

DORSET LOCAL NATURE RECOVERY STRATEGY HABITAT ASSEMBLAGES

Habitat assemblage:	Species of dry and humid heath
Broad Habitat type:	Heathland
S41 and Priority Habitat type:	Lowland Heathland
Composite species assemblages:	<p>Heathland birds</p> <p>Heathland reptiles</p> <p>Invertebrates of mature and senescent stages of dry heath</p> <p>Invertebrates of dry and humid heath and grass-heath</p> <p>Invertebrates of heathland edge and marginal habitats</p> <p>Plants of dry and humid heath and grass-heath</p> <p>Heathland fungi</p> <p>Fungi associated with old bonfire sites and burnt ground on heathland</p> <p>Lichens and bryophytes of open slow-succession heaths</p> <p>Species associated with dung of extensively grazed animals</p>

Species assemblage description:	<p>Lowland heathland is one of Dorset’s most important features and is a rare habitat in Britain and globally. It is essentially an ancient man-made landscape which is dominated by heather-dominated (heath) vegetation with many other small-scale features such as ponds, sand pits and gorse scrub which add considerably to its diversity. There are approximately 7000-hectares in Dorset of which around half is dry and humid heath.</p> <p>This habitat assemblage is for general heathland landscape including the more mature phases of the dry and humid heath vegetation and also includes general gorse scrub and heathland edge features such as scrub and small stands of secondary woodland. There are many scarce and threatened species associated with lowland heathland for which Dorset has nationally important populations.</p> <p>There is separate guidance for species associated with bare ground, wet heath, heathland pools and valley mires.</p>
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Other related Assemblages:	<p>Species associated with bare ground and pioneer stages of dry and humid heath</p> <p>Species of wet heath and grass-heath</p> <p>Species of acid grassland</p>
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Pressures and Threats	
PA04	Removal of small landscape features for agricultural land parcel consolidation (hedges, stone walls, rushes, open ditches, springs, solitary trees, etc.)

	Heathland is a landscape that for several millennia has been created and managed by a pastoral system of grazing and human use of the local resources, such as small-scale sand, gravel and clay pits, trackways, animal drinking ponds, scrub and fallow land. In the twentieth century the cessation of that traditional management has led to a loss of these small-scale features which has led to a loss of many of these features and a consequent decline in heathland specialist species.
PA05	Abandonment of management/use of grasslands and other agricultural and agro-forestry systems (e.g. cessation of grazing, mowing or traditional farming)
	The loss of traditional heathland management, particularly grazing and winter-burning has resulted in a more homogenous vegetation particularly in the later building phase and mature phase with a loss of structure and decline in bare ground both which are important for invertebrates and reptiles. The cessation of turf-cutting (turbary) has contributed to significantly less bare ground within the heath, much of the bare ground is now restricted to tracks where it is too disturbed or too compacted for some species.
PA07	Intensive grazing or overgrazing by livestock
	Prolonged or over grazing can create short and stunted heather which lacks structure. Also any grassland areas are usually preferentially grazed resulting in a loss of flowers as a nectar and pollen resource for many invertebrates. On some sites grazing, or trampling by grazing animals, can impact negatively on egg-laying sites for reptiles.
PA08	Extensive grazing or under-grazing by livestock
	Conservation grazing is typically at a low level which may lead to under-grazing in certain areas with a resulting increase in height and density of species such as bracken and purple moor-grass, plus a loss of bare ground features. With the development of no-fence technology there is the possibility of more targeted grazing of certain areas.
PA15	Use of other pest control methods in agriculture
	The loss of traditional grazing animals and the use of medicines to treat parasites in modern stock has resulted in a decline and local extinction of species associated with dung, particularly dung beetles.
PF05	Sports, tourism and leisure activities
	Heaths are often open access land and are commonly used for recreation, especially within and around the conurbation. This will inevitably lead to conflicts with wildlife such as disturbance of breeding birds and reptiles, enrichment of ground along paths, erosion of sandy paths and increased risks and impacts of wildfires. Sections of paths that are wet in winter are frequently 'gravelled' with imported material which can damage small-scale features such as winter-wet ruts that support specialist species.
PH04	Vandalism or arson (incl. human-introduced wildfire)
	With changing rainfall patterns prolonged dry periods can increase the likelihood of spring and summer fires that are hot and intense and can cause loss of reptiles

	and breeding birds as well as sterilising the peaty ground reducing the levels of heather regrowth and favouring more competitive species such as bracken and gorse.
PI02	Other invasive alien species
	Heathland has been impacted significantly by invasive species such as rhododendron, gaultheria, maritime pine, sika Deer and the moss <i>Campylopus introflexus</i> . The first two of these have, due to sustained and targeted management, have been successfully controlled on many protected sites, but are still present on adjacent land. Sika deer have had a detrimental effect on vegetation very locally, reduction of numbers at certain sites has lessened this impact. As well as the species mentioned above in recent years pirri-pirri-bur has increased at several sites and is being spread along forestry tracks and sandy paths.
PI03	Problematic native species
	With the cessation of traditional management species such as birch, bracken and gorse have all increased significantly usually at the expense of heather-dominated vegetation acid grassland and bare ground features. These species are all an integral components of heathland landscapes and at a small-scale add to the diversity and are important for key species such as nightjar and Dartford warbler.
PJ03	Changes in precipitation regimes due to climate change
	The changing weather patterns may lead to more prolonged drought that may cause die-back of heather. In the short term this may not be an issue as it will create gaps and produce a more varied structure for invertebrates. The gaps created will allow new seedlings to become established, plus the expansion of bryophytes and lichens. Prolonged, or repeated die-back may lead to the replacement of heather by grasses or bracken.
PK04	Atmospheric N-deposition
	Heathland soils are intrinsically very nutrient-poor and the plants grow on them are adapted to the conditions, many are poor competitors. In northwest Europe and parts of eastern England wavy hair-grass has increased significantly and even replaced heather on some heaths, resulting in more homogenous and species-poor vegetation. This has not (yet) happened in the New Forest and Dorset with perhaps higher rainfall the ameliorating factor. However, other species such as purple moor-grass, bog myrtle and western gorse are possibly reacting to low-level deposition. The effects of deposition may be compounded by a reduction in light grazing and climate change.

Micro-habitat assemblage: Heathland birds

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Birds	<i>Anthus trivialis</i>	Tree Pipit	RED	n/a	n/a	1	.	.	.	.	.	.	.	.
Birds	<i>Caprimulgus europaeus</i>	European Nightjar	AMBER	n/a	n/a	2	.	.	.	.	.	.	.	.
Birds	<i>Curruca undata</i>	Dartford Warbler	AMBER	n/a	n/a	2	.	.	.	.	.	.	.	.
Birds	<i>Lullula arborea</i>	Woodlark		n/a	n/a	3	.	.	.	.	.	.	.	.
Birds	<i>Lanius collurio</i>	Red-backed Shrike	Red	n/a	n/a	6	.	.	.	.	.	.	.	.
Birds	<i>Lyurus tetrrix</i>	Black Grouse	Red	n/a	n/a	6	.	.	.	.	.	.	.	.

Micro-habitat assemblage: Heathland reptiles

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Reptiles	<i>Lacerta agilis</i>	Sand Lizard	EN	EN	n/a	1	PA05	PA05	PA07	PF05	PH04	.	.	.
Reptiles	<i>Coronella austriaca</i>	Smooth Snake	EN	EN	n/a	1	PA05	PA05	PA07	PF05	PH04	.	.	.
Reptiles	<i>Viper berus</i>	Adder	NT	VU	n/a	1	PA05	PA05	PF05	PH04	.	.	.	.

Micro-habitat assemblage: Invertebrates of dry and humid heath and grass-heath

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Wasps	<i>Mutilla europaea</i>	Large Velvet Ant		n/a	n/a	3	PA05	PA07	.	.	.	.	.	.
Bees	<i>Colletes succinctus</i>	Heather Colletes	.	n/a	NT(ERLB)	2	PA04	PA07	PA08	PH04	.	.	.	.
Bees	<i>Epeolus cruciger</i>	Red-thighed Epeolus	.	n/a	NT(ERLB)	2	PA04	PA07	PA08	PH04	.	.	.	.
Moths	<i>Cleora cinctaria</i>	Ringed Carpet		n/a	n/a	5	.	.	.	.	.	.	.	.
Moths	<i>Dyscia fagaria</i>	Grey Scalloped Bar	NT	n/a	n/a	2	.	.	.	.	.	.	.	.
Moths	<i>Heliothis maritima</i> ssp. <i>warneckei</i>	Shoulder-striped Clover	EN	n/a	n/a	1	.	.	.	.	.	.	.	.
Moths	<i>Hemaris tityus</i>	Narrow-bordered bee hawk-moth		n/a	n/a	3	.	.	.	.	.	.	.	.
Moths	<i>Selidosema brunnearia</i>	Bordered Grey				5	.	.	.	.	.	.	.	.
Moths	<i>Stilbia anomala</i>	Anomalous	VU	n/a	n/a	1	.	.	.	.	.	.	.	.
Moths	<i>Chlorissa viridata</i>	Small Grass Emerald		n/a	n/a	3	.	.	.	.	.	.	.	.

Micro-habitat assemblage: Invertebrates of mature and senescent stages of dry heath

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Beetles	<i>Strophosoma fulvicorne</i>	a weevil	VU	n/a	n/a	1	.	.	.	.	.	.	.	.
Fles	<i>Myopa fasciata</i>	a thick-headed fly	LC	n/a	n/a	3	.	.	.	.	.	.	.	.
Wasps	<i>Cerceris ruficornis</i>		(NT)	n/a	n/a	2	PA05	PA07	PH04	.	.	.	.	.

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Moths	<i>Coscinia cribraria</i>	Speckled Footman	CR	n/a	n/a	1	.	.	.	.	.	.	.	.
Moths	<i>Pasiphila debiliata</i>	Bilberry Pug				4	.	.	.	.	.	.	.	.
Moths	<i>Acanthopsyche atra</i>	Lesser Heath Bagworm	pRDB	n/a	n/a	5	.	.	.	.	.	.	.	.
Moths	<i>Amphibatis incongruella</i>	Obscure Concealer; Ling Tubic		n/a	n/a	5	.	.	.	.	.	.	.	.
Moths	<i>Apomyelois bistriatella</i>	Phoenix Knot-horn; heath Knot-horn				5	.	.	.	.	.	.	.	.
Moths	<i>Crambus hamella</i>	Southern Heath Grass-moth; Dark Grass-veneer				5	.	.	.	.	.	.	.	.
Moths	<i>Pachythelia villosella</i>	Black Sweep	VU	n/a	n/a	3	.	.	.	.	.	.	.	.
Grasshoppers		Heath Grasshopper	NT	n/a	n/a	2	PA05	PA08	PH04	PF05	.	.	.	.
Spiders	<i>Cheiracanthium pennyi</i>	a foliage spider	EN	n/a	n/a	1	PA05	PA08	PH04	PF05	.	.	.	.
Spiders	<i>Eresus sandaliatus</i>	Ladybird Spider	VU	n/a	n/a	1	PA05	PA07	PA08	PF05	PH04	.	.	.
Spiders	<i>Rhysodromus histrio</i>	a running crab spider		n/a	n/a	3	PH04	.	.	.	.	.	.	.
Spiders	<i>Thomisus onustus</i>	a crab spider		n/a	n/a	3	PF05	PH04	.	.	.	.	.	.
Spiders	<i>Uloborus walckanaerius</i>	A cribellate orbweb spider	NT	n/a	n/a	2	.	.	.	.	.	.	.	.

Micro-habitat assemblage: Invertebrates of heathland edge and marginal habitats

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Hoverflies	<i>Chrysotoxum octomaculatum</i>	Broken-banded Wasp-hoverfly	EN	n/a	n/a	1	.	.	.	.	.	.	.	.
Hoverflies	<i>Chrysotoxum vernale</i>		EN	n/a	n/a	1	.	.	.	.	.	.	.	.
Hoverflies	<i>Microdon analis</i>		LC	n/a	n/a	3	.	.	.	.	.	.	.	.
Hoverflies	<i>Paragus tibialis</i>		NT	n/a	n/a	2	.	.	.	.	.	.	.	.
Hoverflies	<i>Pelecocera tricincta</i>		LC	n/a	n/a	3	.	.	.	.	.	.	.	.
Ants	<i>Formica exsecta</i>	Narrow-headed Ant	EN	n/a	n/a	6	.	.	.	.	.	.	.	.
Ants	<i>Formica pratensis</i>	Black-backed Meadow Ant	RE	n/a	n/a	6	.	.	.	.	.	.	.	.
Ants	<i>Formica sanguinea</i>	Slavemaker Ant	(NT)	n/a	n/a	2	.	.	.	.	.	.	.	.
Ants	<i>Formicoxenus nitidulus</i>	Shining Guest Ant		n/a	n/a	3	PA05	PA08	.	.	.	.	.	.
Wasps	<i>Symmorphus crsssicornis</i>		R	n/a	n/a	3	PA05	PB05	.	.	.	.	.	.
Bees	<i>Andrena tarsata</i>	Tormentil Mining Bee		n/a	LC	3	PA05	PA08	PK04	.	.	.	.	.
Bees	<i>Anthophora retusa</i>	Potter Flower Bee	EN	EN	LC	1	PA05	PA08	PI03	.	.	.	.	.
Bees	<i>Colletes fodiens</i>	Hairy-saddled Colletes	.	n/a	VU(ERLB)	1	PA05	PA07	PA08	PA14	.	.	.	.
Bees	<i>Halictus confusus</i>	Southern Bronze Furrow Bee	.	n/a	LC	3	PA05	PA07	.	.	.	.	.	.
Bees	<i>Hylaeus incongruus</i>	White-lipped Yellow-face Bee	.	n/a	LC	3	PA04	PA07	.	.	.	.	.	.
Bees	<i>Lasioglossum quadrinotatum</i>	Four-spotted Furrow Bee	.	n/a	NT(ERLB)	2	PA04	PA07	.	.	.	.	.	.

Bees	<i>Megachile circumcincta</i>	Black-headed Leafcutter Bee	.	n/a	LC	4	PA04	PA05	.	.	.	.	.	.
Moths	<i>Cyclophora pendularia</i>	Dingy Mocha	NT	n/a	n/a	2	.	.	.	.	.	.	.	.
Moths	<i>Hemaris tityus</i>	Narrow-bordered Bee Hawk-moth		n/a	n/a	3	.	.	.	.	.	.	.	.
Moths	<i>Scotopteryx mucronata</i>	Lead Belle	VU	n/a	n/a	1	.	.	.	.	.	.	.	.

Micro-habitat assemblage: Plants of dry and humid heath and grass-heath

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Plants	<i>Cuscuta epithymum</i>	Dodder	VU	VU	n/a	1	PA05	.	.	.	.	.	.	.
Plants	<i>Euphrasia micrantha</i>	Slender Eyebright	DD	EN	n/a	1	PA05	PA08	PK04	.	.	.	.	.
Plants	<i>Orobanche rapum-genistae</i>	Greater Broomrape	NT	VU	n/a	1, 4	PA05	.	.	.	.	.	.	.
Plants	<i>Viola canina</i>	Heath Dog-violet	NT	VU	n/a	1	PA05	PA08	PK04	.	.	.	.	.
Plants	<i>Viola lactea</i>	Pale Dog-violet	VU	EN	n/a	1	PA04	PA05	PA08	PK04	.	.	.	.

Micro-habitat assemblage: Lichens and bryophytes of open slow-succession heaths

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Liverworts	<i>Odontoschisma denudatum</i>	Matchstick Flapwort	LC	n/a	n/a	4	PA05	PA08	PK04	.	.	.	.	.
Mosses	<i>Dicranum spurium</i>	Rusty Fork-moss	LC	n/a	n/a	3	PA4	PA8	PK04	.	.	.	.	.
Lichens	<i>Cladonia strepsilis</i>		n/a	n/a	n/a	3	PA05	PA08	PH04	PK04	.	.	.	.
Lichens	<i>Cladonia zopfii</i>		n/a	n/a	n/a	3	PA05	PA08	PH04	PK04	.	.	.	.
Lichens	<i>Pycnothelia papillaria</i>		n/a	n/a	n/a	3	PA05	PA08	PH04	PK04	.	.	.	.

Micro-habitat assemblage: Heathland fungi

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Fungi	<i>Hygrocybe lepida</i>	Goblet Waxcap	n/a	n/a	VU	4	PA05	PA08	PA13	PK04	.	.	.	.

Micro-habitat assemblage: Fungi associated with old bonfire sites and burnt ground on heathland

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Fungi	<i>Arrhenia chlorocyanea</i>	Verdigris Navel	n/a	n/a	n/a	4	PA08	PK04	.	.	.	.	.	.
Fungi	<i>Clitocybe (Bonomyces) sinopica</i>	Spring Funnel	n/a	n/a	n/a	4	.	.	.	.	.	.	.	.