

# Nature Recovery in Dorset: Where are we now?

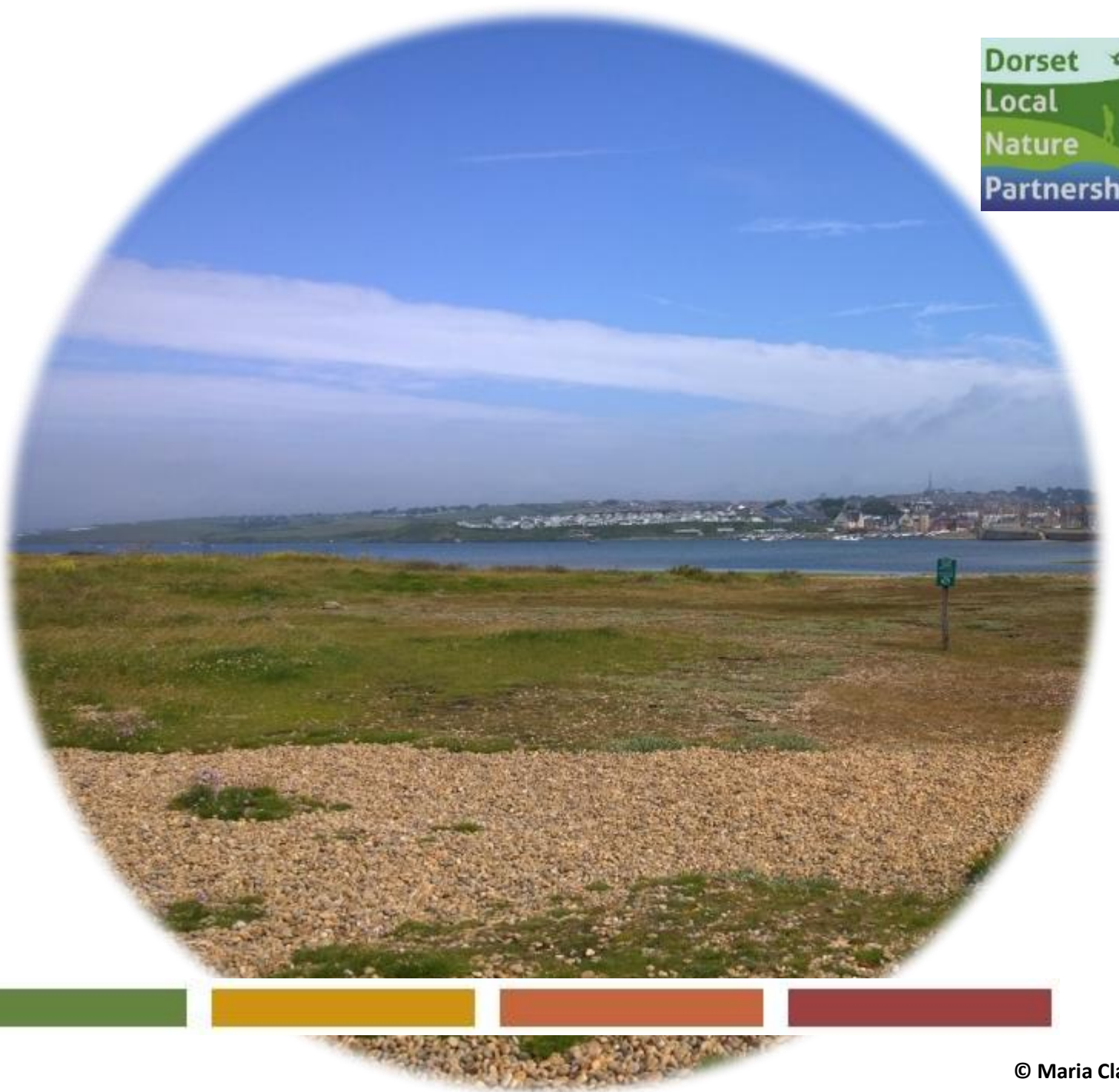
Imogen Davenport

Dorset LNP



# Today

- Baseline
- Work so far
- Work underway or planned



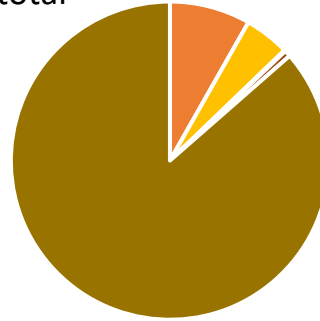
# Baseline

Baseline data: DERC (2021)



## Without Ecological Networks

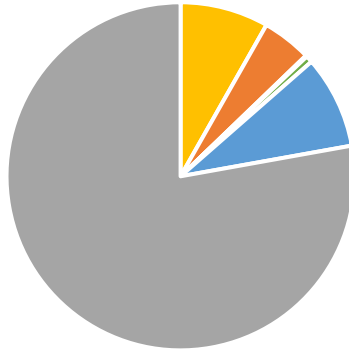
Dorset total



- SSSI (8%)
- SNCI (5%)
- Nature reserves (undesigned)
- Ancient Woodland (undesigned)
- Not identified of existing interest

## Protected areas

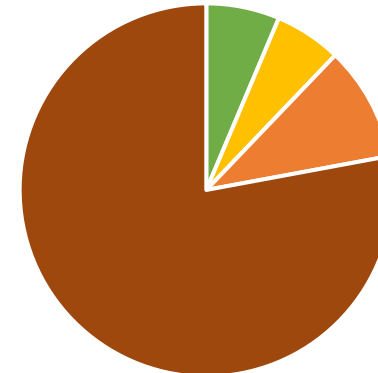
Dorset total



- SSSI (8%)
- SNCI (5%)
- Nature reserves (undesigned)
- Ancient Woodland (undesigned)
- Ecological Networks (other) (9%)

## Condition

Dorset total



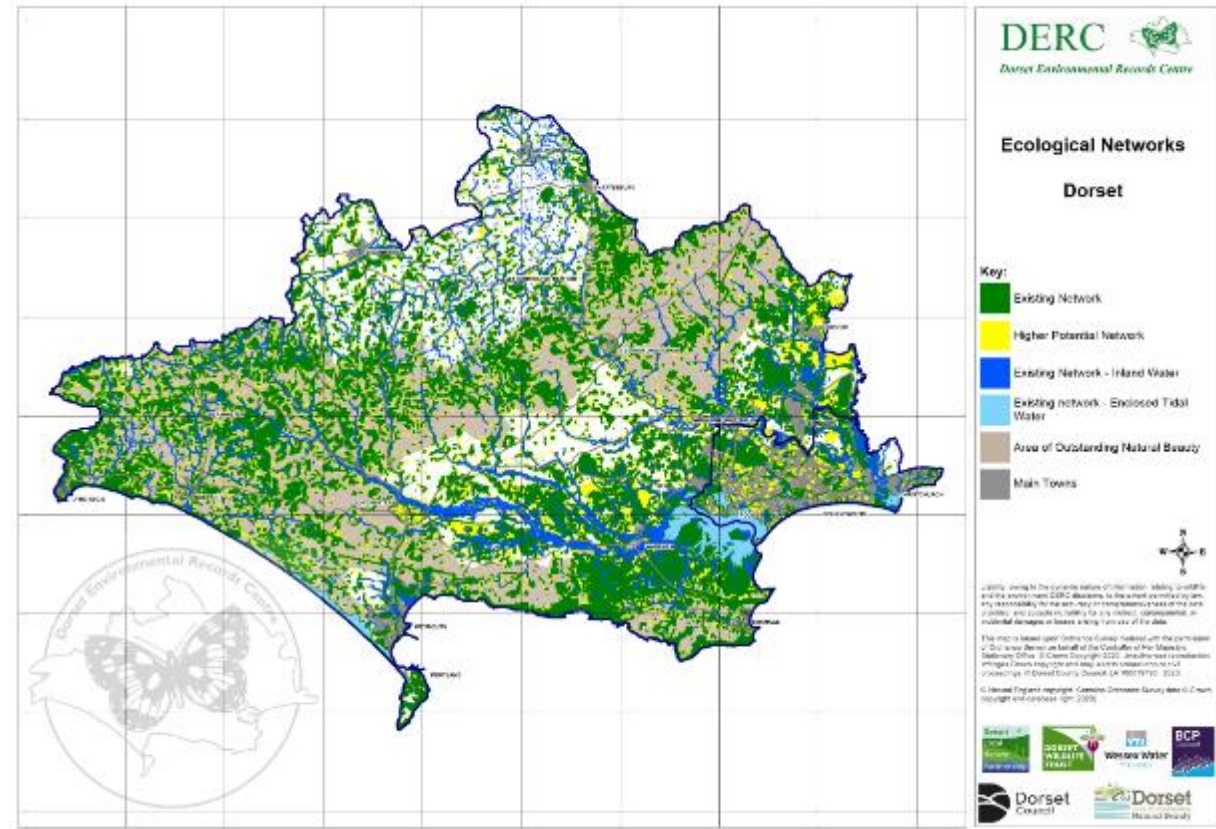
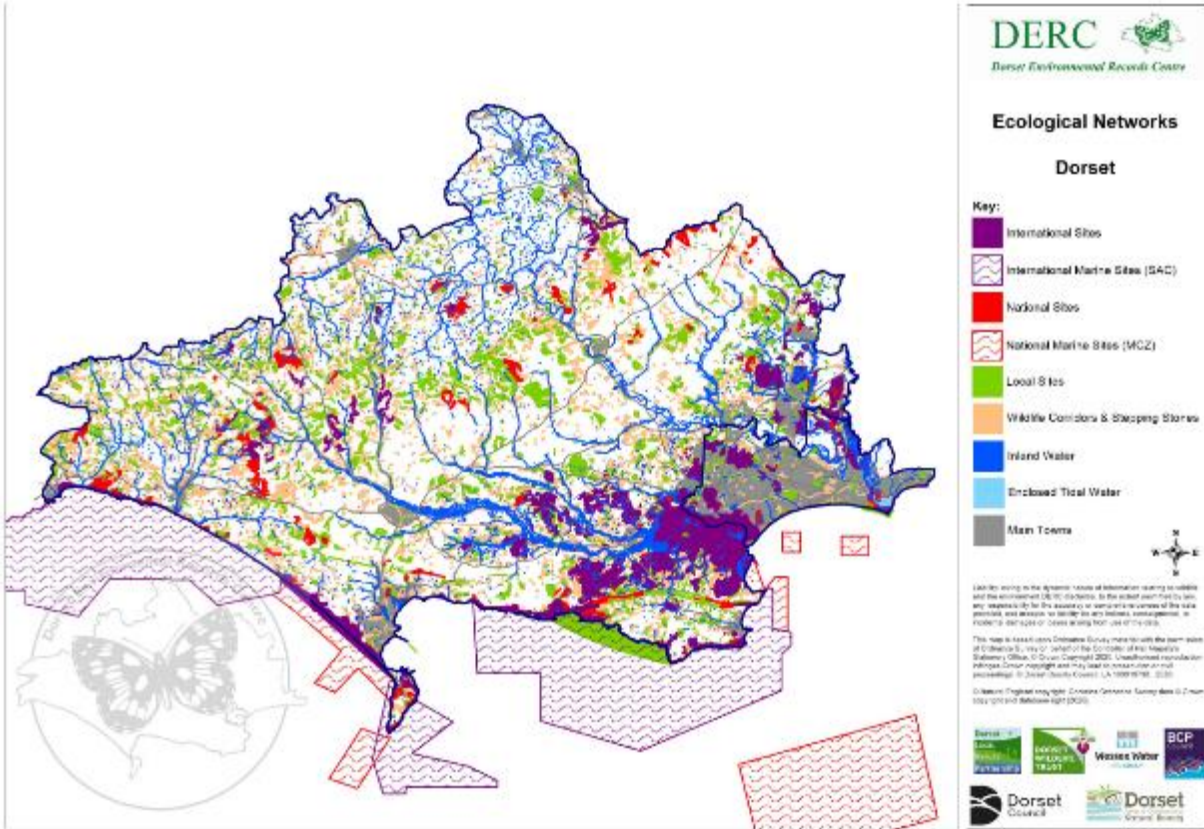
- Total in good condition (6%)
- Total in poor condition (6%)
- Known ecological interest, unknown condition (10%)

Dorset = Dorset and BCP council areas



# Work so far

## Ecological Network Mapping: DERC (2018 & 2020)





# Work so far

## Terrestrial Biodiversity Audit: DERC (2021)



### Dorset Important Species List

1 = species on the UK Biodiversity Action Plan Priority Species list or the Section 41 list (NERC Act 2006) or on Schedules 1, 5 and 8 of the Wildlife & Countryside Act 1981 (& amendments).

2 = species with the IUCN Threat Categories; **Critically Endangered**, **Endangered** or **Vulnerable**, or listed as **Near Threatened** or **Data Deficient**, or for **Birds** on the latest **Red** and **Amber** lists of Birds of Conservation Concern.

3 = species classed as **Nationally Rare** (found in 1-15 10 -km squares nationally) or **Nationally Scarce** (found in 16-100 10 -km squares nationally).

4 = species significant in a regional or county context. These can be species that are declining or rare within the County, or those for which Dorset supports a significant population within the region or nationally.



Purbeck Mason Wasp



Portland Sea-lavender



Splendid Waxcap

2,929 Species (1,107 on 2012 list)

424 Section 41 species

120 WCA species

396 IUCN Threatened (CR, EN, & VU)

186 IUCN Near Threatened

43 Global / European Red Listed

102 Nationally Rare species

1,289 Nationally Scarce species

432 Not seen since 1990



*Podoscypha multizonata*



Early Gentian



Duke of Burgundy



# Work so far



## Marine Biodiversity Audit: DWT (2021)

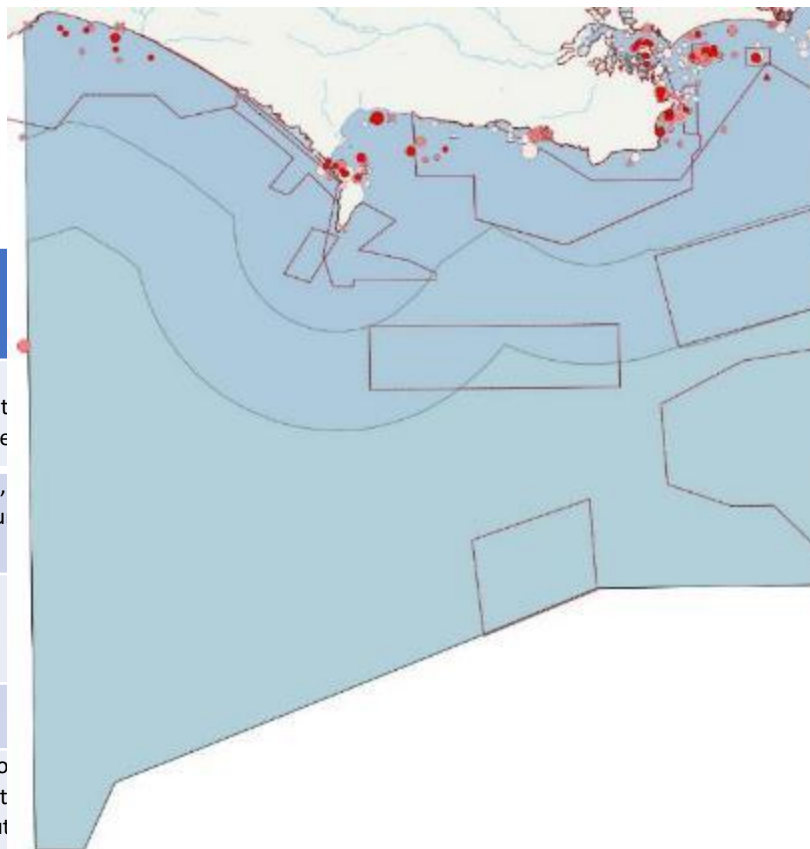
	FOCI/Priority Habitat occurring in	UK/Dorset Priority Habitat		ha
Blue Mussel Beds	?	UK	Mussel beds on rock excluded from UK priority habitat – probably applies to most Dorset examples	
Estuarine rocky habitats	?	UK	Difficult to map, but probably present in Poole Harbour and Portland Harbour	
Fragile sponge and anthozoan communities on subtidal rocky habitats	Yes	UK		
Intertidal mudflats	Yes	UK		2049
Intertidal underboulder communities	Yes	UK	The extent of boulders on the shore can often be determined from aerial photographs but ground-truthing is necessary to determine species richness	50?
Littoral chalk communities	Yes	UK		
Maerl beds	Yes	UK		
Sea-pen and burrowing megafauna communities	?	UK	Uncertainty over which mud biotope applies in Portland Harbour	
Native oyster ( <i>Ostrea edulis</i> ) beds	No	UK	Individual oysters widespread, but not at sufficient density to form a bed	
Peat and clay exposures	Yes	UK		

	FOCI/Priority Habitat occurring in Dorset	UK/Dorset Priority Habitat		ha
Honeycomb worm ( <i>Sabellaria alveolata</i> ) reefs	Yes	UK		
Ross worm ( <i>Sabellaria spinulosa</i> ) reefs	Yes	UK		
Seagrass beds	Yes	UK		476
Sheltered muddy gravels	Yes	UK	Includes peacock worm “forests” in Poole Harbour	
Subtidal chalk	Yes	UK		
Tide-swept channels	?	UK		
Ampelisca mats	Yes	Dorset		
Brittlestar beds	Yes	Dorset		
Neopentadactyla aggregations in maerl gravel	Yes	Dorset		
Black bream nesting sites	Yes	UK		



# Work so far

## Marine Biodiversity Audit: DWT (2021)

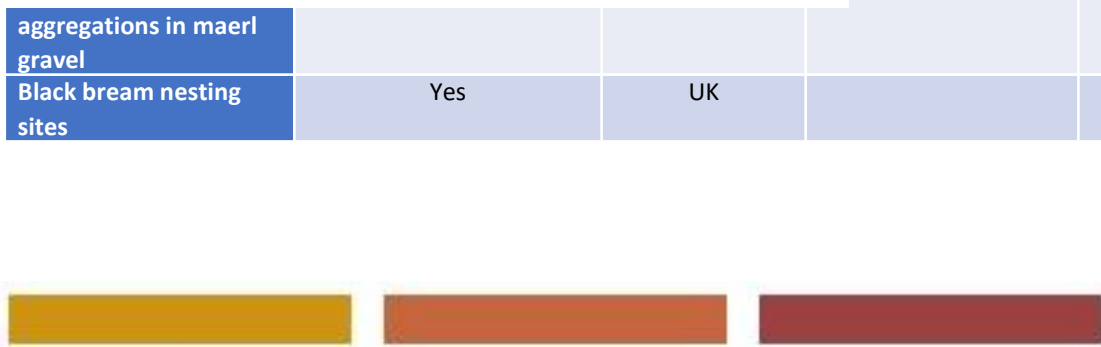


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Peat and clay exposures	Yes	UK	

Native oyster beds

- Ostrea edulis records
- x Absent
- Superabundant
- Abundant
- Common
- Frequent
- Occasional
- Rare
- ▲ Present (no abundance score)
- Age of records
- up to 6 yrs old
- 6-12 yrs old
- over 12 yrs old
- Certainty of records
- Certain
- Uncertain
- Protected area boundary

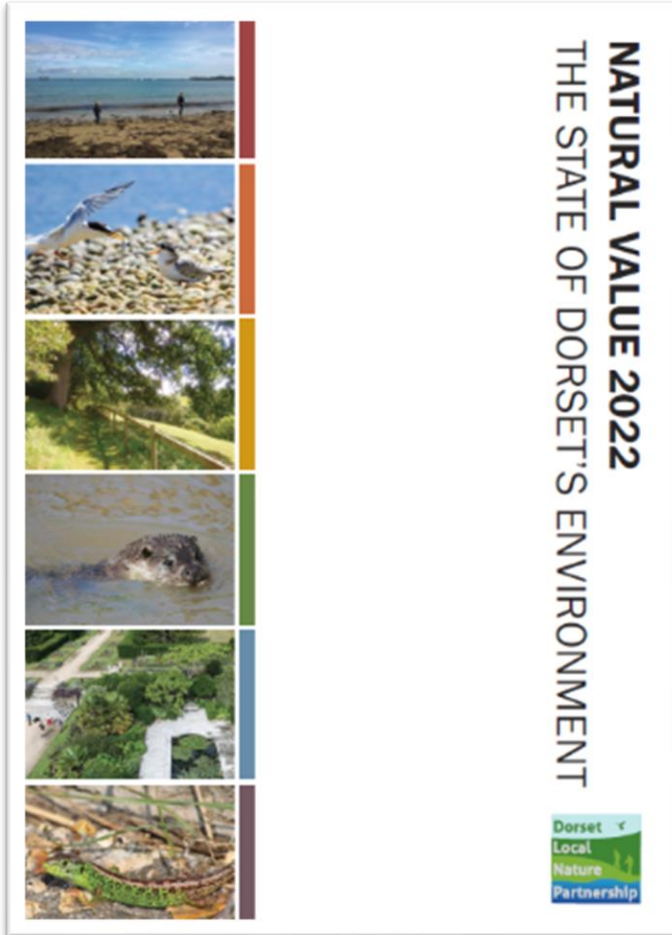
	ha
	476
includes peacock	
firm "forests" in	
ole Harbour	





# Work so far

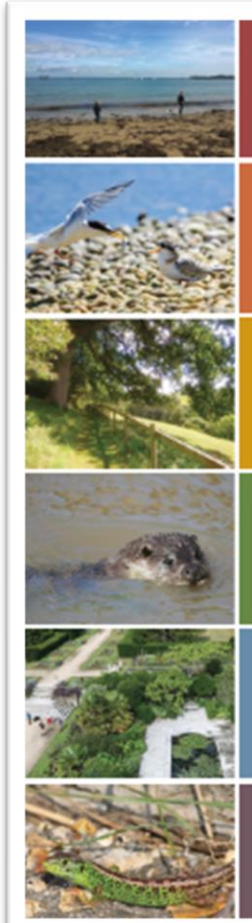
Natural Value Report: Dorset LNP (2022)





# Work so far

## Natural Value Report: Dorset LNP (2022)



## NATURAL CAPITAL

Our natural assets (or natural capital) are often taken for granted, ignored in decision making or given lower priority than social and economic goals, but they are essential for our way of life. These assets provide goods and services we rely on, from fertile soil and productive land and seas to fresh water and clean air. They provide vital services (often called ecosystem services) such as pollination, natural protection against flooding spaces for recreation, and the regulation of our climate.

We need to invest in our natural assets, taking a natural capital approach when decision making (i.e. incorporating the impacts on the environment from the outset, so as not to erode the assets which underpin our economy and quality of life). This will enable greater benefits to society, to our health and wellbeing and community resilience, and to our economy, to deliver a sustainable future and be an economic driver. This will also conserve and enhance our natural environment for its own intrinsic value, help to reverse the

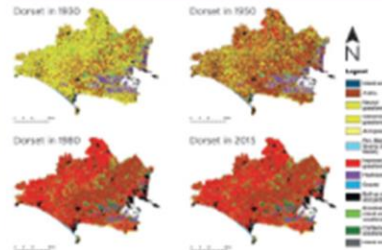
ecological crisis and help address climate change issues

**Land use change:** Dorset is recognised for its biodiversity and landscape quality, with many national and international designations for both wildlife species and sites. This does not mean however that all our natural environment is in good health. As with many areas in the country, land use has changed over time and more of our land has been developed to meet population growth and the need for housing and food.

Figure 1 shows that over time land use types that tend to be more wildlife rich, such as natural and calcareous grasslands and heathland, have been converted to improved grassland, arable and urban use, which tends to be less wildlife rich. The maps exclude most of the BCP Council area as this was not within the original 1930 map.

<sup>1</sup> Bournemouth University (2017)

FIGURE 1: LAND COVER CHANGE<sup>1</sup>



**Landscape**  
Over 52% of Dorset's high quality landscape is designated as Areas of Outstanding Natural Beauty (AONB). Approximately 42% of Dorset is covered by the Dorset AONB with 1,129km<sup>2</sup> and is the 5th largest of the 46 AONBs in the UK. A further 273km<sup>2</sup> is covered by the Cranborne Chase AONB (29% of the AONB is within Dorset). These areas are designated for their beauty but are being working areas so development is not prohibited but needs to be appropriate, for example using local stone or vernacular design.

In around 2000 the area of fragmented heathland (grass less than 25ha and >500m from neighbouring heathland blocks) in the south Purbeck area was approx. 270ha. Following restoration work (between 2000 and to date), including reversion from conifer, improved pasture, arable, quarries etc. to lowland heathland and grassland, fragmentation has been reduced to around 145ha, a reduction of some 47%.

**Wildlife**  
Nationally, biodiversity is in decline and between 1970 and 2019<sup>2</sup>, there was a significant decline of 13% in the average abundance of 694 terrestrial and freshwater indicator species and a 5% decline in average species distribution. Of 8,431 species assessed nationally, 15% are threatened with extinction, and 2% are already extinct.

The Dorset Biodiversity Audit 2021<sup>3</sup> lists 2,920 terrestrial and freshwater species and 157 marine species of conservation concern in Dorset (species that are rare, scarce, threatened, protected, declining or extinct in the county).

Table 1 demonstrates the marine priority habitats known to be present in Dorset, for most of these the total area is not known.

Table 2 sets out the area covered by terrestrial priority habitat within the area. The total area of priority habitat is some 19,900ha and is about 7.4%

TABLE 1: MARINE PRIORITY HABITATS IN DORSET<sup>4</sup>

	UK/Dorset Priority Habitat	Area/ha
Fragile sponge and anthozoan communities on subtidal rocky habitats	UK	unknown
Intertidal mudflats	UK	2049
Intertidal underbiofilm communities	UK	Estimated 50
Littoral chalk communities	UK	unknown
Marl beds	UK	unknown
Peat and clay exposures	UK	unknown
Honeycomb worm ( <i>Sabellaria obovata</i> ) reefs	UK	unknown
Koss worm ( <i>Sabellaria spinulosa</i> ) reefs	UK	unknown
Seagrass beds	UK	476
Sheltered muddy gravels	UK	unknown
Subtidal chalk	UK	unknown
Amphibola mats	Dorset	unknown
Brachiolaria beds	Dorset	unknown
Nonspontaneous aggregations in marl gravel	Dorset	unknown
Black brinn nesting sites	UK	unknown

TABLE 2: PRIORITY HABITATS IN DORSET 2020<sup>5</sup>

Priority Habitat	All Dorset Area (Ha)	DC Area (Ha)	BCP Area (Ha)
Coastal Floodplain & Grazing Marsh	655	460	195
Coastal saltmarsh	476	374	100
Coastal sand dunes	93	90	3
Coastal vegetated shingle	101	100	0
Lowland beach and yaw	34	34	0
Lowland calcareous grassland	3,206	3,206	0
Lowland dry acid grassland	663	543	98
Lowland fern (excluding Valley mires)	47	45	2
Lowland fern (including Valley mires)	665	656	9
Lowland heathland	5,529	4,669	860
Lowland meadows	702	663	38
Lowland mixed deciduous woodland	4,401	4,288	112
Maritime cliff and slope	670	670	0
Floods (of High Ecological Quality)	7	7	0
Purple moor grass	522	500	22
Reedbeds	209	272	18
Saltwater Lagoons	511	511	0
Traditional Orchards	67	67	0
Wet woodland	585	553	32
Wood pasture and parkland	590	590	0

<sup>1</sup> Site of Nature (2019)  
<sup>2</sup> DEFRA (2021)  
<sup>3</sup> DWT (2020)



# Work so far

## Natural Value Report: Dorset LNP (2022)



### NATURAL CAPITAL

Our natural assets (or natural capital) are often taken for granted, ignored in decision making or given lower priority than social and economic goals, but they are essential for our way of life. These assets provide goods and services we rely on, from fertile soil and productive land and seas to fresh water and clean air. They provide vital services (often called ecosystem services) such as pollination, natural protection against flooding, spaces for recreation, and the regulation of our climate.

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Land use change Dorset is recognised with many national designations for both species and sites. It means however that environment is being with many areas in use has changed over our land has been most population growth for housing and food.

Figure 1 shows that use types that tend wildlife rich, such as calcareous grassland have been converted to agriculture and which tends to be the original 1930 map.

\*Bournemouth University

**FIGURE 1: LAND COVER CHANGE\***

### NATURAL HEALTH

In Dorset the Integrated Care System (ICS) and local authorities spend £1.4 billion on health services<sup>1</sup>. It is forecast that by 2023-24 NHS specialised services in Dorset will have a gap of £272million<sup>2</sup>. The health system needs to change to meet and focus on prevention to reduce the need for acute care in the long term.

There is increasing evidence about the value being in nature has to health and wellbeing. The natural environment makes a huge contribution to physical and mental health and wellbeing, with many people accessing natural and green spaces to support their quality of life, offering opportunities for physical activity and a place for quiet contemplation to reduce stress and anxiety. The pandemic highlighted the value of nature for people's wellbeing, particularly during the lockdowns.

**Natural health service:** Physical activity can reduce the risk of major illnesses, such as type 2 diabetes, cancer, heart disease and stroke by up to 50%, and lower risk of early death by up to 30% as well as supporting good mental health. The cost of physical inactivity to Dorset ICS is around £4.3million<sup>3</sup>. A study by Exeter University valued the benefits to health of 'Green services' (physical activity in natural environments) in England at around £2.2 billion a year<sup>4</sup>.

While figures across Dorset are below the average for people feeling lonely often or always and above average for those never feeling lonely, almost 95% of people felt lonely some of the time or occasionally (comparable with the England average).

One in four people will have a mental health issue at some time in their life and one in six people at any one time will have a mental health issue - this means that in Dorset, about 128,971 people out of a total population of 773,831 (mid-year estimates 2019) will have a mental health issue at any one time.

<sup>1</sup> Dorset Integrated Care System  
<sup>2</sup> Active Dorset (2020)  
<sup>3</sup> Exeter University (2016)  
<sup>4</sup> Exeter University (2020)

**TABLE 1: ACTIVE LIVES SURVEY ADULTS OVER 16YRS DORSETWIDE\***

	2015-16	2016-17	2017-18	2018-19	2019-20
Active at least 150 minutes a week	43.0	44.0	44.6	46.5	44.5
Fairly active 30-149 minutes per week	13.4	12.2	12.4	12.3	10.2
Inactive: less than 30 minutes a week	24.5	23.8	21.0	21.2	25.3

### NATURAL HEALTH (CONTINUED)

one place which people can self-refer to or can be signposted to by health professionals.

Dorset ACONB received £328,000 from the Big Lottery for a three-year project (2017-2020) to engage older people needing additional support, including those living with dementia and their carers, in dementia friendly nature-based activities and sensory rich visits to places of interest in Dorset. The Stepping into Nature<sup>5</sup> evaluation highlighted the benefits of the project - 75% of people intended to spend more time outdoors, 92% felt they had good opportunities to socialise, 80% felt the activities allowed them good opportunities to connect to nature, 96% felt included and 91% intended to return and take part in further activities. A future £380,000 has been awarded to expand the project for a further three years.

**Access to natural spaces** The Dorset Sustainability and Transformation Plan (STP) brings the health system (NHS, Public Health,

<sup>5</sup> Public Health Dorset (2020)  
<sup>6</sup> The Journal of Mental Psychology (2018)  
<sup>7</sup> Exeter University (2017)  
<sup>8</sup> Dorset LNP  
<sup>9</sup> Dorset ACONB

**TABLE 11: LONELINESS\***

	Dorset	BCP Council	Dorset Council	England
Often/always	0	0	0	5.3
Some of the time	19.7	21.4	17.9	16.9
Occasionally	19	19	18	21.5
Hardly ever	25.8	25.1	24.5	28.8
Never	31.6	30.1	33.3	27

**TABLE 12: DEPRESSION AND ANXIETY PREVALENCE\***

	BCP Council	Dorset	Southwest	England
Depression and anxiety prevalence (% on GP register 18 <sup>+</sup> )	10.8	11.0	11.2	10.7

Research shows that just 5 mins in the natural environment helps to boost mood<sup>6</sup> and a recommendation has been made that we should all spend 120 minutes a week in the nature to support of wellbeing. Activities in the natural environment offer both a preventative and a therapeutic opportunity to support and enhance health and wellbeing.

The natural environment offers opportunities to support wellbeing and act as a prevention to illness through opportunities for physical activity, social connection, mental stimulation and relaxation. Health needs and illnesses can also be supported by therapeutic opportunities to either reduce symptoms or help improve quality of life. The green prescription service, Natural Choices<sup>7</sup>, was rolled out across Dorset, offering over 60 activities from 27 providers (pre covid). The programme acts as an umbrella brand which brings together opportunities for activities within the natural environment which support both physical and mental wellbeing in

**TABLE 13: WOODLAND\***

Woodland	385	333	32
Wood pasture and parkland	590	590	0

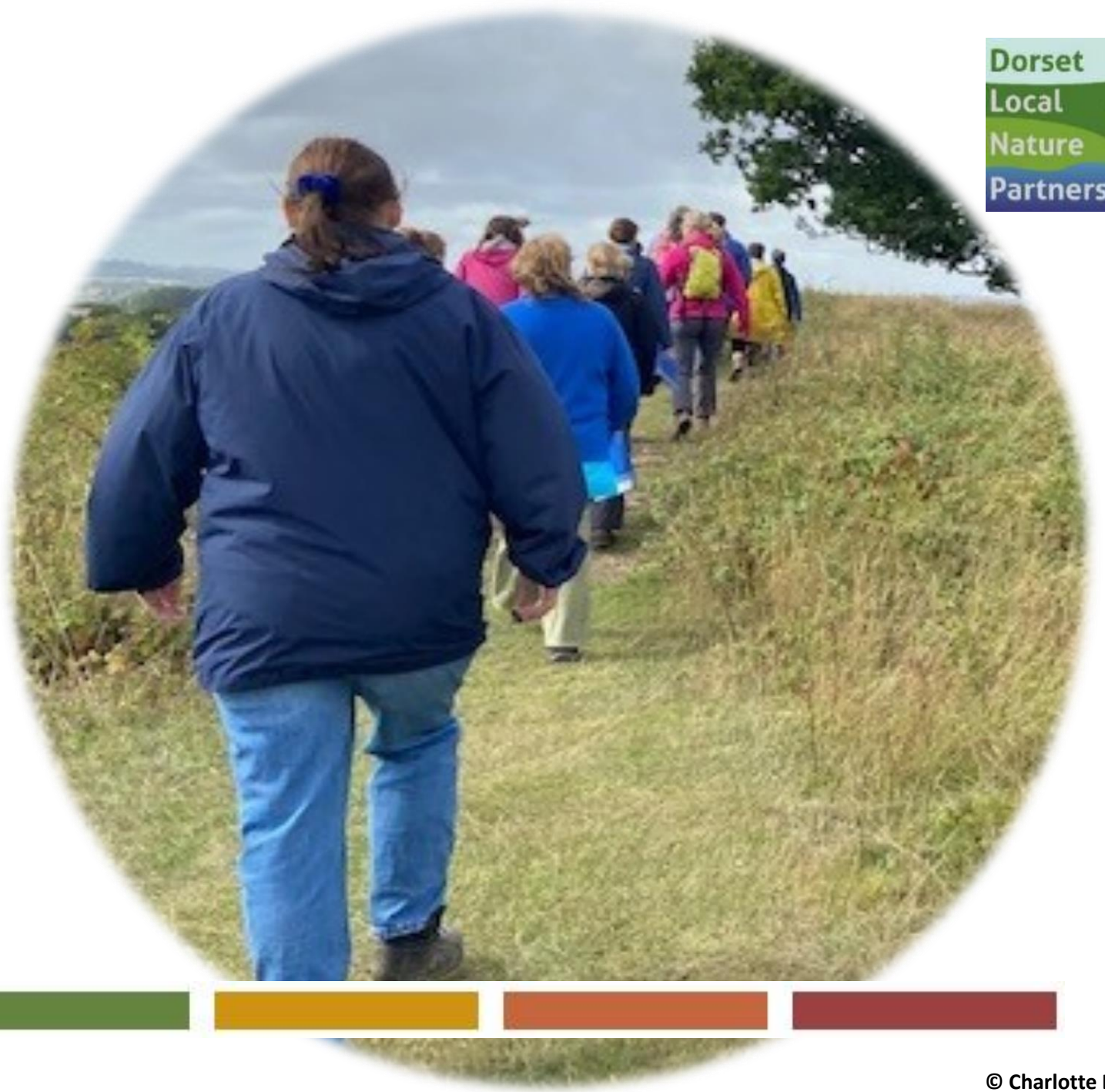


# Work underway or planned

- Data / evidence mapping
- Biodiversity Character Area Mapping
- Stakeholder Communications Plan
- Wider engagement once guidance published







Thank you

[info@dorsetlnp.org.uk](mailto:info@dorsetlnp.org.uk)

[www.dorsetlnp.org.uk](http://www.dorsetlnp.org.uk)

