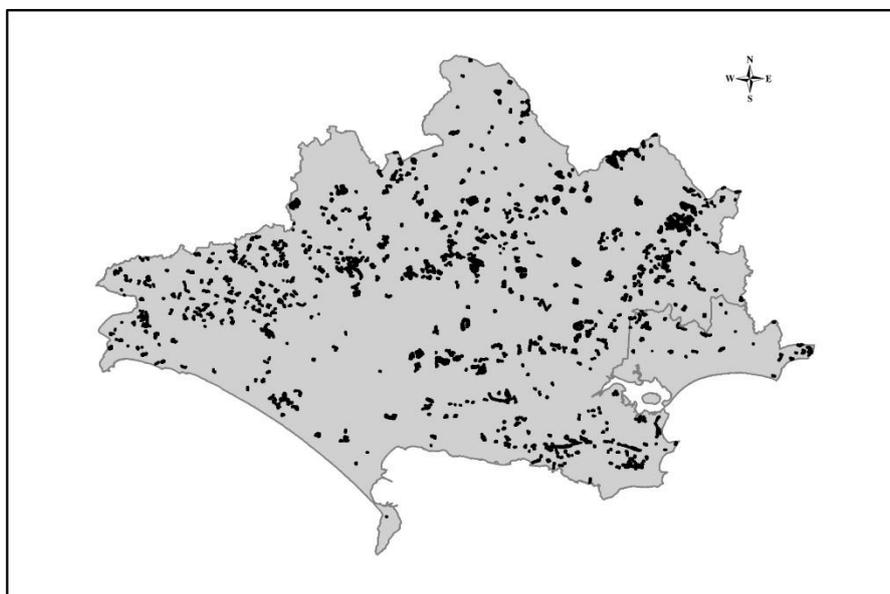
Lowland mixed deciduous woodland

Theme: Forestry & Woodland

Strategy reference: 2.2.1. This wide-ranging habitat includes all ancient semi-natural woodland and all semi-natural recently established woodland comprising Ash, Birch, Maple and Oak, often over a well-developed understorey of Hazel or Holly.

In Dorset Lowland mixed deciduous woodland consists mainly of small farm woodlands that have traditionally been managed as coppice-with-standards. The main focus of woodland conservation effort in the county is on ancient woodlands, since these are generally the richest in wildlife. The days in which ancient deciduous woodland was converted to conifer plantations has now gone.

Site Name	Grid	Area of Habitat	Status: organisation
Brackett's Coppice	ST5107	20 ha	SSSI: DWT
Garston Wood	SU0019	34 ha	SSSI: RSPB
Langton West Wood	SY9979	17 ha	SNCI: NT
Powerstock Common	SY5496	60 ha	SSSI: DWT



Key species

Dormouse
Bechstein's Bat
White Admiral
Usnea articulata
Fly Orchid

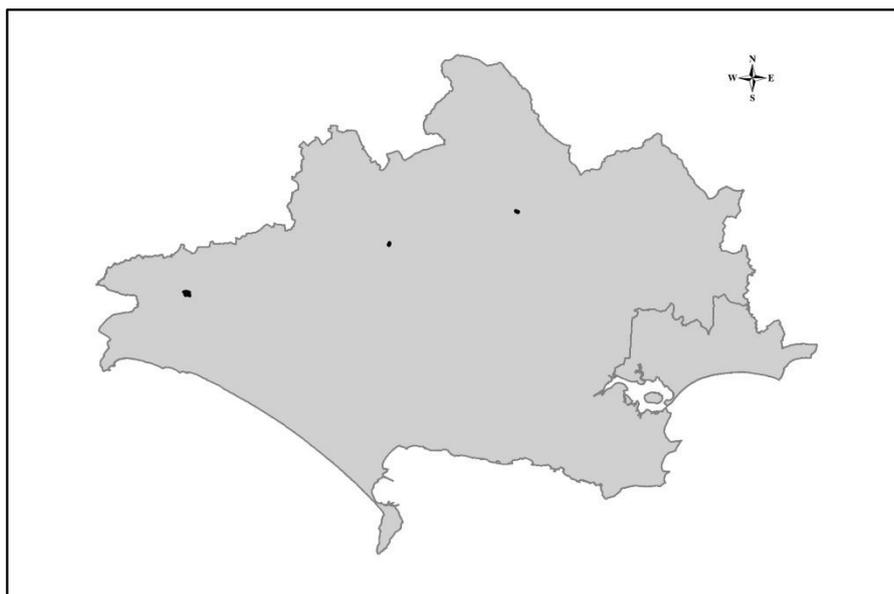
HABITAT ACCOUNTS

Lowland beech & yew woodland

Theme: Forestry & Woodland

Strategy reference: 2.2.3. These woodlands have a very restricted distribution in Dorset. Several small Yew woodlands have developed on the scarp slope of the chalk in the north-east. Beech is on the western limit of its native distribution in Dorset, but is an important constituent of two woodlands in the east of the county. Old beech plantations that are not commercial woodlands and have developed a flora and fauna typical of more ancient sites are also included.

Site Name	Grid	Area of Habitat	Status: organisation
Holt Forest	SU0305	65 ha	SSSI; NT
Hambledon Hill (Yew wood)	ST8411	6.5 ha	SSSI



Key species

Bird's-nest Orchid

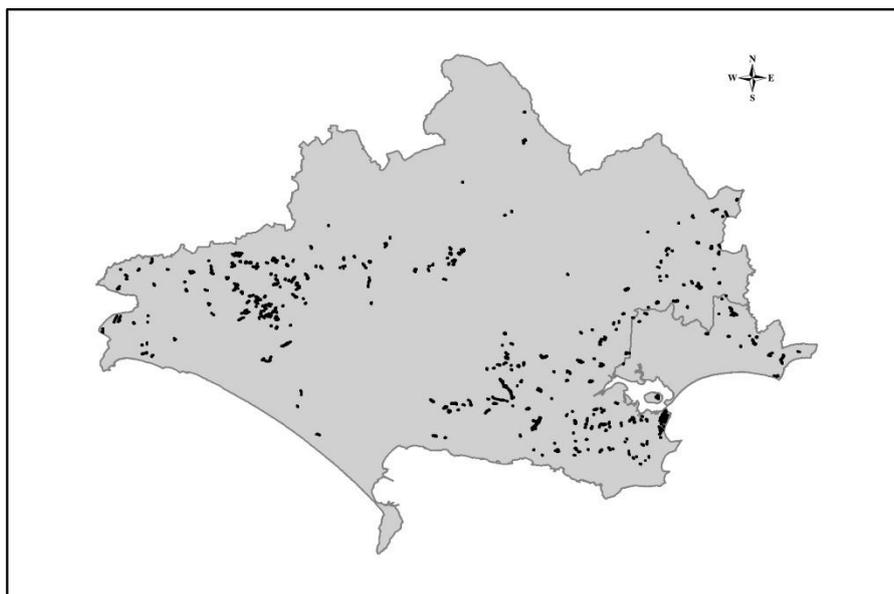
HABITAT ACCOUNTS

Wet woodland

Theme: Forestry & Woodland

Strategy reference: 2.2.2. These woodlands have formed on seasonally or permanently water-logged soils, and have a canopy often dominated by Alder, Downy Birch and Willow species. Two areas in the county are particularly important; the floodplains of the larger rivers in the Poole Basin and springlines and seepages in the northern and western vales. Wet woodland includes both ancient and more recent stands, both of which are of high conservation importance. This habitat may be found in conjunction with fen and swamp.

Site Name	Grid	Area of Habitat	Status: organisation
Kingcombe Meadows NR	SY5498	3 ha	SSSI: DWT
Morden Bog	SY9191	5 ha	SSSI: NE
Studland NNR	SZ0283	6 ha	SSSI: NT
Troublefield	SZ1297	0.5 ha	SSSI: DWT



Key species

Marsh Tit
Goat Moth
Gyrodon lividus
Mezereon

Characteristic species

Alder
Greater Tussock Sedge
Opposite-leaved Golden-saxifrage
Woodcock
Scarlet Elf Cup

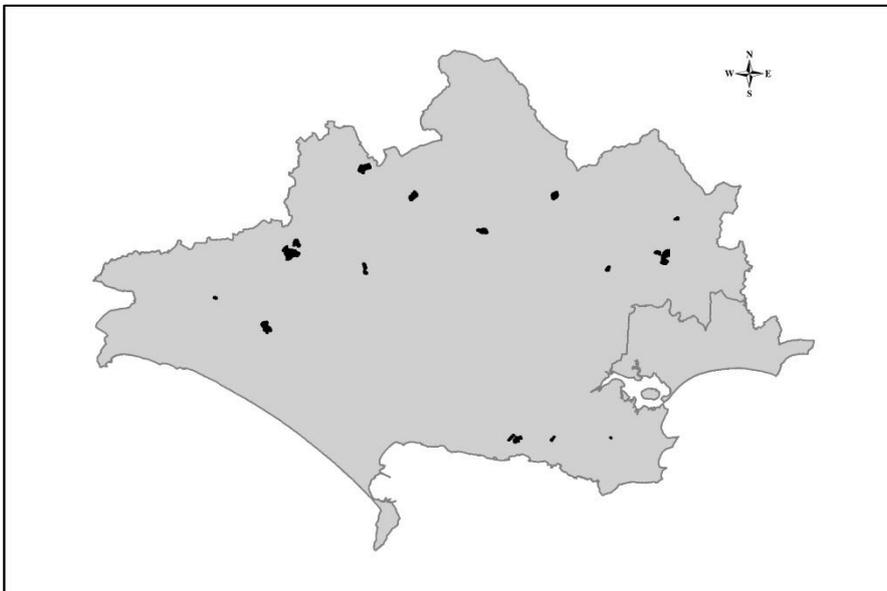
HABITAT ACCOUNTS

Wood-pasture and parkland

Strategy reference: 2.6. These habitats are relics of historic land management systems, and represent a vegetation structure rather than being a particular plant community. Typically this structure consists of large open-grown or high forest trees, often veterans, at various densities, in a matrix of grassland, heathland and/or woodland vegetation. The presence of large old trees is a key characteristic of this habitat type, and many plant, fungi and insect species are associated with, or dependent on, them. The processes which led to the creation of these habitats have long since ceased and most of Dorset's parklands have been converted to farmland. However, the few remaining examples, such as Melbury Park, are of international importance. Wood-pasture is particularly important for bats.

Veteran trees can also occur in other habitats such as hedgerows, but the extent of the resource is poorly known. Wayside trees are typically found along roads and tracks or in improved pasture, sometimes as relics of former 18th or 19th century landscaped parks. They are subject to natural eutrophication and support a lichen flora of national importance.

Site Name	Grid	Area of Habitat	Status: organisation
Holt Forest NNR	SU0305	65 ha	SSSI, NT
The Oaks	ST9603	8.5 ha	SNCI, NT
Turnworth Common	ST8108	36 ha	SNCI, NT
Upton Country Park	SY9992	4.5 ha	LNR



Key species

Noctule
Oak Polypore
Anaptychia ciliaris
Enterographa sorediata

Characteristic species

Bats
Bracket fungi
Old woodland lichens
Saproxyllic (deadwood)
invertebrates

HABITAT ACCOUNTS

Hedgerows

Theme: Agriculture

Strategy reference: 2.3.5. Hedgerows are an intimate element of the farmed landscape and are a refuge for a wide variety of plants and animals. They act as wildlife corridors, providing protection and assisting dispersal of species in an otherwise fragmented landscape. Ancient hedgerows, which tend to be those that support the greatest diversity of plants and animals, may be identified as those that were in existence before the Enclosures Act were passed (mainly between 1720 and 1840).

As a region, the south-west probably has a greater number of hedges remaining than any other region in the UK. In Dorset, the west of the county in particular holds the highest concentration of this habitat.

Site Name	Grid/location	Status: organisation
Blackmore Vale	West Dorset	
Kingcombe Meadows NR	SY59	SSSI: DWT
Marshwood Vale	West Dorset	

This habitat has not been mapped for Dorset.

Key species

Yellowhammer
Dormouse
Brown Hairstreak
Copse Bindweed

Characteristic species

Hedge brown
Whitethroat
Red Campion
Bank Vole

HABITAT ACCOUNTS

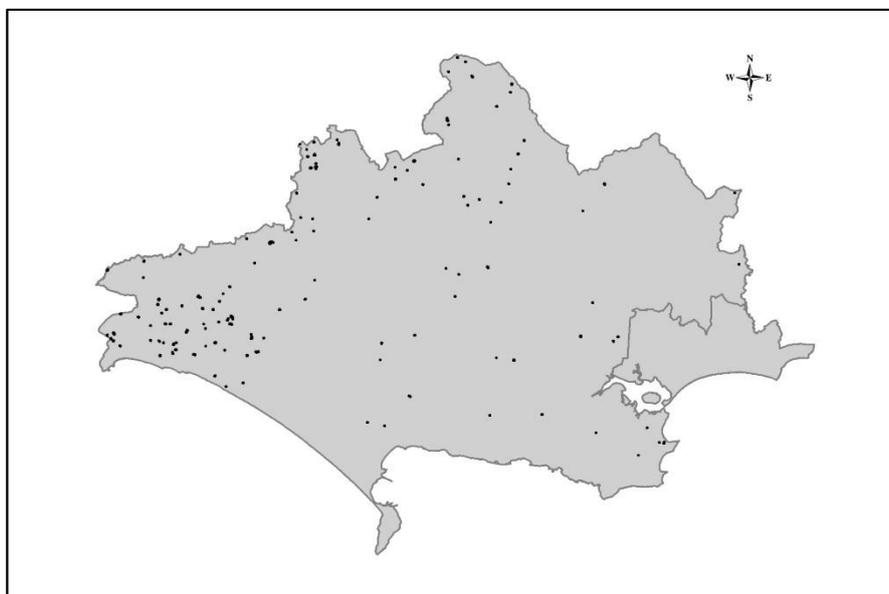
Traditional orchards

Theme: Agriculture

Traditional orchards were added to the UK Priority Habitat list in 2007. The Mid Term Review of the Strategy incorporates actions for this habitat; these can be found in the Forestry and Woodland Management section (actions FWM20 – FWM23). Dorset has relatively few traditional orchards compared with other counties in the south-west, notably Somerset. The vast majority that are present are very small and found close to manor houses or farmhouses. Most of the larger intensively managed orchards that are part of the landscape are of relatively recent origin and therefore do not strictly fall within the definition of the habitat.

Although covering a relatively small area, orchards can include a number of other habitat types including hedgerows and species-rich grassland that add significantly to the interest. Older trees can have the features of ‘veteran trees’ such as dead wood, bracket fungi and rot holes. A wide variety of epiphytic bryophytes and lichens have been found on old fruit trees. Traditional orchards can support types of fruit tree that are now rare and of considerable genetic and historic importance.

Site Name	Grid	Area of Habitat	Status: organisation
Broad Oak Community Orchard	ST7912	0.2 ha	DWT
King’s Lane Community Orchard	ST5196	0.3 ha	DWT



The map is based on a data set available from Natural England checked against aerial photographs and other data available at DERC.

HABITAT ACCOUNTS

Arable field margins

Theme: Agriculture

Strategy reference: 2.3.6. The UK Priority Habitat of arable field margins has been broadened for the context of Dorset, to include the whole arable field where it is utilised by key species. In 2016 Arable land (97,946 ha) covered approximately 37% of the county. Biodiversity on arable land has come under intense pressure due to intensification and specialisation of arable production.

There is little quantitative data for biodiversity-rich land in Dorset. There is however, much evidence of massive declines in plant species indicative of arable land and of widespread declines in populations of farmland birds. In Dorset the Tree Sparrow has been lost as a breeding species, and others such as Grey Partridge and Corn Bunting are increasingly rare in the county. 'Hotspots' for arable biodiversity occur on the chalk in north-east Dorset and the limestone in Purbeck.

Site Name	Grid	Status: organisation
St Aldhelm's Head	SY97	SNCI
Portland Bill	SY66	

This habitat has not been mapped for Dorset.

Key species

Corn Bunting
Brown Hare
Shepherd's Needle
Pheasant's-eye

Characteristic species

Skylark
Yellowhammer
Poppy

HABITAT ACCOUNTS

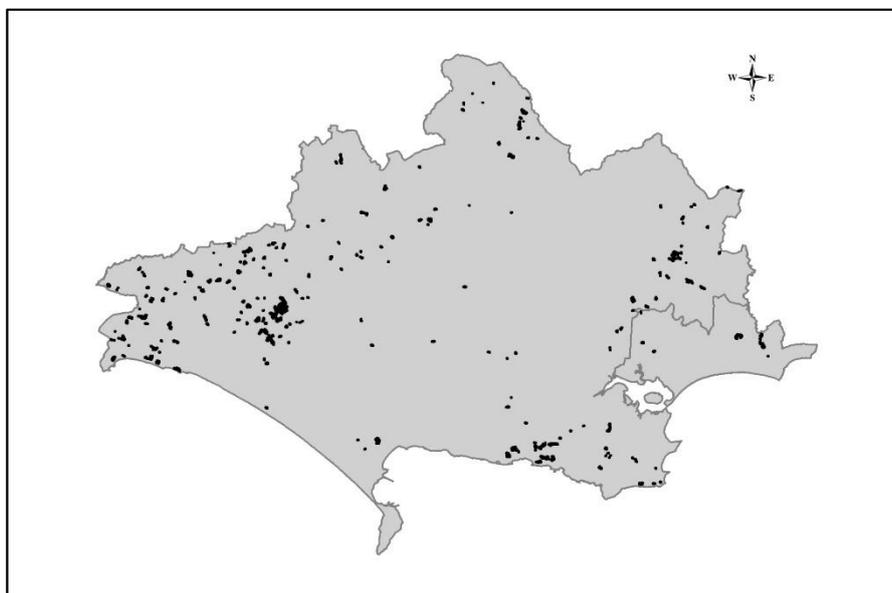
Lowland meadows

Theme: Agriculture

Strategy reference: 2.3.1. Neutral grasslands occur on a range of soils usually with a pH of between 4.5 and 6.5. It includes enclosed dry hay meadows and pastures. These are confined to two main areas in Dorset, the northern and western vales, and the clays around the periphery of the heaths in the Poole Basin. Across the UK 97% of this habitat has been lost between 1930 and 1984, making it one of the most endangered in Britain.

In Dorset, many of these areas comprise a mosaic of dry grassland and rush-pasture, and are often small and isolated. The Dorset Neutral Grassland Inventory (DERC 2002b) identified 241 sites. The few larger examples such as the Golden Cap Estate and Kingcombe Meadows are of national importance. Most are managed as grazed pasture, with a few still traditionally cut for hay.

Site Name	Grid	Area of Habitat	Status: organisation
Corfe Mullen Meadow	SY9896	1.6 ha	SSSI: DWT
Golden Cap Estate	SY3892	40 ha	SSSI: NT
Kingcombe Meadows	SY5498	75 ha	SNCI: DWT
Ryewater Farm meadows	ST5106	12 ha	SSSI: DWT



Key species

Skylark
Grizzled Skipper
Green-winged Orchid

Characteristic species

Crested Dog's-tail
Common Knapweed
Oxeye Daisy
Meadow Grasshopper
Marbled White

HABITAT ACCOUNTS

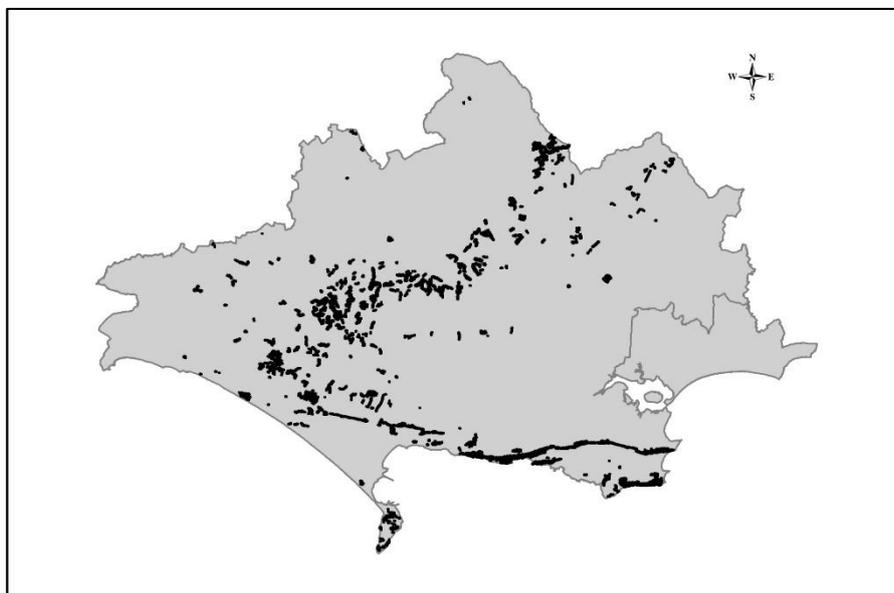
Lowland calcareous grassland

Theme: Agriculture

Strategy reference: 2.3.3. Calcareous grassland occurs on chalk and limestone substrates. Dorset's chalk grassland supports an outstanding range of flora and fauna across an area of just under 3000 ha (DERC, 1998). This habitat is very fragmented and mainly confined to the steeper scarp slopes of chalk outcrop. The majority of grassland has been recognised to be either of national or countywide importance.

Limestone grassland is much more limited in extent, and equally fragmented; with the majority on the Isle of Portland or the Purbeck Coast, with a few outlying sites in the north and west. The Dorset Limestone Grassland Inventory (DERC& DWT, 2000) identified 480 ha in the county. The vast majority is recognised as being of national importance and within various SSSIs, with the remainder selected as SNCI. The limestone turf supports many key plant species, and a similar range of butterflies that occur on the chalk.

Site Name	Grid	Area	Status: organisation
Badbury Rings	ST9603	36 ha	SSSI: NT
Fontmell and Melbury Downs	ST8818	211 ha	SSSI: NT/DWT
Hog Cliff NNR	SY6197	47 ha	SSSI, NNR: NE
Durlston Country Park	SZ0277	22 ha	SSSI, NNR: DCC



Key species

Early Gentian
Blackwort
Lulworth Skipper
Marsh Fritillary
Chalk Carpet

Characteristic species:

Cowslip
Adonis Blue

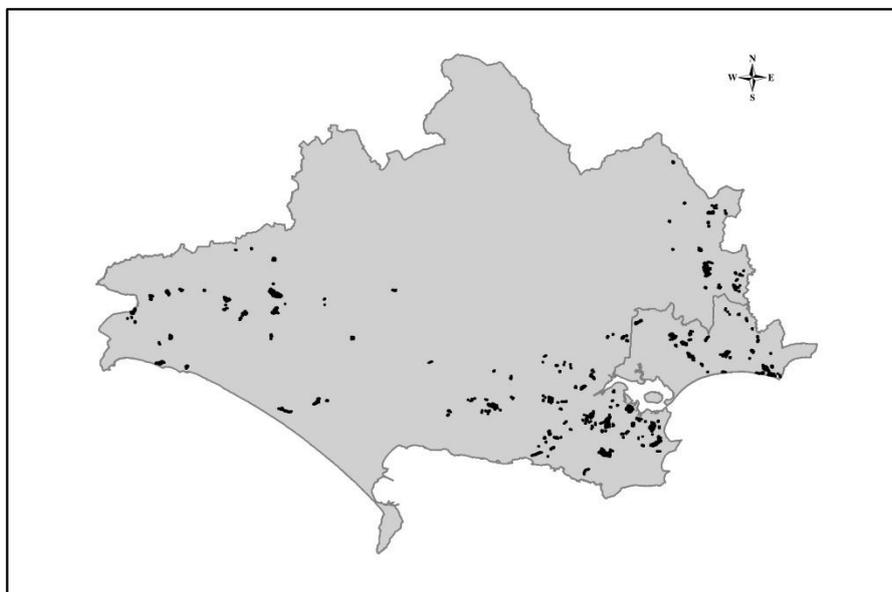
Lowland dry acid grassland

Theme: Agriculture

Strategy reference: 2.3.4. Lowland acid grassland typically occurs on nutrient-poor, free-draining soils with a pH ranging from 4-5.5 overlying sands and gravels. In Dorset this habitat is largely confined to two distinct areas: the Poole Basin and periphery of the heaths, and west Dorset where they are associated with the Greensand, especially on acid hill tops. Dorset supports approximately 500 ha of dry acid grassland (DERC, 2002). The parched sandy grasslands of the Poole Basin are of national importance for their acid grassland plants, while some of those in the west are rich in grassland fungi.

Acid grassland is normally managed through grazing by livestock or rabbits, on some sites it is maintained by mowing (often along with rabbit grazing). However, some of the richest sites have developed naturally on former arable land and periodic disturbance is an additional important factor in maintaining the rich flora.

Site Name	Grid	Area of Habitat	Status: organisation
Corfe Common	SY98	40 ha	SSSI: NT
Golden Cap Estate	SY4092	10.5 ha	SSSI: NT
Hengistbury Head	SZ1690	9.5 ha	SNCI, LNR
Kingcombe Meadows	SY5498	11.8 ha	SSSI: DWT

**Key species**

Hornet Robber Fly
Small Heath
Chamomile
Glandular Eyebright

Characteristic species:

Waxcap fungi

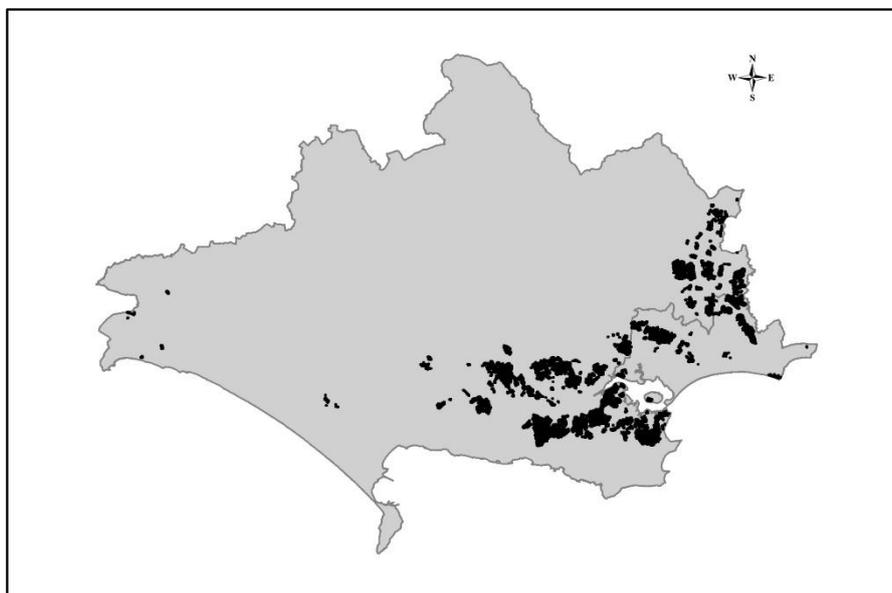
HABITAT ACCOUNTS

Lowland heathland

Strategy reference: 2.7. Lowland heathland is dominated by dwarf ericoid shrubs (heathers) along with species of Gorse on poor soils, typically sands and gravels. It is rare within a European context making the Dorset heaths one of our most important habitats. Historically the loss and fragmentation of the heaths has been attributable to agriculture, forestry and urban development. Until recently lack of management compounded the situation.

As well as being a distinctive habitat, heathland can also be described as a working landscape of open land, mires, trackways, drinking ponds, small quarries, sandy grassland and pasture woodland. The loss of this traditionally managed landscape has led to a significant decline in so called 'heathland' species.

Site Name	Grid	Area of Habitat	Status: organisation
Hartland Moor	SY9585	172 ha	SSSI; NE/NT
Avon Heath CP	SU1303	52 ha	SSSI: DCC/RSPB
Upton Heath	SY9894	77 ha	SNCI: DWT
Winfrith Heath	SY8087	71 ha	SSSI: DWT



Key species

Nightjar
Silver Studded Blue
Heath Bee-fly
Marsh Clubmoss
Smooth Snake

Characteristic species

Ling
Bell Heather
Dwarf Gorse
Grayling
Dartford Warbler
Tiger Beetle

Heathland is one of the few habitats showing an apparent increase in habitat area. Most of this 'new' heathland has been created by the felling of conifer plantations around Rempstone Heath, restoring part of the original Dorset Heaths.

HABITAT ACCOUNTS

Purple moor-grass & rush-pasture

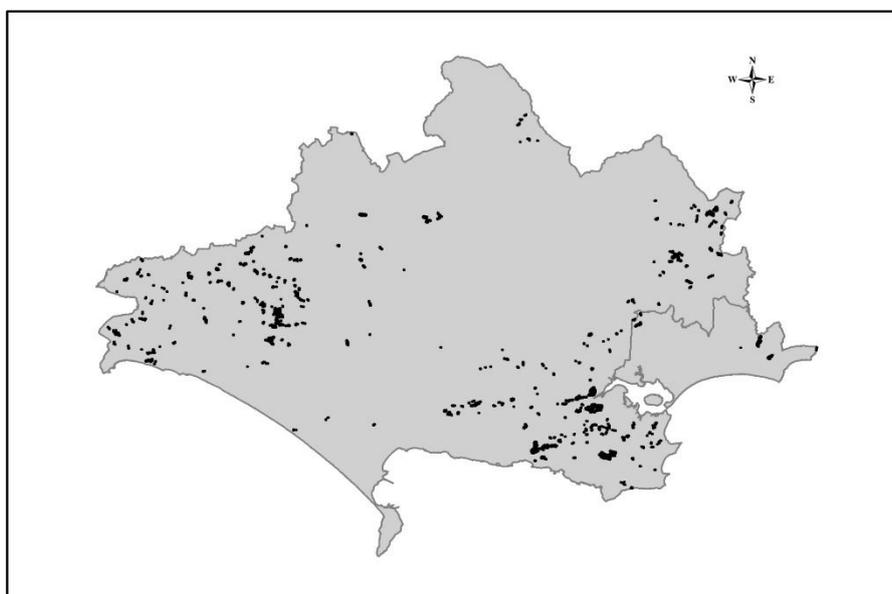
Theme: Agriculture

Strategy reference: 2.3.2 Purple Moor-grass and rush-pasture sites exist on poorly drained, nutrient-poor soils. They consist of mosaics of different communities that can include species-rich fen-meadows, wet heaths and mire, as well as drier grassland and scrub.

Purple Moor Grass is a species-rich vegetation type developed on nutrient-poor but base-rich or flushed soils. In Dorset the stands are small and fragmented, and largely confined to the periphery of the heaths and the western vales.

Rush-pasture is the most common vegetation type in poorly drained pastures. Soft and Sharp-flowered Rush dominate, and when grazed a wide variety of herbs are present. This habitat type is much more widespread than Purple Moor Grass.

Site Name	Grid	Area of Habitat	Status: organisation
Corfe Common	SY9581	16 ha	SSSI: NT
Kingcombe Meadows	SY5498	13 ha	SSSI: DWT
Powerstock Common	SY5497	7.5 ha	SNCI: DWT
Tadnoll Meadows	SY7987	11.5 ha	SSSI: DWT



Key species

Marsh Fritillary
Viper's Grass

Characteristic species

Purple Moor-grass
Sharp-flowered Rush
Meadow Thistle
Mint Leaf-beetle

HABITAT ACCOUNTS

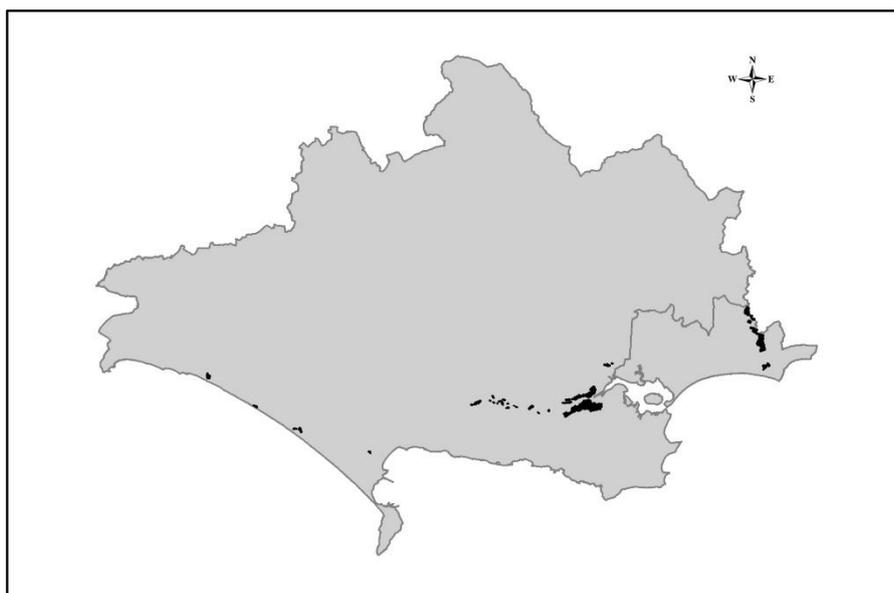
Coastal and floodplain grazing marsh

Theme: Freshwater

Strategy reference: 2.4.1. Coastal and floodplain grazing marsh is defined as wet grassland that has been formed by the claiming of coastal or floodplain wetland. Areas may have been enclosed by sea walls or river banks. They are poorly drained by tidal channels or by an interconnected grid of ditches that are typically subject to locked drainage through tidal or fluvial influences. Their fertile soils support intensive farmland and there is a marked contrast between seasons. In winter, the flooded fields are home to wading birds and waterfowl, whilst in the summer, the wildlife interest is largely confined to the water-filled ditches which can be rich in plants and invertebrates.

Historically Dorset contained about 5,300 ha of lowland wet grassland. Since about 1900 approximately 200 ha (12%) of the county's grazing marsh has been destroyed through loss of the tidal channels or ditch network through development, waste disposal or re-flooding. Parts of the remaining area have changed from grassland to reed or sedge swamp. In coming years some grazing marsh around the harbours will be vulnerable to loss from rising sea levels and the unsustainable nature of sea walls. Managing such a complex system is a delicate balance and needs to consider soil, water, wildlife and farming.

Site Name	Grid	Area of Habitat	Status: organisation
Wareham Common	SY9187	4.2 ha	SSSI
West Bexington - Cogden	SY5286	10 ha	SSSI; NT / DWT
Winkton Common	SZ1594	14 ha	SSSI



Key species

Tubular Water Dropwort
Lapwing
Desmoulin's Whorl Snail
European Eel
Otter

Characteristic species

Snipe
Hairy Dragonfly
Lesser Marsh Grasshopper

HABITAT ACCOUNTS

Lowland fens

Theme: Freshwater

Strategy reference: 2.4.4. Fens are formed over peaty soils that receive calcareous groundwater and they can occur in floodplains, around seepages and along springlines.

Fens are rare in Dorset with the 45 ha found within existing SSSIs and SNCIs accounting for the majority of the county's resource. Individual fens are small and scattered and usually occur within or on the periphery of other habitats of nature conservation value, including heathland, rush-pasture and wet woodland. Many of the fens within the larger heathland complexes can be accommodated within the management of the larger site. Other fens exist in river valleys and are an important element for consideration in river management strategies. A few important habitats remain within the agricultural landscape where conservation effort needs to be specifically targeted.

Site Name	Grid	Area	Status: organisation
Corfe Common	SY9581	<1 ha	SSSI; NT
East Stoke Fen	SY8686	1 ha	SSSI: DWT



Key species
Southern Damselfly
Saw-sedge

Characteristic species
Blunt-flowered Rush

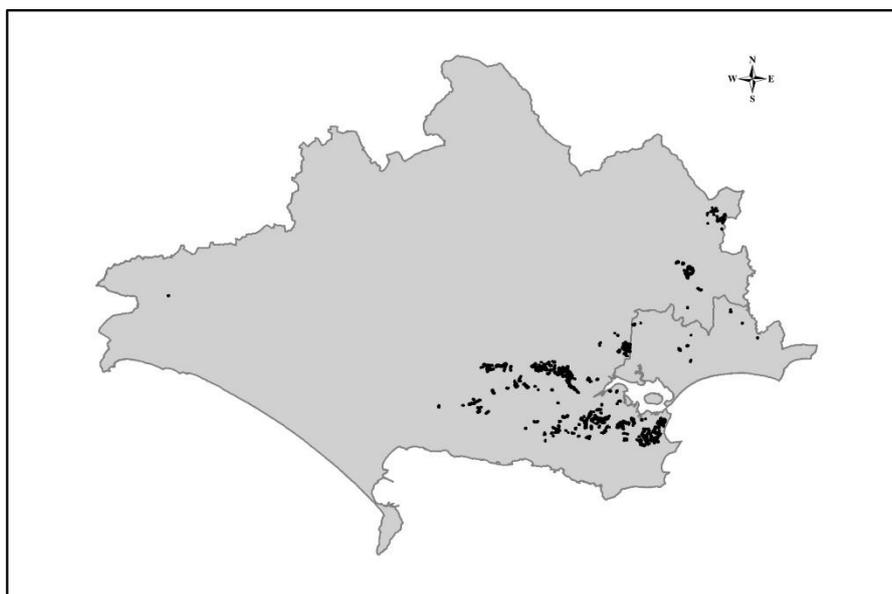
HABITAT ACCOUNTS

Lowland fens – valley mires

Theme: Freshwater

Strategy reference: 2.7. Valley mires are formed where peat accumulates and there is a permanently high water table, allowing the formation of *Sphagnum* moss, and are typically fed by acid ground water. The habitat is rare at a European level and in the UK the New Forest and Dorset heaths support the vast majority of the resource. Many rare and uncommon plant and invertebrate species are associated with valley mires. In Dorset the vast majority of the resource is found within heathland complexes in the Poole Basin, and recent grazing initiatives have also benefited the mire systems.

Site Name	Grid	Area of Habitat	Status: organisation
Hartland Moor	SY9585	58 ha	SSSI:NE/ NT
Morden Bog	SY9190	102 ha	SSSI: NE
Slop Bog	SU0701	2.1 ha	SNCI; DCC, LNR
Studland and Godlingston Heaths	SZ0183	35 ha	SSSI: NT



Key species

Southern Damselfly
 Large Marsh Grasshopper
 Great Sundew
Chrysops sepulchralis

Characteristic species

Sphagnum moss
 Cottongrass
 Bog Asphodel
 Small Red Damselfly
 Bog Bush-cricket

HABITAT ACCOUNTS

Reedbeds

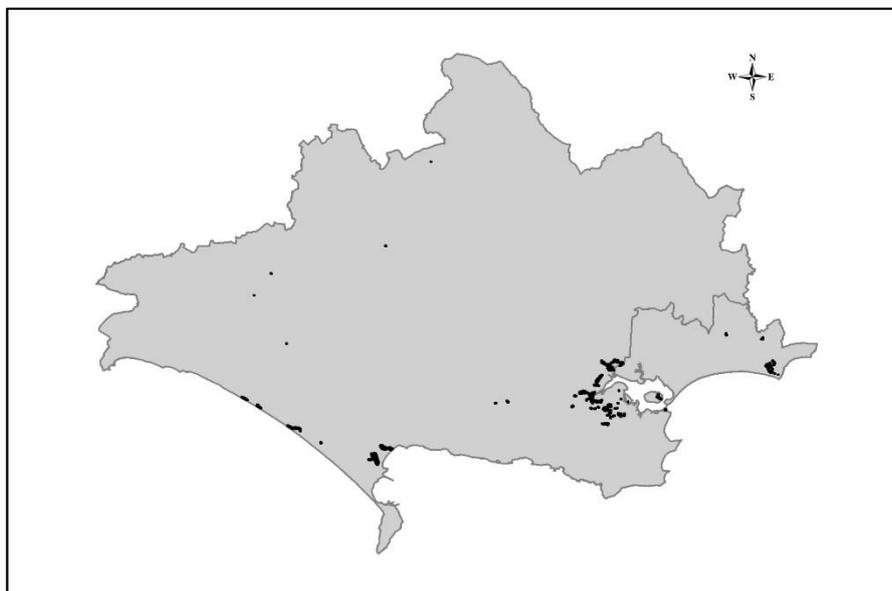
Theme: Freshwater

Strategy reference: 2.4.3. Reedbeds are wetlands dominated by, but not necessarily, composed purely of, stands of common reed *Phragmites australis*. It includes areas of reeds that are both in freshwater and brackish water habitats.

Nationally, reedbeds are a rare habitat, and this is reflected in Dorset. But despite its scarcity Dorset's reedbeds are important for many scarce invertebrates, and several uncommon birds.

Ownership of reedbeds is largely sympathetic the conservation of this habitat in Dorset.

Site Name	Grid	Area of Habitat	Status: organisation
Abbotsbury Swannery	SY5784	15 ha	SSSI
Burton Mere - Cogden	SY5087	4 ha	SSSI: NT
Poole Harbour reedbeds	SY9587	183 ha	SSSI: RSPB / NT
Radipole Lake	SY6780	45 ha	SSSI: RSPB



Key species

Water Vole
Reed Leopard
Bittern
Reed Bunting

Characteristic species

Common Reed

HABITAT ACCOUNTS

Rivers

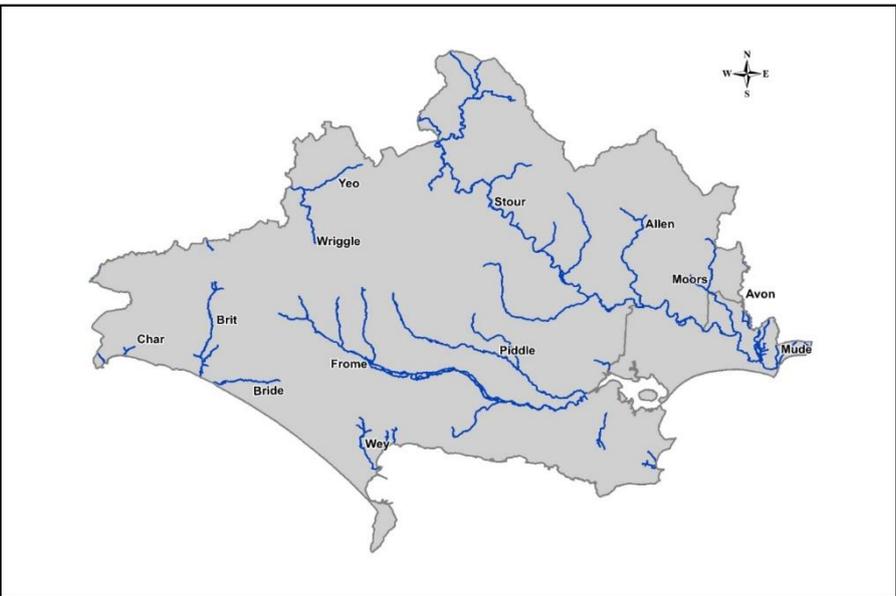
Theme: Freshwater

Strategy reference: 2.4.2. In the 2003 Dorset Biodiversity Strategy and Audit only chalk streams were included, but the habitat definition was subsequently widened to include all rivers on all substrates. This wider habitat is reflected in the Mid Term Review of the Strategy under the Freshwater Management section (actions F1 – F13)

Dorset supports a significant amount of the national resource of chalk streams, plus other very important rivers such as the Stour, Moors, the lower reaches of the Avon and parts of the Axe in the far west. This variety is reflected in the rich associated riparian flora and invertebrate fauna. Dorset rivers are also important for migratory fish such as Eel, Salmon and Sea Trout. Fish are prey to the Otter which is currently on the increase. White-clawed Crayfish only survive in a very few sites.

As with all wetland habitats rivers are vulnerable to pollution and run-off from adjacent land use, and to low water flows through abstraction.

Site Name	Status: organisation
River Avon	SSSI, SAC
River Frome	SSSI
Moors River	SSSI
River Stour	



Characteristic species:
Stream Water-crowfoot
Yellow Water-lily
Banded Demoiselle
Brown Trout

Key species:
Otter
Water Vole
River Lamprey
Sea Lamprey
Salmon
Sharp's Diving Beetle

HABITAT ACCOUNTS

Ponds

Theme: Freshwater

Strategy reference: 2.3.7. In the more recent Dorset Biodiversity Strategy Mid Term Review, ponds have been moved to the Freshwater Management section (actions F23 – F27). Ponds are defined as small permanent or semi-permanent water bodies between 25 m² and 2 ha in area. They provide valuable refuges for wildlife in the wide countryside for many forms of wildlife, especially amphibians and wetland invertebrates. Due to a combination of agricultural intensification, pollution, development and lack of management the number of ponds and their quality has declined throughout the UK, and in Dorset the true extent of the resource is as yet unknown.

The ponds that qualify as the Priority Habitat are those that support invertebrate or plant species of national or international importance or are particularly species-rich based on strict criteria.

Site Name	Grid	Status: organisation
Powerstock Common	SY537968	SSSI: DWT



Key species:
Great Crested Newt
Common Frog
Pillwort
Downy Emerald

HABITAT ACCOUNTS

Oligotrophic and mesotrophic lakes

Theme: Freshwater

Dorset has very few semi-natural large standing water bodies except Little Sea. This site is important in a national context, supporting uncommon plant species and are also important for wintering waterfowl. There are more man-made water bodies resulting from mineral abstraction and the older ones, particularly ball clay pits in Purbeck, can support a wide variety of wildlife and are especially important for dragonflies. Most large water bodies are included within SSSIs or SNCIs.

Site Name	Grid	Area of habitat	Status: organisation
Little Sea	SZ0284	31 ha	SSSI, SAC: NT



Key species

Six-stamened Waterwort
Spring Quillwort

Characteristic species:

Ruddy Darter

HABITAT ACCOUNTS

Open mosaic habitats on previously developed land

A wide ranging habitat type encompassing land that has previously been developed, mined or quarried for minerals, but has been abandoned and has developed an interesting range of wildlife.

Some sites, especially old gravel working, will have been flooded and now support species associated with wetlands and can be important for wintering and breeding waterfowl and for dragonflies. Other sites are partially vegetated with large amounts of bare ground and exposed faces that provide a habitat for a wide variety of invertebrates.

The vast majority of this habitat is found in the south-east of the county and is associated with extraction of sand and gravel within the wider heathland landscape. Portland and Purbeck have a number of abandoned limestone quarries. Within the urban area brown field sites are generally rare due to the pressure for development.

Site Name	Status: organisation
Arne Clay Pit / Bestwall Quarry	RSPB
Portland quarries including Broadcroft Quarry and Tout Quarry	SSSI: DWT

This habitat has not been mapped for Dorset.

HABITAT ACCOUNTS

Maritime cliff and slope

Theme: Coastal

Strategy reference: 2.5.1. Dorset's coastline comprises soft and hard cliffs and undercliffs, and vary greatly between massive vegetated land slips, high chalk cliffs and pinnacles, unstable shales and sand and sheer limestone faces and ledges. The habitats that develop on the cliffs and slopes are varied, and are some of the most natural anywhere in the county. On soft cliffs in particular there is high proportion of bare ground, compared with other habitats, which is utilised by many specialised plant and invertebrate species. Other habitats include maritime grassland, flushes, scree and scrub.

The Dorset resource includes:

54.48 km soft cliffs

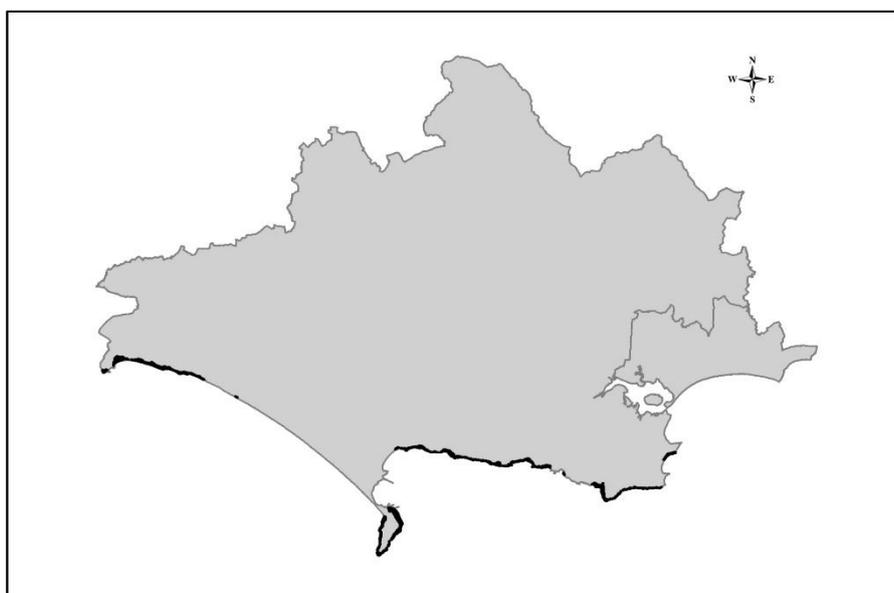
33.81 km hard cliffs

10.24 km are composite sites (with soft undercliffs backed by hard, sheer limestone cliffs)

Total recorded length is 78.05 km

Much of the coast is within the East Devon and Dorset World Heritage Site and shows a complete section through the Upper Jurassic rocks.

Site Name	Status: organisation
Purbeck Coast (limestone)	SSSI: NT/DCC
Isle of Portland (limestone)	SSSI:
White Nothe – Lulworth Cove (chalk)	SSSI:
Eype – Lyme Regis (sands and clays)	SSSI: NT



Key species

Cliff Tiger Beetle

Long-horned Bee

Dorset Clothes moth

Odynerus melanocephalus

Triangular Pygmy-moss

Characteristic species

Wild Cabbage

Colt's-foot

Solitary Wasp & Bees

Rock Pipit

Adder

HABITAT ACCOUNTS

Coastal vegetated shingle

Theme: Coastal

Strategy reference: 2.5.1. Shingle is defined as sediment with particle sizes in the range 2-200 mm. It is a globally restricted sediment type with few occurrences outside north-west Europe, Japan and New Zealand.

Coastal vegetated shingle occurs widely around England's coast, however, large shingle beaches where areas of shingle become stabilised and support vegetation are relatively few. Chesil Beach is one such structure. It is an internationally important breeding ground for Little Tern, and supports a specialised flora and fauna. Very small areas of vegetated shingle also occur in Poole Harbour.

Site Name	Grid	Status: organisation
Chesil Beach	SY49-67	SSSI



Key species

Little Tern
Scaly Cricket

Characteristic species

Sea Kale
Yellow Horned-poppy
Sea Pea
Ringed Plover

HABITAT ACCOUNTS

Coastal sand dunes

Theme: Coastal

Strategy reference: 2.5.1. Sand dunes are entirely a coastal phenomenon in Dorset. They comprise windblown sand formations that are both stable and shifting and their associated slacks, grassland and scrub.

The only significant sand dunes in Dorset occur at Studland in Purbeck, which comprise approximately 90 ha of dunes. This is the largest acidic dune system on the south coast and supports a large area of dune-heath, and is also the only dune system in south central England to support any dune wetland (i.e. open water, mire, swamp, wet heath and wet woodland).

The habitats importance for invertebrates, reptiles and vegetation is reflected in its designation as a National Nature Reserve and Special Area of Conservation. Relic dunes also occur at Sandbanks, Hengistbury and Mudeford. Blown sand is present amongst the shingle at Ferrybridge resulting in a very rich flora with many sand dune specialists present.

Site Name	Status: organisation
Studland NNR	SSSI: NT
Hengistbury Head	SSSI: LNR
Ferrybridge	SSSI



Key species
Heath Tiger Beetle
Sand Lizard
Prickly Saltwort

Characteristic species
Marram Grass
Sand Sedge
Sea Bindweed
Sand wasp
Mottled Grasshopper

HABITAT ACCOUNTS

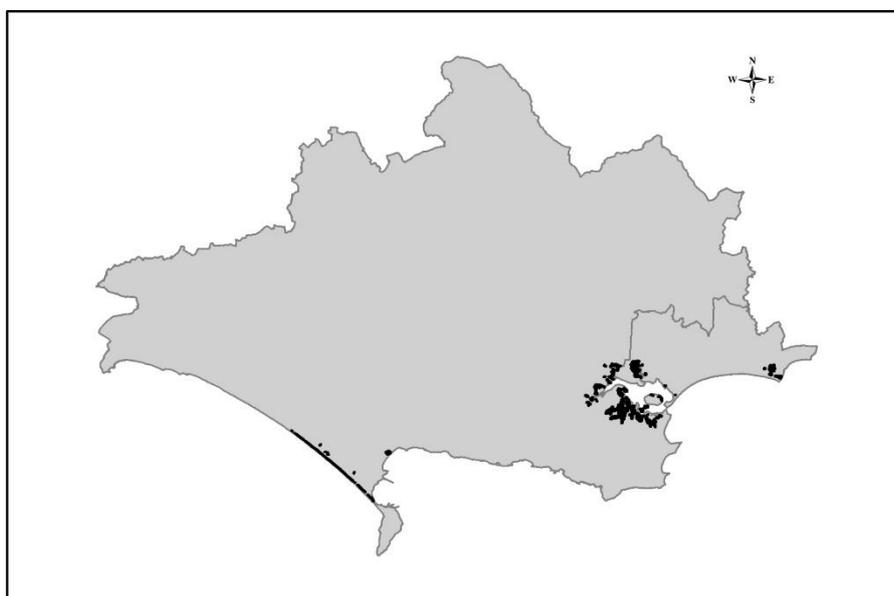
Coastal saltmarsh

Theme: Coastal

Strategy reference: 2.5.1. Coastal saltmarshes comprise the upper, vegetated parts of intertidal mudflats, lying approximately between high water neap tides and mean high water spring tides. Salt-marshes are restricted to sheltered locations in estuaries, and the development of salt-marsh vegetation is dependent on the presence of intertidal mudflats. They are an important resource for wading birds and wildfowl.

In Dorset by far the largest area of salt-marsh is found around Poole Harbour, with small stands present by the Fleet, at Lodmoor and in Christchurch Harbour. Dorset has suffered less from salt-marsh reclamation than other southern counties, and the upper salt-marsh zone with transitions to grassland, heathland, mire, reedbed and woodland is well represented.

Site Name	Status: organisation
Christchurch Harbour	SSSI, LNR
Ferrybridge & Fleet	SSSI
Lodmoor	SSSI: RSPB
Poole Harbour	SSSI



Characteristic species

Common Cord-grass
Common Sea-lavender
Sea Aster
Lesser Marsh Grasshopper

HABITAT ACCOUNTS

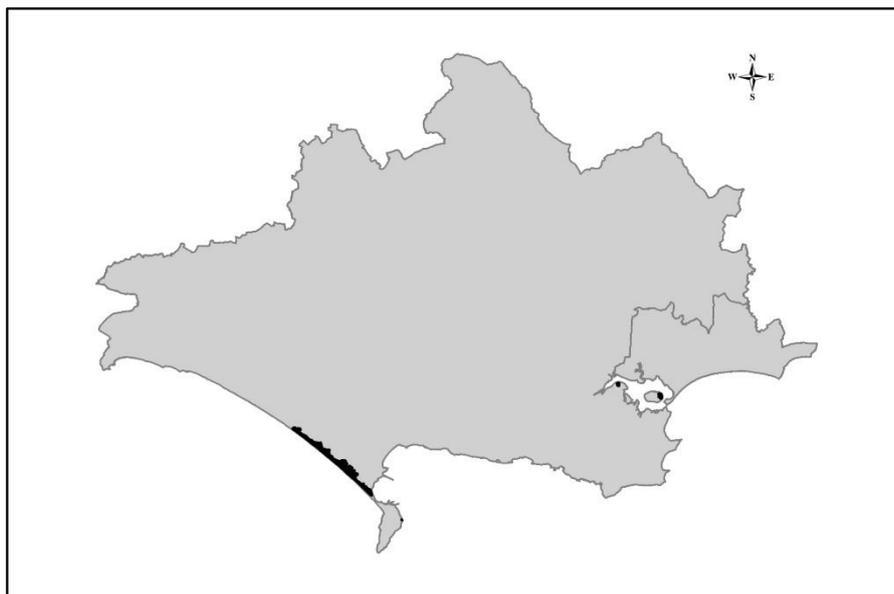
Saline lagoons

Theme: Coastal

Strategy reference: 2.5.2. Saline lagoons are natural or artificial bodies of saline water wholly or partially separated from the adjacent sea. They retain a proportion of their seawater at low tide and may develop as brackish, fully saline or hyper-saline water bodies.

The Fleet is the largest saline lagoon in Britain, and in terms of its biodiversity one of the most important in Atlantic Europe. Seawater exchange is mainly through a single, small inlet, and secondarily by percolation through the Chesil Bank, the enclosing barrier. Low freshwater input results in near fully saline conditions through most of the lagoon. Tidal rapids within the outer lagoon support rich seaweed and sponge assemblages, and there are important *Zostera* and *Ruppia* beds within the lagoonal basin. More than 750 aquatic plant and animal species have been recorded within the Fleet over the past 35 years.

Site Name	Grid	Area	Status: organisation
The Fleet	SY58-67	480 ha	SSSI



Key species

Foxtail Stonewort
Lagoon Sand-shrimp
Dark-bellied Brent Goose

Characteristic species

Eel-grass

Glossary

Ancient Woodland – semi-natural woodlands which have been in existence since at least the Middle Ages.

Biodiversity – the variety of life on Earth.

Biodiversity Action Plan – a plan setting out the current status, issues and threats for a species or habitat, and a programme of specific and timed actions with identified responsible agencies to restore, maintain or enhance the biodiversity interest.

Convention on the Conservation of European Wildlife and Natural Habitats (Bern) – this imposes obligations to conserve wild plants, birds and other animals, with particular emphasis on endangered and vulnerable species and their habitats. The provisions of the Convention underlie the EC Habitats Directive as well as the UK's wildlife legislation.

EC Habitats and Species Directive (92/43/EEC) – this Directive requires Member States to take measures to maintain or restore natural habitats and wild species at a favourable conservation status in the Community, giving effect to both site and species protection objectives.

Habitat – the place in which a species of animal or plant lives, providing a particular set of environmental conditions. Often used in a wider sense, referring to major assemblages or communities of plants and animals found together.

Habitat Action Plan – a plan setting out the current status, issues and threats for a habitat, and a programme of specific and timed actions with identified responsible agencies to restore, maintain or enhance the biodiversity interest.

International importance – those species which the UK, at least at some time of the year, holds a high proportion of the European or World population. For waterfowl, a site is defined as being internationally important if it regularly supports over 20,000 waterfowl, or 1% of the biogeographical population of the species. Habitat types and/or species which are rare or threatened within a European context are identified in Annex I and II of EC Directive 92/43 on the conservation of natural habitats and of wild fauna and flora, for which the Directive requires the designation of Special Areas of Conservation (SACs).

Invertebrates - animals without a backbone.

JNCC – Joint Nature Conservation Committee

National importance – a site is defined as being nationally important if it regularly supports over 1% of the UK population of a species. This criterion is most usually applied to bird populations.

National Nature Reserve (NNR) – a site of national or international importance for conservation which are primarily used and managed for nature conservation. NNRs are designated by Natural England and are the best examples of their kind.

Nationally Scarce – invertebrates found in 16-100 10km squares nationwide.

Priority Habitats have been selected because they fulfil one or more of the following criteria: the habitat is at risk; the UK has international obligations to protect it; they are functionally important for species inhabiting wider environments; and/or they are important for species of particular conservation concern. In

addition to the 36 UK Priority Habitats that occur in Dorset, the Dorset Biodiversity Partnership has added 4 habitats of local significance. Find out more at <https://jncc.gov.uk/our-work/uk-bap-priority-habitats/>

Priority Species - since 1995 the UK has listed its most threatened species. Find out more at <https://jncc.gov.uk/our-work/uk-bap-priority-species/>

Protected species – species specially protected by the law, primarily under Schedules 1 (birds), 5 (amphibians, reptiles & mammals), and 8 (plants) of the Wildlife and Countryside Act 1981.

Ramsar – a site designated under the Ramsar Convention on the Conservation of Wetlands of International Importance.

Red Data Book (RDB) species – catalogues published by the IUCN or by National Authorities listing species which are rare or in danger of becoming extinct globally or nationally. Sometimes species are included for which the national authority hosts a large part of the world’s population, and has an international responsibility to conserve them.

Semi-natural habitats – habitats or communities that have been modified to a limited extent by man, but still consist of species naturally occurring in the area.

Site of Nature Conservation Interest (SNCI) – sites selected for their habitat or species interest. Sites are selected by an SNCI Panel with representatives of Dorset Wildlife Trust, Dorset Environmental Records Centre, Natural England and Dorset County Council.

Special Area of Conservation (SAC) – a site designated under EC Directive 92/43 on the conservation of natural habitats and wild fauna and flora.

Special Protection Area (SPA) – a site designated under Article 4 of EC Directive 79/409 on the conservation of wild birds. Together SACs and SPAs form a network of European sites known as ‘Natura 2000’.

Site of Community Importance (SCI) – SAC adopted by the European Commission but not yet formally designated by the Government.

Site of Special Scientific Interest (SSSI) – an area of land notified under the Wildlife & Countryside Act 1981 for their special scientific interest. They are the best examples of our natural heritage of wildlife habitats, geological features and land forms. All sites of national and international importance on land are notified as SSSIs. SSSIs are notified in England by Natural England.

UK endemic species – species that are confined to the UK and which, as far as is known, originated here.

Vascular plants – plants that contain vessels for conducting liquids – a vascular system. This includes flowering plants, conifers, ferns and their allies.

Vertebrates – animals with a backbone; mammals, birds, reptiles, amphibians and fish.

World Heritage Site – an area considered to be of outstanding universal value, that meets one or more of the four criteria set out by the United Nations Educational, Scientific and Cultural Organization (UNESCO).

Abbreviations

Organisations

DC	Dorset Council
BCP	Bournemouth, Christchurch and Poole Council
DWT	Dorset Wildlife Trust
NE	Natural England
NT	National Trust
RSPB	Royal Society for the Protection of Birds

Site status

LNR	Local Nature Reserve
NNR	National Nature Reserve
SAC	Special Area of Conservation
SAC (SCI)	Special Area of Conservation (Site of Community Importance)
SNA	Strategic Nature Area
SNCI	Site of Nature Conservation Interest
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest. In the habitat accounts these are linked to the site manager e.g. Natural England, National Trust, RSPB etc.