

Species Recovery supporting document

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Introduction

Dorset local nature recovery strategy sets priorities and proposes activities to create or improve habitats and map locations where doing this can deliver the most benefits for nature and the wider environment.

In addition to supporting the overall enhancement of species abundance and species richness, the local nature recovery strategy also identifies priority species that need targeted and bespoke actions. This document sets out the process that was followed by local experts to create the priority species list.

Local species experts

A species task and finish group was formed to complete this work and met regularly from January to August 2024.

The 15 group members were drawn from the organisations listed below, to contribute a range of expertise on the major taxonomic groups and species recovery. The group was chaired by an independent ecologist with authoritative knowledge of the county and national perspectives.

- Amphibians and Reptiles – Amphibian and Reptile Conservation (ARC)
- Birds – Royal Society for the Protection of Birds (RSPB)
- Bryophytes – Dorset Environmental Records Centre (DERC)
- Butterflies – Butterfly Conservation
- Fish – Environment Agency
- Fungi – DERC
- Invertebrates – DERC and independent experts on individual taxa
- Lichens – DERC
- Mammals – Dorset Bat Group, National Trust
- Vascular plants – DERC
- Conservation translocations – Forestry England
- Ecology – Dorset Council, BCP Council, Natural England, Forestry Commission, Footprint Ecology.
- Intertidal and estuarine – Dorset Wildlife Trust



Group members also engaged with other groups and expert individuals with detailed knowledge of species and opportunities within Dorset, groups including:

- Birds of Poole Harbour
- Dorset Bird Club
- Dorset Flora Group
- Dorset Mammal Group
- Dorset Moth Group
- Dorset Dragonfly Group
- Dorset Fungus Group
- Purbeck Recorder Group
- Freshwater fishing clubs
- Portland Bird Observatory
- Dorset Amphibian and Reptile Group

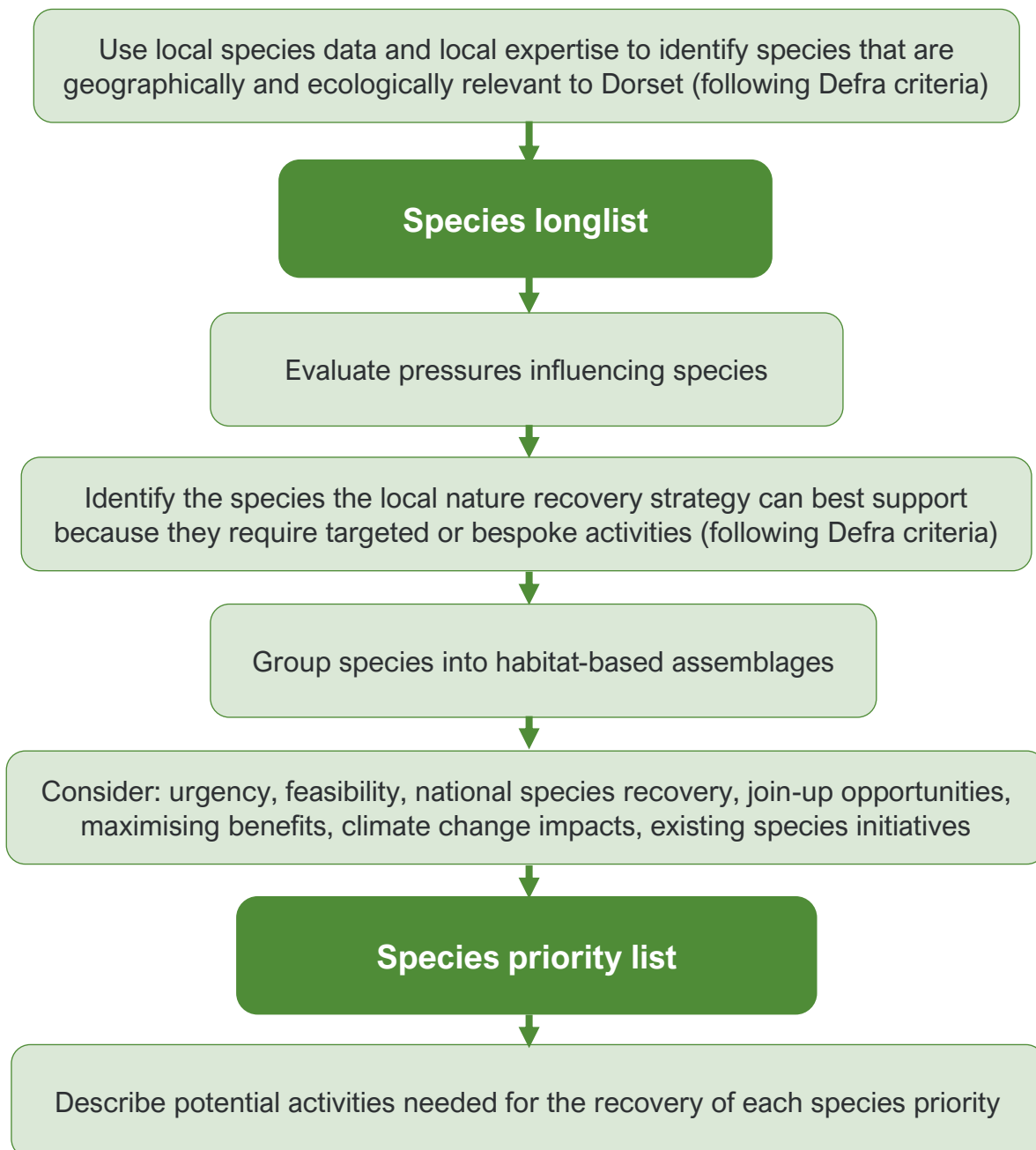
The groups also reviewed species advice notes for the local nature recovery strategy provided by several national organisations, such as [Plantlife](#), [Amphibian and Reptile Conservation](#), [Buglife](#), [Bat Conservation Trust](#), [People's Trust for Endangered Species \(PTES\)](#), [The Species Recovery Trust](#) and [Natural England](#).





Methodology

The process for identifying the priority species for Dorset's local nature recovery strategy followed the "Species Recovery within Local Nature Recovery Strategies Advice for Responsible Authorities" issued by Defra. The process is summarised in the diagram below and each step is explained in more detail over the following pages.





Preparing the species longlist

Species were selected according to their global, national and local rarity, and where known, their change in distribution and abundance in recent decades.

The criteria for inclusion on the longlist were, species that are:

- characteristic of habitats in Dorset
- at high risk of extinction
- not currently present in Dorset but could feasibly become established or be reintroduced
- other species of local significance

Dorset Environmental Records Centre (DERC) coordinated this process, bringing together local records, national and international data, and contributions from the group members.

Species of local significance were identified by engaging with local species groups and experts and including the most frequently mentioned species at the [LNP Annual Forum 2024](#) workshop.

In Dorset, this produced a longlist of 998 species (appendix A). Following the public consultation, 3 more species were added to the longlist that have been found in Dorset this year. This list helps describe the biodiversity of Dorset and is a useful tool for anyone wanting to understand local species and/or support species recovery.

While the priority list focuses on species requiring bespoke action, the longlist is a useful tool for planning nature recovery projects that may be able to target species that do not feature on the priority list. The longlist species are grouped into habitat-based assemblages, each with their own guide explaining which species have similar habitat requirements and the pressures they face. These guides provide useful information to understand how activities under other priorities in the local nature recovery strategy will help species. For example, the potential activities under priority 5 – coastal can support the assemblage ‘species of soft rock and slumping cliffs’. You can also review the longlist to understand how the priority species were identified.



Creating the species priority list

From the longlist, the group followed the steps below to identify a smaller number of species which the Dorset local nature recovery strategy can best support, beyond the general habitat improvement and creation activities proposed in the strategy.

Species assemblages

Species of the same taxa on the longlist were grouped together according to their habitat requirements. For example:

- plants of short, open chalk and limestone grassland
- riparian dragonflies and damselflies
- ecto-mycorrhizal and saprotrophic fungi of ancient and long-established woodland

One-hundred and thirty-six species assemblages were identified (appendix B).

Pressures

The key pressures that affect, or are likely to affect, species in each species assemblage were identified. Pressures were identified using this [classification of pressures](#) suggested by Defra, in combination with local expertise held in the group. Pressures were identified for species in each habitat-based assemblage and some individual species (appendix C).

Species the local nature recovery strategy can best support

Species were categorised by the relevant taxa experts according to a their current, or anticipated future needs, to rule out those species that either:

- will be supported by general habitat improvement or creation activities in the local nature recovery strategy
- require recovery actions that are beyond the scope of the local nature recovery strategy

Appendix D explains the categories set by Defra, and columns AN-AX on the longlist spreadsheet record the categories assigned to each species.

This categorisation reduced the longlist to those species identified as needing:

- targeted habitat management
- improvements in environmental quality
- bespoke conservation action(s)



Habitat assemblages

Where possible species were grouped into habitat-based assemblages, groups of species from multiple taxa that have similar habitat/ecological requirements. For example:

- species of open woodland, glades, rides and early-stage coppice
- species of ancient and unimproved grasslands
- species of saltmarsh and brackish-freshwater transitions

Twenty-nine habitat assemblages were identified, see a list in appendix B and guidance documents for each assemblage in appendix C.

Important considerations

For each remaining species, the following important considerations were made by the relevant taxa expert individually, and then the group reviewed these considerations together in a workshop session to guide the selection of the species on the priority list.

- urgency
- deliverability
- contributions to national species recovery
- cross-boundary considerations
- maximising benefits
- climate change impacts
- pre-existing initiatives

See appendix E for further detail. These considerations and discussions enabled the group to narrow down to 73 individual species. This was further reduced to 54 species priorities, by grouping some species requiring similar activities into 4 assemblages. Following the public consultation, 1 further species was added to the priority list taking the total to 55 species priorities.



Identifying activities required for the recovery of priority species

For each priority species, or assemblage, the group identified the potential activities required to support their recovery and enhancement. These are the specific practical actions that these priority species require, above and beyond the habitat restoration and enhancement activities outlined to achieve the rest of Dorset's local nature recovery strategy priorities.

Potential activities are mostly actions to create new habitat or enhance existing habitat but can also include addressing specific pressures or conservation translocation (explained further in section 3.4). The potential activities required to support each priority species can be seen in section 4.

Some of the potential activities require action across a wide area, but for those that can be targeted in specific locations, these were added to the potential activities map layer in the places where they can have the most impact.



Reintroductions and other conservation translocations

The Government's [25 Year Environment Plan](#) and [Environmental Improvement Plan](#) envisaged that species reintroductions, when carefully planned and managed, can be a part of nature recovery and provide benefits to people and the economy.

The national [code and guidance](#) defines conservation translocations as the deliberate movement and release of plants, animals or fungi into the wild for conservation purposes. The guidance also outlines the four main types of conservation translocation.

Population restoration

within the species' natural geographical range (past or present)

Reinforcement

Movement of plant animal or fungi into an existing population of the same species, to improve population viability.

Reintroduction

Movement of plant, animal or fungi into an area from which it has been lost, to re-establish a viable population.

Conservation introduction

outside the species' natural geographical range (past or present)

Assisted colonisation

Movement of plant, animal or fungi into an area where the current or future conditions are likely to be more suitable than where it has previously existed.

Ecological replacement

Movement of plant, animal or fungi to perform a specific ecological function that has been lost through another species becoming extinct.

Human activity has been shaping the natural environment for millions of years, sometimes our actions have been based on limited environmental understanding and therefore resulted in the extinction of species. The loss of any species undoubtedly changes the way the environment functions; for some species the changes are barely perceptible, but for others the consequences for ecosystems and the environment in which we live are much more profound.

Dorset's local nature recovery strategy species priority list includes several species proposed for conservation translocation, or population enhancement for species already subject to translocation in England. A number of these are re-introductions where the species has become extinct in Dorset in recent decades and where conditions are now suitable and sustainable for re-establishment. An example might be an exceptionally rare insect, the greenweed piercer, which is now locally extinct because of habitat loss and inappropriate management but where habitat quantity and quality is now increasing in Dorset, and appropriate management is in place.



Other species in the species longlist and priority list are proposed that have more profound effects in their environment. Ecologists often refer to them as keystone species, and ecosystem engineers. Their presence or absence sets the direction in which the habitat develops, and they have a critical role in altering the physical conditions of their environment, and in maintaining the structure of an ecological community. Sometimes we can simulate at least some of the ecological function of a lost ecosystem engineer with another species, for example cattle for auroch, ponies for tarpan, or pigs for wild boar. But sometimes there is no comparable domestic species that can restore the full functionality and biodiversity benefits. An example is the Eurasian beaver, which has the ability to create new wetlands, restore native woodland and improve conditions for a wide range of species including dragonflies, otters and fish. It is also an example of a nature-based solution that can help to address wider environmental issues, such as flooding, climate change and pollution. Another example is pine marten, which can help respond to the threat to native red squirrels from non-native grey squirrels.

The species task and finish group agreed that species reintroductions can and should be part of nature recovery, but recognise each requires careful planning, and the balancing of different viewpoints to deliver positive outcomes. Conservation translocations, or re-introductions, must adhere to the [code and guidance for reintroductions and other conservation translocations in England](#), and be subject to scrutiny to ensure that proposals provide clear benefits, recognise any risks and avoid negative environmental, economic or social impacts.

Within the species priority list, activities attached to the priority species describe whether conservation translocation is under consideration, and the extent to which this might be achievable within the 10-year timescale of this local nature recovery strategy.

The species longlist considers some apex predators that have become extinct, such as bears, wolves and lynx, but these are not included in the species priority list. Apex predators were the animals at the top of a food chain and impact ecosystem structure by influencing the behaviour of their prey. This can benefit biodiversity, if for example the apex predator changes the behaviour of deer, this could mean the deer eat less plants, giving the plants chance to regrow. In a functioning system the numbers of apex predators are kept under control by the availability of prey. Without apex predators the system becomes unbalanced and may require other controls. The complexity of potential apex predator reintroduction is beyond the scope of this local nature recovery strategy and would require dedicated time for local people to be involved in discussions and reviews of potential proposals.




Species priority list

The priority species are those requiring bespoke and targeted activities within Dorset's local nature recovery strategy. Abundance and diversity of a much wider range of local species will be boosted by the more general habitat enhancement and creation activities captured in the rest of the local nature recovery strategy.

The species priority list and their potential activities are provided in this section. There are 55 priority species and species assemblages. Species assemblages are groups of individual species with the same potential activities. The priority list includes a total of 74 species.

For the species in the first section of this list, the ambition is to reverse the huge decline seen in their numbers, by protecting current populations, enhancing their habitats and reducing the pressures they face. For species in the second section of the list, the ambition is to explore the potential for conservation translocation, where expertly informed projects actively intervene to restore populations. It may not be possible to recover or reintroduce some of the priority species within the lifetime of the local nature recovery strategy, instead the potential activities for those species focus on better understanding the evidence, risks, local views and deliverability.

Species	Potential activities
 <p>Atlantic puffin</p>	<p>Continue research into reasons for breeding failure</p> <p>Initiate action based on research findings.</p> <p>Continue National Trust scoping of feasibility for artificial nesting sites at Dancing Ledge, potentially setting up a seabird stakeholder group within NNR proposals.</p>
 <p>Barn owl</p>	<p>Create more small-mammal habitat (away from road verges)</p> <p>Continue barn owl box scheme on county farms</p>



Species

Potential activities

Crane

Create more wetlands to allow the population to expand.



Grey partridge

Raise awareness of the ecological requirements of grey partridge and what funding is available to undertake activities to conserve them, for example Sustainable Farming Incentive (SFI)







Maintain, create and manage different habitats to sustain grey partridges at different stages of their lifecycle and throughout all seasons of the year. For example, insect-rich cereal headland brood-rearing habitat, tussocky nesting cover, wild bird seed mixtures and overwinter stubble to provide seed food over winter.

Refer to the RSPB's grey partridge conservation and land management advice for farmers (arable and grassland)

Join and promote the Partridge Count Scheme, to confirm the presence of grey partridge on farms and numbers of this species. Grey partridge are relatively elusive, when compared to more easily seen and heard song birds – adopting tailored recording methodology will increase the likelihood of successfully monitoring this species.

Undertake targeted and legal predation control, following expert advice



Species	Potential activities
<p>Beach nesting birds assemblage common tern, little tern, ringed plover, sandwich tern</p>   	<p>Monitor population and productivity</p> <p>Protect existing breeding sites from human access during the breeding season</p> <p>Create more areas of beach / shingle habitat protected from human access during the breeding season. Identify potential new sites for nest protection by locating ringed plover roosting flocks in spring/autumn, or where little terns are regularly feeding or located pre or post breeding</p> <p>Create or enhance islands that provide habitat for birds at various stages. These would likely initially be colonised by ringed plover and/or little terns, but then common terns could move in and finally sandwich terns and gulls, by which time the ringed plover and little terns would have abandoned it</p> <p>Introduce floating rafts or nest platforms for common terns if islands cannot be created or enhanced, and plan for their ongoing annual maintenance</p> <p>Follow best practice for nest cage trials currently taking place for ringed plover</p> <p>Protect sites from common tern predators (can be done in water)</p> <p>Build on the projects at Hengistbury Head and Chesil</p> <p>Explore options to create habitat for beach nesting birds in areas near Poole Harbour protected from human access, as part of a Birds of Poole Harbour project.</p>
<p>Stone-curlew</p> 	<p>Incentivise the provision of fallow / nesting plots on farmland nearest to the existing Wiltshire and Hampshire populations (also beneficial to other wildlife)</p>



Species

Potential activities

Swift



Raise awareness among householders, developers, builders and planners of the need to accommodate swift nesting during household renovations

Raise awareness among planners, builders and architects of the options for incorporating swift nest sites into new builds, such as universal nest bricks

Use the planning system to mandate action for swifts, such as a minimum of one universal nest brick per unit where appropriate

Dorset Swift Network project installing swift nest spaces on local houses and schools. Also sharing tips on how to attract swifts to a nesting box or create a mini-meadow in nearby outdoor space to bring more insects.

Boost aerial invertebrate numbers by encouraging agro-ecological farming and wildlife friendly gardening

Encourage people to record swift activity using the RSPB's online Swift Mapper or get involved in a volunteer survey.

Make more towns 'swift towns' to celebrate and protect these species.

Hazel dormouse



Raise awareness of sympathetic woodland and hedgerow management practices

Include specific plant and hedgerow species for planting and gapping up that enhance the habitat for dormice

Put out a call for sites for monitoring dormice

Work with PTES, Dorset Mammal Group, other organisations for volunteer monitoring

Water vole



Increase the geographic extent of suitable habitat

Increase the quality and complexity of habitat, especially wetlands

Remove predation pressure from non-native American mink

Learn from new mink control methods from the Waterlife Recovery Trust project

Learn from previous Dorset project to remove mink to protect water vole on the Brit and Bride catchment delivered by BASC, SITA Trust and EA.



Species

Potential activities

Grey long-eared bat



Ensure known roosts are safeguarded through a combination of recording on the county database and roost owner education, Dorset has the biggest mainland colony in the UK.

Understand and map suitable habitat networks for bats, then work with landowners to improve connectivity between isolated habitat blocks and improve management of marginal areas within the networks.

Undertake targeted trapping and tracking projects in areas of suitable habitat where non-maternity roosts are known (through, for instance, DNA tests of droppings undertaken through the planning process) to identify unknown maternity colonies and, where appropriate, work with adjacent county bat groups to study and understand cross border movements.

Introduce consultation zones (in the same way they have been created for greater horseshoe at Bryanston) to ensure grey long-eared habitat requirements are taken into account in the planning system.

Revisit known 'long-eared' roosts that are in suitable habitat and within a collection of other known roosts, to determine species, possibly through DNA testing of droppings.

Continue work of Dorset Bat Group to establish if this is a swarming species

Swarming bat assemblage

Alcathoe,
Bechstein's, Brandt's,
brown long-eared,
common pipistrelle,
Daubenton's,
Natterer's, serotine,
western barbastelle,
whiskered



Where required, stabilise existing quarries and explore opening up of now closed, or partly closed quarries that have been previously noted as good bat sites

Increase our understanding of the distribution of swarming sites throughout the county, working with landowners to safeguard them into the future, so ensuring the genetic health of the wider Dorset meta populations

Research whether the clutter, or other factors, around the inland quarries acts as a barriers to swarming and use the findings to inform management of the quarries.

Identify bat species that would benefit from research projects, including advance survey techniques, to improve our understanding of their ecological needs and niches, and to help extend their range.



Species

Potential activities

Atlantic salmon



Tackle issues around barriers preventing fish from reaching spawning areas. For example, targeted gravel cleaning, reduce sediment input through best practice land management advice

Safeguard water quality and quantity through permitting and regulation

Ensure parr habitat is optimised to allow for maximum growth potential as this will increase the chance of marine survival. For example, protection of ranunculus coverage by; planting, exclusion from swans, best practice agreement for any weed cutting

Continue or develop monitoring programmes to help address issues and monitor successes or failures of attempted salmon recovery works which can help to steer future works

Reduce losses of all life stages through exploitation and predation. For example, reducing angler exploitation, reducing pollution and exploring whether it is necessary to manage predators

European eel



Ensure connectivity exists between marine and freshwater environments to maximise elver survival

Install eel passes or remove barriers to migration

Develop a best practice management plan for the species which highlights key habitats to protect or attempt to create

Reduce licences for commercial fishing and stop illegal fishing activity

Explore potential for trapping elvers in the lower catchment and reintroduce to areas higher in the catchment, this would ideally not be necessary but could be done as a short-term measure

Sea lamprey



Installation of fish passes to overcome barriers to migration and allow fish to migrate upstream to find suitable spawning habitat

Encouragement of marginal vegetation to allow silt deposits to accumulate which are essential for the juvenile life stages of this species



Species

Potential activities

White-clawed crayfish



Regulate and restrict trapping licences for crayfish in certain areas to ensure there is no risk of white-clawed crayfish being mistakenly caught during these activities

Protect white-clawed crayfish from the spread of crayfish plague by practicing proper biosecurity. Anyone who uses a waterway for activities like fishing, walking, or water sports should use the 'Check, Clean, Dry' method to clean equipment thoroughly after each use, as the disease can remain infectious on equipment for up to 22 days.

Establish ark sites, such as offline lakes, quarries or isolated rivers to protect local white-clawed crayfish populations from non-native crayfish that might outcompete them for resources or carry crayfish plague

Monitor local populations to understand fluctuations within this species and assess their level of threat, as well as potential locations for habitat improvements

Potter flower bee



Ensure the remaining sites have suitable nesting and foraging habitat - this bee forages in late April and May from plants such as ground ivy, bird's-foot-trefoil, common vetch and red clover along heathland edge and nests in vertical sand faces.

Work with mineral companies to include this species in quarry restoration plans, for example, Puddletown Road and Povington Ball Clay pit

Produce a regular monitoring plan for each of the sites, this should include the habitat quality as well as the number of adult insects

Raise awareness of this species and other ground nesting bees and wasps of heathland edges with land managers, old mineral workings on Dorset Heaths are very important habitats for this species



Species

Potential activities

Long-horned bee



Establish the location and extent of remaining populations by looking at records and surveying

Produce mini-management plans for each of the remaining sites, this species requires herb rich grassland for foraging with an abundance of vetches, trefoils and clovers from which the females preferentially forage. This may involve changing grazing that is reducing the amount of flowers or controlling scrub that is invading the cliff top at the expense of the grassland.

Produce a regular monitoring plan for each of the sites, this should include the habitat quality, such as the abundance of forage plants present.

Raise awareness of how important Dorset is for this and other threatened coastal bees, produce best practice guidance for coastal land managers

Dingy mocha



Review and revise current monitoring programme with partners including Butterfly Conservation

Implement revised monitoring programme

Raise awareness of species, its requirements, and practical beneficial actions with site managers

Barberry carpet moth



Draw up conservation plan with partners including Butterfly Conservation, Forestry England, National Landscapes

Ensure sufficient nursery stock is being grown to sustain demand for common barberry plants

Review current monitoring programme with partners

Implement revised monitoring programme using volunteers from Dorset Moth Group and others

Micro-moths of limestone cliffs cliff plume, samphire knot-horn




Draw up conservation plans for cliff plume and samphire knot-horn with partners including Natural England, Butterfly Conservation, British Mountaineering Council, Isle of Portland CIC

Implement species conservation plans

Carry out monitoring programme using volunteers from Dorset Moth Group and others





Species	Potential activities
<p data-bbox="197 315 507 365">Duke of Burgundy</p> 	<p data-bbox="507 315 1398 405">Provide landowner advice on habitat management to restore sites for Duke of Burgundy</p> <p data-bbox="507 405 1398 454">Deliver targeted scrub management</p> <p data-bbox="507 454 1398 544">Implement appropriate grazing - extensive autumn/winter cattle grazing with a spring pulse graze if needed.</p> <p data-bbox="507 544 1398 701">Grasslands without scrub may need management to increase scrub levels. Plant scrub in small groups of 3 whips, eg. small groups of hawthorn, blackthorn and wayfaring tree</p> <p data-bbox="507 701 1398 813">Improve quality of breeding habitat by increasing frequency of larval foodplants, sowing locally collected cowslip seed or planting plug plants</p> <p data-bbox="507 813 1398 952">Identify and enhance corridors and restore and create new areas of suitable habitat for Duke of Burgundy butterflies to breed</p>
<p data-bbox="197 952 507 1001">Lulworth skipper</p> 	<p data-bbox="507 952 1398 1153">Deliver appropriate grazing: aim to maintain areas of grassland with extensive, tall patches of tor-grass (25-40cm tall), especially growing in sheltered situations. Extensive light cattle grazing is ideal as this produces a varied sward with some tall and some shorter areas. Avoid sheep grazing.</p> <p data-bbox="507 1153 1398 1243">Manage through cutting to achieve desired sward conditions (as above) if grazing is not possible</p> <p data-bbox="507 1243 1398 1444">Manage scrub on rotation; aim to have a maximum of 30% cover to provide shelter. Where there is less than 10% scrub cover, aim to maintain all scrub. It should be retained as discrete small patches, lines and occasional individual bushes scattered across the site.</p> <p data-bbox="507 1444 1398 1534">Monitor populations – carry out abundance and distribution surveys every 5-10 years</p>
<p data-bbox="197 1534 507 1583">Marsh fritillary</p> 	<p data-bbox="507 1534 1398 1624">Appropriate grazing to create a structured and varied sward height of between 5-15cm</p> <p data-bbox="507 1624 1398 1713">Scrub removal to maintain an appropriate cover to maintain shelter (5-10% cover)</p> <p data-bbox="507 1713 1398 1780">Planting of Devil's-bit scabious plants, or seed scattering, in areas where surveys indicate low frequency</p> <p data-bbox="507 1780 1398 1870">Creation of scrapes, where appropriate, to encourage Devil's-bit scabious to germinate</p> <p data-bbox="507 1870 1398 2011">Management to improve connectivity between breeding habitat patches; creation of 'stepping stone' habitat between breeding patches; creating flower-rich linkages between sites to support dispersal</p>



Species

Potential activities

Richardson's case-bearer



Draw up conservation plan focused on scrub control, with partners including Natural England, Butterfly Conservation, Isle of Portland CIC
 Implement species conservation plans
 Carry out monitoring programme using volunteers from Dorset Moth Group and others

Blackwort



Assess the current status of the species at each of the remaining sites on the Isle of Portland

Produce mini-management plans for each of the remaining sites for the species

Create small-scale scrapes in the limestone turf at five of the remaining sites to extend the area of habitat for the species

Establish plots to monitor the changes in the habitat and species, plots should be 5x5meters with 1x1meter sub-plots to monitor species

Produce management plans for the quarries on Portland that are due to come out of production, including creation of micro-habitat required by this species and Blackwort

Chalk threadwort



Assess the current status of the species at each of the remaining sites on the Isle of Portland

Produce mini-management plans for each of the remaining sites for the species

Create small-scale scrapes in the limestone turf at five of the remaining sites to extend the area of habitat for the species

Establish plots to monitor the changes in the habitat and species, plots should be 5x5meters with 1x1meter sub-plots to monitor species

Produce management plans for the quarries on Portland that are due to come out of production, including creation of micro-habitat required by this species and blackwort



Species

Potential activities

Stinking goosefoot



Survey the one remaining site on the cliff top at West Bay to establish whether the species is still present, if present assess whether the population is threatened by the ongoing erosion of the cliffs.

Survey the coast between West Bay and Burton Freshwater to identify suitable sites to establish 3 new populations close to the remaining site

Establish plots to monitor both the habitat and the plant at each of the sites, using trained volunteers from the Dorset Flora Group

Thatch-moss



Survey known sites and former sites to understand the size of the current population and the state of the thatch roofs

Seagrass beds assemblage

eelgrass, dwarf eelgrass



Ongoing Studland Bay Marine Partnership project to restore, monitor and protect *Zostera* (for example, eco-moorings). Publication anticipated next year demonstrating recovery and expansion.

Eelgrass once covered most of the intertidal mudflats in Poole Harbour, it is now confined to the shallow/intertidal area off Whitley Lake. Protect the remaining eelgrass areas by following IFCA byelaws that prevent dredging at high tide and digging/raking at low tide. Consider potential for expanding eelgrass areas and addressing related water quality

Assess impact of recreational water sports, particularly kite-surfing and electric hydrofoils in shallow water over seagrass beds. Help water sports users follow the code of conduct to avoid the seagrass beds by informing them where the seagrass beds are (not currently marked).

Repeat 2004 inventory of seagrass beds in Dorset.

Explore possible presence of dwarf eelgrass in Poole Harbour based on old records.





Species

Potential activities

Seagrass beds assemblage

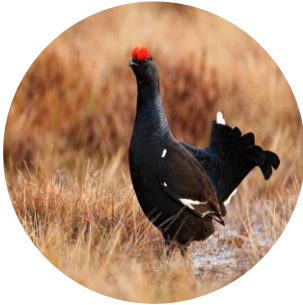
Map extent of dwarf eelgrass in Portland Harbour, to build on recent intertidal records.
Consider extending the bylaw prohibiting gathering in seagrass beds in Portland Harbour

Species involving conservation translocation

Species

Potential activities

Black grouse



Continue exploring potential reintroduction project in Purbeck, feasibility report commissioned (National Trust in the next 1-2years)

Corncrake



Investigate reports of recent summer calling to see if the bird has naturally re-established

Learn from other English reintroductions and current project in Norfolk

Create suitable habitat to prepare for possible future reintroduction

Red-backed shrike



Create suitable habitat to prepare for possible reintroduction

Carry out feasibility study for translocation project in Purbeck (National Trust in the next 3-4 years)

Learn from early reintroduction projects elsewhere

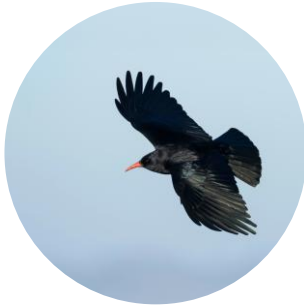


Species involving conservation translocation

Species

Potential activities

Red-billed chough



Continue exploring potential reintroduction project in Purbeck based on completed feasibility study (National Trust, Birds of Poole Harbour and Natural England in the next 1-2 years)

White stork



Explore whether there is local interest in trying a reintroduction in Dorset

Build artificial nests to encourage storks

Eurasian beaver



Increase 'beaver ready' habitat across Dorset

Follow licencing procedures

Seek approval for further breeding pairs to be released (unfenced) from where they are currently established and breeding in Studland (National Trust)

European bison



Undertake feasibility study for introduction to fenced areas

Follow licencing procedures



Species involving conservation translocation

Species

Potential activities

Pine marten



Trial increasing the number of denning sites within the wooded landscape. For example, veteranizing trees to artificially make den sites

Increase connectivity between forests, planting of deciduous trees in appropriate places

Explore possibility of detailed study of current and potential distribution of pine martens, following on from Purbeck feasibility study

Natterjack toad



Liaise with landowners and managers to provide site-specific management advice to enhance the current reintroduced populations at Hengistbury head and in Purbeck.

Maintain and restore appropriate grazing regimes on natterjack toad sites. If possible, grazing alone should be used to manage vegetation height to 5cm or less during summer (and no more than 8cm). If grazing is not possible, a cut and collect regime should be maintained. Note the potential impact of grazing on sand lizard and smooth snake may need consideration in some places.

Maintain and restore ephemeral water bodies across natterjack toad sites to provide suitable breeding habitat. Ephemeral ponds are temporary waterbodies with a recurrent dry phase, they should be maintained or can be created (sometimes called a scrape). An ideal natterjack pool holds water in April but dries out by the late summer in most years, whereas ponds that are full all year are less beneficial to natterjack toads due to predators and competitors.

Ensure appropriate extent of bare ground with sandy substrate is maintained for the species foraging, refuge and basking requirements. Where sand is limited, dry stone walls, large rocks, tree branches or tidal debris may also provide opportunities for rest and shelter.

Development projects should consider the impact of development on the dispersal ability of natterjack toads (up to 5km), connectivity between existing sub-populations and potential to restore historic populations.



Species involving conservation translocation

Species

Potential activities

Natterjack toad

Raise awareness of the sensitivity of natterjack toad breeding habitats to disturbance with local residents and visitors. Install physical barriers where necessary and use consistent messages across all sites and taxa.

Initiate reintroduction feasibility studies for Dorset, starting in Purbeck. Follow the natterjack translocation strategy for England.

If new reintroductions are deemed feasible, form a steering group with relevant partners, to ensure knowledge and workload can be shared to maximise chances of success

Ensure all natterjack toad sites are monitored annually, using standardised methods, as part of the national Natterjack Toad monitoring programme. Amphibian and Reptile Conservation Trust (ARC) can support this monitoring through guidance, surveyors, and recording infrastructure.

Follow advice produced by Amphibian and Reptile Conservation Trust (ARC) and/or contact them for support with monitoring

Black-backed meadow ant



Undertake feasibility study for reintroduction, last seen in 1986 at Gore Heath, previously in other sites around Wareham and Bournemouth

Understand its ecology and requirements, the species is still present on scrubby cliff top heathland where the southern wood ant is not present. On the Dorset heaths, southern wood ant is now locally abundant, it is more aggressive and may outcompete the black-backed meadow ant.

Identify suitable sites on Dorset heaths where the southern wood ant is not present.

Narrow headed ant



Explore potential for reintroduction in Dorset to establish another viable population within the former range of the species, the only remaining site in England is on Chudleigh Knighton Heath in Devon

Identify suitable sites for reintroduction, looking at the historic sites and habitat at current site in Devon to see if there is suitable comparable habitat present in Dorset

Establish regular monitoring



Species involving conservation translocation

Species

Potential activities

Shrill carder bee



Create areas of tall open flower-rich grasslands, close to undisturbed thick tussocky grassland nesting habitat.

Provide plentiful flower-rich forage into late September to ensure new queens are reared as this is a late emerging species. For example, by adapting or rotating cutting and grazing of meadows, hedgerow margins and ditches.

Leave wide uncut strips at the edge of fields to provide late forage, rotating strip each year

Leave tussocky grass and scrubby areas for nesting, undisturbed between March and October.

Protect and manage brownfield habitats by rotational clearance of vegetation to maintain mosaic with open flowery areas

Ladybird spider



Continue translocations, adhering to the Species Action Plan

Protect and enhance existing sites across Dorset

Orange-spotted emerald



Increase suitable habitat across Dorset watercourses

Continue scoping potential reintroduction



Species involving conservation translocation

Species

Potential activities

Pearl-bordered fritillary



Undertake feasibility study into possible re-introduction into Chase Woods and other suitable sites

Following the feasibility study, work with foresters and the Dorset coppice group to provide habitat suitable for potential re-introductions at sites across its former range

For woodland identified for potential reintroduction from the feasibility study, develop management plans that include flower rich, sunny clearings where adults can feed and larvae can bask in sparse, dry vegetation with abundant brown leaf litter, and sunny connecting rides between clearings. Use techniques such as coppicing, regular felling, replanting with deciduous trees, and maintaining sheltered unshaded ditch edges and boundary banks.

Speckled footman



Agree between partners that translocation from Dorset population to elsewhere in Dorset is appropriate and on what timescale

Agree and implement translocation plan

Carry out monitoring programme using volunteers from Dorset Moth Group and others

Micro-moths of Dyer's greenweed assemblage

greenweed buff/flat-body, greenweed dot/pigmy, greenweed piercer, greenweed Smith, laburnum leaf-miner, large gold case-bearer



Draw up conservation plans for micro-moths feeding on Dyer's greenweed with partners including Natural England, Butterfly Conservation. Note that the plans will differ for each species because some are locally extinct so require consideration of translocation

Carry out monitoring programme of Dorset populations of species where extant, using volunteers from Dorset Moth Group and others

Agree between partners that translocation of 2 species extinct in Dorset from populations elsewhere in England is appropriate and on what timescale (large gold case-bearer, greenweed piercer)

Agree and implement translocation plan



Species involving conservation translocation

Species

Potential activities

Heath tiger beetle
(also known as
wood tiger beetle)



Learn from captive breeding programme at Sparsholt College and explore possible conservation translocation into known former sites.

Check suitability of existing scrapes in Slepe Heath, Hartland Moor, Great Ovens and Sopley Common. If not suitable, create new purpose-made 'scrapes' to make suitable bare ground habitat.

Manage heathland to have a varied structure of vegetation, for example through considered cutting and/or some prescribed burning. Burning is often not the most appropriate management method, licencing, consultation and regulations must be followed before burns.

Connect fragmented heathland habitat together.

Monitor population numbers within six known sites in Dorset where individuals have been found: Slepe Heath, Great Ovens, Studland Heath, Sopley Common, Hartland Moor and Bovington Heath. Continue the work of the Purbeck Heaths NNR monitoring group to carry out quantitative surveys within the Studland Heath area to monitor population levels.

Wart-biter



Explore options to reintroduce the species in Dorset, last seen in 2000

Identify potential reintroduction sites with suitable habitat, the other 3-4 British sites are all on chalk grassland, the former Dorset site was on a grassy heath

Identify areas within the potential reintroduction sites with warm southerly and easterly facing slopes and species rich grassland with both short swards and longer tussocky areas

Work with the land managers of the other British sites (National Trust and Natural England) to identify a suitable source of insects for translocation.



Species involving conservation translocation

Species

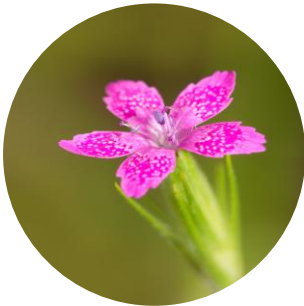
Potential activities

Black poplar



Build on the established project looking at DNA to establish parentage of remaining plants and propagation/reintroduction of new plants of both sexes

Deptford pink



Identify additional locations at Avon Heath Country Park that would be suitable for re-introduction, building on the existing project

Aim to establish at least 5 self-sustaining populations in both North Park and South Park

Establish plots to monitor both the habitat and the plant at each of the sites, using trained volunteers at the country park

Continue to propagate plants by collecting seed, using trained volunteers at the country park

Elm species



Identify sites to introduce new populations of disease resistant native Elms, using data on current and former distribution of invertebrates, fungi and lichens that are dependent on Elms

Identify surviving Elms across Dorset to use for propagation to plant young trees back into the landscape

Involve parish tree wardens

Ivy-leaved Bellflower



Survey the remaining site at Three-legged Cross to establish whether the plant is still present, and if so the size and extent of the population

Survey former and historic sites to establish whether there is suitable habitat, or whether habitat could easily be created with management to identify 5 potential reintroduction sites

Identify the nearest large populations from which plants or seeds can be sourced, if the species is extinct in Dorset



Species involving conservation translocation

Species

Potential activities

Juniper



Continue establishing scrapes as part of reintroduction at two former sites

Survey former sites to identify 5 more suitable sites for reintroduction, especially in the core area on NE chalk

Pheasant's-eye



Establish at least 3 populations within its former range in Dorset

Identify suitable locations where it could be re-introduced, ideally on a farm or within farm-clusters where suitable management for arable plants and birds is already being undertaken. This should be in its former stronghold on the North Eastern Chalk, around St Aldhelm's Head on Purbeck and at Portland Bill.

Identify suitable sources of seed, the nearest populations are in Hampshire and Wiltshire but the number of plants may be small and as an annual the seed is required to sustain those native populations, so the Millennium Seedbank is probably the better option as a reliable seed source.

At the re-introduction sites, establish plots to monitor the plants.

Work with farm advisors and clusters to raise the profile of arable plants in general, as there are a significant number of other species threatened with extinction in Dorset.

Wild asparagus



Establish 2 more populations at former sites, building on the species recovery program that has reestablished this species at two historic sites at Hamm Beach and Portland Bill

Survey former sites to identify suitable areas for re-introduction around Ferrybridge and at Portland Bill



Appendices

Appendix A. Species longlist

The species longlist is available to download at dorsetcouncil.gov.uk/w/dorset-local-nature-recovery-strategy-species-recovery-supporting-document

Appendix B. Species and habitat assemblages

The tables in this appendix list the species assemblages and habitat assemblages identified for the species longlist and priority list. You can see the assemblage for each species in column BB and BC of the longlist spreadsheet.

Woodland habitats

UK Priority and Section 41 habitat(s)	Habitat assemblage (cross-taxa or multi-taxa assemblage)	Species assemblage (micro-habitat assemblage)
Lowland mixed deciduous woodland	Species of ancient and long established woodland	Plants of ancient and long-established woodland Moths of ancient and long-established woodland and parkland
Lowland beech and yew woodland		Ecto-mycorrhizal and saprotrophic fungi of ancient and long-established woodland Woodland bats
Wood-pasture and parkland		Woodland birds
	Species of open woodland, glades, rides and early-stage coppice	Plants of open woodland, glades, rides and early-stage coppice Invertebrates of open woodland, glades, rides and early-stage coppice Butterflies and day-flying moths of open woodland and early-stage coppice Woodland bats
	Species of veteran and ancient trees and deadwood features of old growth woodland	Saproxyllic Invertebrates associated with dead wood habitats and veteran trees in old growth woodland Lichens of old growth woodland and wood-pasture Bracket, crust and other saprotrophic fungi of old growth woodland and wood-pasture Woodland bats



Woodland habitats

UK Priority and Section 41 habitat(s)	Habitat assemblage (cross-taxa or multi-taxa assemblage)	Species assemblage (micro-habitat assemblage)
Wet woodland	Species of wet woodland	Plants of wet woodland Fungi of wet woodland Bryophytes of wet woodland Invertebrates of wet woodland Woodland bats

Heathland habitats

UK Priority and Section 41 habitat(s)	Habitat assemblage (cross-taxa or multi-taxa assemblage)	Species assemblage (micro-habitat assemblage)
Lowland heathland	Species of dry and humid heath	Invertebrates of mature and senescent stages of dry heath Plants of dry and humid heath and grass-heath Invertebrates of dry and humid heath and grass-heath Invertebrates of heathland edge and marginal habitats Lichens and bryophytes of open slow-succession heaths Heathland birds Heathland reptiles Heathland fungi Fungi associated with old bonfire sites and burnt ground on heathland
	Species associated with bare ground and pioneer stages of dry and humid heath	Invertebrates of bare ground and the open pioneer stages of sandy and clayey heaths Plants of heathland trackways Heathland reptiles
	Species of wet heath and grass-heath	Plants of wet heath and grass-heath Plants of open, peaty, winter-wet hollows on wet heath Invertebrates of wet heaths Lichens and bryophytes of open slow-succession heaths



Heathland habitats

UK Priority and Section 41 habitat(s)	Habitat assemblage (cross-taxa or multi-taxa assemblage)	Species assemblage (micro-habitat assemblage)
Lowland heathland	Species of heathland pools	Plants of nutrient-poor heathland pools and ponds Invertebrates of nutrient-poor heathland pools and ponds Dragonflies and damselflies of acid mires and pools
Lowland fens – valley mires	Species of open, <i>Sphagnum</i> -rich valley mires and flushes	Plants of open <i>Sphagnum</i> -rich valley mires and acid flushes Bryophytes of open valley mires and acid flushes Fungi of valley mires Invertebrates of open <i>Sphagnum</i> -rich valley mires Dragonflies and damselflies of mires and acid pools
Lowland dry acid grassland	Species of acid grassland	Plants of open, parched acid grassland Invertebrates of open, parched acid grassland Plants of dry to seasonally damp acid grasslands, commons and village greens Plants of humid acid grasslands of hill slopes Fungi of ancient and unimproved grasslands Species associated with dung of extensively grazed animals



Grassland habitats

UK Priority and Section 41 habitat(s)	Habitat assemblage (cross-taxa or multi-taxa assemblage)	Species assemblage (micro-habitat assemblage)
Lowland meadows	Species of ancient and unimproved grasslands	Plants of ancient and unimproved meadows and pastures Fungi of ancient and unimproved grasslands Grassland bees and bumblebees Micro-moths of Dyer's Greenweed Bats of ancient and unimproved grassland
Lowland calcareous grassland	Species of short, open chalk and limestone grassland Species of longer calcareous grassland, and scrub margins	Butterflies and day-flying moths of chalk and limestone grassland Plants of short, open chalk and limestone grassland Bryophytes and lichens of short, open chalk and limestone grassland Invertebrates of short, open and species-rich chalk and limestone grassland Fungi associated with Rockrose-rich chalk grasslands Plants of longer calcareous grassland, scrub edge and marginal habitats Plants of species-rich scrub and scrub edges Invertebrates of longer calcareous grassland, scrub edge and marginal habitats Bryophytes and lichens of sarsen stones
Purple moor-grass and rush-pasture	Species of fen-meadows and rush-pastures	Invertebrates of fens, fen-meadows and rush-pastures Plants of seasonally wet flood meadows, rush-pastures and fen-meadows



Wetland habitats

UK Priority and Section 41 habitat(s)	Habitat assemblage (cross-taxa or multi-taxa assemblage)	Species assemblage (micro-habitat assemblage)
Lowland fens – Rich fens	Species of rich fens, basic flushes and swamps	Plants of open calcareous fens Plants of tall-herb fens, swamps and reedbeds Invertebrates of tall-herb fens and swamps Invertebrates of calcareous fens and basic flushes Bryophytes of rich fens and base-rich flushes
Reedbeds	Species of brackish and freshwater reedbeds	Invertebrates of reedbeds Breeding birds of reedbeds
Coastal and floodplain grazing marsh	Species of grazing marsh grasslands and associated ditch systems	Aquatic and marginal plants of grazing marsh ditches Plants of seasonally flooded grasslands, included hollows and shallow pools Invertebrates of grazing marsh grassland and associated ditches Breeding & wintering birds of seasonally flooded grazing marsh
Rivers (of high ecological quality)	Species of rivers, streams and riparian habitats	Riparian dragonflies and damselflies Plants of species-rich lowland rivers Invertebrates of chalk streams Invertebrates of muddy and gravelly river margins Birds of lowland rivers Bryophytes of riparian habitats Plants of muddy pond, stream and river margins Bats of riparian habitats Migratory Fish Salmonid fish Fish dependant on clean gravels for spawning



Wetland habitats

UK Priority and Section 41 habitat(s)	Habitat assemblage (cross-taxa or multi-taxa assemblage)	Species assemblage (micro-habitat assemblage)
Mesotrophic lakes	Species of ponds and lakes	Plants of nutrient-poor waterbodies Plants of muddy pond and lake margins Invertebrates of nutrient-poor water bodies Dragonflies and damselflies of ponds and lakes Breeding birds of ponds and lakes Wintering and passage birds of inland water bodies Invertebrates of ponds in the wider countryside and suburban gardens Amphibians of ponds in the wider countryside and suburban gardens Wetland bats
Ponds (of high ecological quality)		

Coastal habitats

UK Priority and Section 41 habitat(s)	Habitat assemblage (cross-taxa or multi-taxa assemblage)	Species assemblage (micro-habitat assemblage)
Maritime cliffs and slopes	Species of maritime cliffs, undercliffs and coastal slopes	Plants of cliffs ledges and maritime grassland Lichens of exposed maritime rocks and boulders Lichens of maritime rock outcrops and boulders Bryophytes and Lichens of maritime slopes Bryophytes of sheltered maritime undercliffs Invertebrates of cliff slopes and maritime grasslands Invertebrates of scree and rock faces Breeding birds of sea cliffs



Coastal habitats

UK Priority and Section 41 habitat(s)	Habitat assemblage (cross-taxa or multi-taxa assemblage)	Species assemblage (micro-habitat assemblage)
Maritime cliffs and slopes	Species of soft rock and slumping cliffs	Plants of slumping clay and sand cliffs Lichens and bryophytes of slumping clay and sand cliffs Invertebrates of open sand and clay on slumping soft cliffs Invertebrates of seepages and flushes on slumping soft cliffs
Coastal vegetated shingle	Species of stabilised and vegetated shingle	Plants of open vegetated shingle Plants of shingle grassland Lichens of stabilised shingle Invertebrates of stabilised and vegetated shingle
Coastal sand dunes	Species of sand dunes	Plants of pioneer, mobile and semi-fixed sand dunes Fungi of acid sand dunes and dune slacks Lichens of acid dune heaths Invertebrates of open acid sand dunes and dune slacks Invertebrates associated with sparsely vegetated beaches and strandlines
Coastal saltmarsh	Species of saltmarsh and brackish-freshwater transitions	Plants of pioneer, lower and middle saltmarsh Plants of upper saltmarsh and freshwater transitions Invertebrates of upper saltmarshes and brackish marshes Plants of brackish ground and coastal grazing marsh
Intertidal mudflats	Species of estuarine intertidal mudflats	Wintering waterbirds of mudflats and saltmarshes
Seagrass beds	Species of seagrass beds	



Coastal habitats

UK Priority and Section 41 habitat(s)	Habitat assemblage (cross-taxa or multi-taxa assemblage)	Species assemblage (micro-habitat assemblage)
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Saline lagoons

Wintering waterbirds of estuarine waters and shorelines

Beach nesting birds

Invertebrates associated with sparsely vegetated beaches and strandlines

Farmland, Town and Village habitats

UK Priority and Section 41 habitat(s)	Habitat assemblage (cross-taxa or multi-taxa assemblage)	Species assemblage (micro-habitat assemblage)
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Arable field margins

Species of arable farmland and field margins

Breeding farmland birds

Wintering farmland birds

Arable plants of cultivated field margins

Invertebrates of field margins

Species-rich hedgerows

Species of species-rich hedges and hedge banks

Plants of species-rich hedgerows and hedge banks

Plants of old droves, green lanes and Holloways

Invertebrates of species-rich hedgerows and hedge banks

Breeding birds of hedgerows and scrub habitats

Species of species-rich scrub and scrub edges

Breeding birds of hedgerows and scrub habitats

Invertebrates of species-rich scrub and scrub edges

Bats of the wider countryside

Synanthropic habitats

Plants of disturbed, nutrient-rich soil around farms and in the wider countryside

Lichens, fungi and bryophytes of mature and veteran wayside and pasture trees

Lichens and bryophytes of churchyards

Open early succession grassland



Appendix C. Pressures and assemblages

Pressures can be seen in columns AD-AK of the longlist spreadsheet for each species, or in the following habitat-based species assemblage guidance documents. Individual species from the longlist are included in each habitat-based assemblage, but the information could apply to other typical species of these habitats.

The codes used for each pressure come from this [List of pressures and threats for reporting 2019-2024 v1.1.xlsx](#). Threats and pressures are described individually, but if combined they can have a bigger impact on species.

Guides to each habitat-based assemblage are available at dorsetcouncil.gov.uk/w/dorset-local-nature-recovery-strategy-species-recovery-supporting-document

Appendix D. Identifying the species the local nature recovery strategy can best support

Owing to its specific features as a strategic spatial targeting tool, Dorset's local nature recovery strategy will support the recovery of certain species more than others. Some species require actions for recovery that are beyond the scope of the local nature recovery strategy – e.g., research. Local nature recovery strategy species priorities should be focused on species for which the strategy can bring the greatest benefit.

The first step of refining the species longlist is to use the categories below to identify which species the local nature recovery strategy can best support, and those for which it is not appropriate. This categorisation should be done on the basis of species' current or anticipated future needs and with a view to the specific local context, referring back to the evaluation of species pressures.

Note that it may be difficult to assign some species to just one category. In such cases, it may help to think about the overriding pressures on the species and aim to prioritise action on that basis.

Species assigned to **category A** can likely be ruled out of inclusion in the priority list as the potential activities for habitat creation/restoration in the rest of the local nature recovery strategy should meet their species needs.

Species assigned **categories E-G** require actions for recovery that are beyond the scope of the local nature recovery strategy and should not be included in the priority list. However, their localities should be considered in the rest of the local nature recovery strategy to avoid adverse impacts. Other projects and mechanisms may be able to support recovery of these species e.g. Species Recovery Projects or Species Conservation Strategies.



Ai	Species likely to markedly benefit from general creation, expansion, and improved connectivity of good quality habitats in the strategy area
Aii	Species with high recovery potential that do not require specific or targeted recovery measures
Bi	Species with specific requirements for habitat quality, structure, conditions, or processes above and beyond category A
Bii	Species may require specific configurations or complexes of connected or nearby habitat/s, either at site level or across large areas / multiple sites. This may include habitat connectivity measures for species needing support to track climate change.
Biii	Causes of decline can be addressed with new or improved management practices
C	Species primarily limited by one or more pressures beyond site level that can be mitigated at LNRS scale or wider scales through collaboration with neighbouring RAs. For example, better catchment water quality, improved spatial planning of air pollution sources, mitigation of recreational disturbance
D	Species requiring additional, tailored measures which can be spatially indicated on the local habitat map Species may need multiple coordinated actions to bring about recovery, including combinations of local actions and national actions, where LNRS could address the former Examples of bespoke, spatially targetable local actions include conservation translocations (such as assisted colonisation for climate change adaptation), control of invasive species, and localised surveys
Ei	Species for which there is insufficient evidence or understanding regarding drivers of decline, required recovery actions, and range / population levels
Eii	Species for which the current priority is other than on-the-ground action, for example research or ex-situ conservation
F	Species with low (or very low) recovery potential due to factors constraining recovery beyond English borders Evidence shows that action in England is highly unlikely to improve species' prospects This category is likely to apply only to migratory species (e.g., Afro-Palaearctic migratory birds affected by hunting)
G	Species currently outside their normal breeding or wintering range or normal migration route, without an extant population in the strategy area, and which are not suitable for conservation translocation



Appendix E. Important considerations

Important considerations suggested by Defra to guide the selection of the species on the priority list. See notes for each species in columns BE – BK of the longlist spreadsheet.

* **Urgency**

- do any species / assemblages stand out as having particularly urgent recovery requirements?

* **Deliverability**

- how feasible will it be to deliver the recovery measures required by a species / assemblage?
- This may apply particularly to species requiring translocation or other highly targeted measures.
- If, for whatever reason, the required measures are not deliverable, or are highly unlikely to be delivered in the foreseeable future, the species / assemblage in question should not be included within the LNRS species priorities list.

* **Contributions to national species recovery**

- is the strategy area of national (or international) significance for the conservation of any species / assemblages? may wish to prioritise such species / assemblages
- should prioritise species / assemblages which are only found within the strategy area.

* **Cross-boundary considerations**

- are there any particular opportunities to join up species recovery plans across LNRS boundaries?
- may wish to prioritise species / assemblages that could be recovered successfully at regional / catchment scales, working in collaboration with neighbouring LNRS.
- The boundaries to LNRS areas are political, rather than ecological. Many species will move across these boundaries as they travel to and from, within and between feeding, roosting, breeding, and overwintering areas, or undertake regional or global migrations. Further, many important areas for species conservation will span these boundaries

* **Maximising benefits**

- would the recovery of a species /assemblage be likely to bring about other biodiversity and environmental benefits (for instance, positively affecting other species, or providing nature-based solutions)?
- may wish to prioritise keystone species / ecosystem engineers or assemblages whose required recovery measures could contribute to wider environmental goals.



* Climate change impacts

- are any species / assemblages likely to be particularly affected by climate change?
- may wish to prioritise species / assemblages which are particularly vulnerable to climate change impacts, as well as those which might be at the limits of their range in the strategy area.
- Climate change will directly or indirectly affect nearly all species. Impacts can be direct, such as warming impacting overwintering survival, or driven by changes to the ecosystems or habitats that species reside in – for example, the loss of coastal habitats due to sea-level rise. Impacts can also be indirect via human responses to climate change, such as changed cropping patterns or abstraction. The Natural England report [Risks and Opportunities for Species as a result of climate change](#) provides an assessment of this for over 3000 species.
- In some cases, the goal will be to ensure species' ongoing persistence within the landscape. Building the resilience of ecological networks in line with Lawton principles (more, bigger, better, better-connected) is a good first step, but increasingly specific action will be required, such as protecting climate change refugia areas buffered from climate change pressures relative to the surrounding areas, or addressing the specific causes of climate pressures.
- In others, the focus will be on ensuring that species are able to track climate change. Interventions that promote directional (south-north, altitudinal) habitat connectivity should be considered. In exceptional circumstances, and with NE's support, RAs might consider possibilities for translocations to assist colonisation of new sites.
- The [NE and RSPB Climate Adaptation Manual](#) provides more detail on the variety of possible approaches and illustrates them for a range of climate-sensitive species.

* Pre-existing initiatives

- are there any particular opportunities to enhance species recovery gains made recently in the strategy area or beyond, or otherwise support species projects?
- may wish to prioritise species / assemblages which are the subject of, or which relate to pre-existing local, regional, or national initiatives.



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- Atlantic puffin – Tim Downton
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- Black-backed meadow ant – Philipp Hoenle
- Black poplar – Bryan Edwards
- Blackwort – Bryan Edwards
- Chalk Threadwort - Sharon Pilkington / British Bryological Society
- Cliff plume larva – Mark Parsons
- Common pipistrelle – National Trust, Chris Damant
- Common tern – Tim Downton
- Corncrake – Nick Tomalin
- Crane – Tim Downton
- Daubenton's – Nick Tomlinson
- Dingy mocha – Robin Harley
- Dwarf eelgrass – Peter Tinsley
- Eelgrass – Sarah Hodgson
- Eurasian beaver – Sam Rose
- European eel – Environment Agency
- Greenweed buff adult – Mark Parsons
- Greenweed piercer larva – Phil Sterling
- Greenweed Smith larva – Phil Sterling
- Ladybird spider – Kat Saleiko
- Large gold case-bearer – Mark Parsons
- Little tern – Tim Downton
- Long-horned bee – Bryan Edwards
- Lulworth skipper – Peter Eles
- Male potter flower bee – Bryan Edwards
- Male red-backed shrike – Susan Buckland
- Marsh fritillary – Steve Masters
- Natterer's – Nick Tomlinson
- Natterjack toad – Chris Dresh
- Pearl-bordered fritillary – Steve Masters
- Pheasant's eye - Krzysztof Ziarnik
- Richardson's case-bearer – Mark Parsons
- Ringed plover – Nick Tomalin
- Samphire knot-horn adult – Phil Sterling
- Shrill carder bee – Pieter Haringsma / Bumblebee Conservation Trust
- Speckled footman adult – Mark Parsons
- Stone curlew – Susan Buckland
- Swift – Tim Downton
- Thatch-moss – Bryan Edwards
- Wart-biter – Bryan Edwards
- Water vole – Natural England
- White stork – Susan Buckland
- White-clawed crayfish – Chris Rowland
- Wild asparagus – Bryan Edwards