DORSET LOCAL NATURE RECOVERY STRATEGY HABITAT ASSEMBLAGES

Habitat assemblage:	Species of acid grassland	
Broad Habitat type:	Heathland	
S41 & Priority Habitat type:	Lowland Dry Acid Grassland	
Composite species assemblages:	Invertebrates of open, parched acid grassland Plants 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	

Habitat
assemblage
description:

There are *c.* 800 hectares of acid grassland in Dorset that qualifies as Lowland Dry Acid Grassland plus an undetermined area of semi-improved, less speciesrich, grassland that could be restored. Acid grassland occurs in two main areas in the county, firstly on drought-prone sandy soils in and around the heaths in the Poole Basin, and secondly on the hill slopes and summits in the western vales where rainfall is higher. Historically it was also widespread on superficial deposits above the chalk, today Rampisham is the largest surviving example with much smaller remnants elsewhere.

In the Poole Basin are of national importance for the flora associated with the parched acid grassland which includes many small early-flowering annuals. When found adjacent to the heaths the grasslands provide an important nectar and pollen resource for invertebrates many of which may nest in bare ground on the heaths. In West Dorset the acid grasslands on the hill slopes have recently been recognised for their importance for grassland fungi several of which are on the Global Fungal Red List.

Species of ancient & unimproved grasslands Species of dry & humid heath

Pressures & Threats	
PA05	Abandonment of management/use of grasslands and other agricultural and agro-forestry systems (e.g. cessation of grazing, mowing or traditional farming)
	The intensification of farming has led to losses in acid grassland through improvement by re-seeding and applying artificial fertilizers, or on flatter ground conversion to arable land. In West Dorset in particular abandonment is an issue with steep slopes formerly grazed now covered in dense bracken or other scrub such as gorse.
PA07	Intensive grazing or overgrazing by livestock

	Prolonged intensive grazing leads to a homogenous sward with little structure. It can significantly reduce the flowering of herbs which is detrimental to invertebrates that forage and obtain nectar from the flowers.
PA08	Extensive grazing or under-grazing by livestock
	A reduction in grazing pressure leads to an increase in more robust grasses such as Yorkshire fog and cock's-foot to the detriment of finer grasses and smaller herbs, plus the loss of bare ground features. Longer swards with matted litter layer can inhibit the fruiting of smaller grassland fungi. Scrub species such as bracken, bramble and gorse can be invasive especially in periods of under grazing, but in small amounts (5-10%) these species can add structure and diversity to a site, especially for invertebrates and birds.
PA13	Application of natural or synthetic fertilisers on agricultural land
	Acid grasslands are naturally nutrient-poor and the plant and fungi species that are confined to it require nutrient-poor conditions. Regular applications of dung, slurry and artificial fertilizers will promote competitive and quick growing nitrogen tolerant species and may eventually eliminate the acid grassland species, especially the fungi.
PA14	Use of pesticides in agriculture
	The use of Ivermectin's to treat cattle is having a detrimental effect on the fauna associated with the dung of grazing animals particularly dung beetles and the hornet robber-fly.
PI02	Other invasive alien species
	At present there are no widespread non-native species that are significantly impacting on acid grasslands in Dorset.
PI03	Problematic native species
	Bracken and gorse are the main invasive species which are quick to colonise following a reduction in grazing intensity or the cessation of grazing.
PJ03	Changes in precipitation regimes due to climate change
	Changes may have both positive and negative effects on this habitat. Droughts are a natural phenomenon that for some grasslands (U1-type) and the plants are adapted to growing on drought-prone soils. They create bare ground for annual plants to seed into and provide the habitat for ground-nesting invertebrates. However, spring droughts can reduce flowering which can impact on invertebrates. Rainfall patterns along with the extended growing season can lead to longer and more closed swards that favours perennial rather than annuals. Long swards (>10cm) in the autumn and early winter months can inhibit the 'fruiting' of grassland fungi.
PK04	Atmospheric N-deposition
	Continual low-level deposition of nitrogen compounds has a fertilising effect on grassland especially those that are naturally very nutrient-poor. Over long periods this can lead to a change in the flora promoting those species that are more tolerant of nitrogen to the detriment of other species, it may also encourage. This effect can be ameliorated by increased grazing.

Dorset Local Nature Recovery Strategy Species Assemblages Guidance: *Species of acid grassland* © DERC: Version 1.0, December 2024

Micro-habitat assemblage: Invertebrates of open, parched acid grassland

Group	Species	Common Name	GB	Eng Eng	IUCN other Criteria	Criteria	2			Threats / Pre	ressures		
Bees	Andrena tarsata	Tormentil Mining Bee		n/a	LC	3	PA05	PA08	PK04				
Bees	Colletes fodiens	Hairy-saddled Colletes		n/a	VU(ERLB)	1	PA05	PA07	PA08	PA14			
Bees	Halictus confusus	Southern Bronze Furrow Bee		n/a	LC	3	PA05	PA07	•				
Bees	Megachile circumcincta	Black-headed Leafcutter Bee		n/a	LC	4	PA04	PA05					

Micro-habitat assemblage: Plants of open, parched acid grassland

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria				Threats / Pressures	ressures		
Plants	Dianthus armeria	Deptford Pink	EN	EN	n/a	1	PA04	PA05	PA07	PA08			•
Plants	Hypochaeris glabra	Smooth Cat's-ear	VU	VU	n/a	1	PA05	PA08	PK04				•
Plants	Lotus angustissimus	Slender Bird's-foot-trefoil	NT	NT	n/a	2	PA08	PK04					
Plants	Medicago minima	Bur Medick	٧U	٧U	n/a	1							
Plants	Moenchia erecta	Upright Chickweed	LC	٧U	n/a	1	PA04	PA05	PA08	PJ03	PK04		•
Plants	Potentilla argentea	Hoary Cinquefoil	NT	NT	n/a	2	PA05	PA08	PK04				•
Plants	Scleranthus annuus	Annual Knawel	EN	EN	n/a	_	PA04	PA05	PA08	PK04			•

Micro-habitat assemblage: Plants of humid acid grasslands of hill slopes

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria				Threats / Pres	ressures		
Plants	Euphrasia anglica	English Eyebright	EN	EN	n/a	1	PA05	PA08	PK04				
Plants	Nardus stricta	Matgrass		NT	n/a	2	PA05	PA08	PK04				

Micro-habitat assemblage: Plants of dry to seasonally damp acid grasslands, commons and village greens

	•		PK04	PA08	PA05	1	n/a	ΠΛ	VU	Chamomile	Chamaemelum nobile	Plants
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		•) ritoria	EICN Othor	IUCN	IUCN	Common Namo	0	5

Micro-habitat assemblage: Fungi of ancient and unimproved grasslands

Group	Species	Common Name	GB	Eng	IUCN other	Criteria				Threats / Pressures	ressures			
Fungi	Camarophyllopsis schulzeri		n/a	n/a	VU(Eur)	1	PA05	PA08	PA13	PK04				
Fungi	Cuphophyllus flavipes	Yellow-foot Waxcap	n/a	n/a	VU(Eur)	1	PA05	PA08	PA13	PK04				
Fungi	Cuphophyllus lacmus	Grey Waxacap	n/a	n/a	VU(Eur)	1	PA05	PA08	PA13	PK04				
Fungi	Entoloma griseocyaneum	Felted Pinkgill	n/a	n/a	VU(Eur)	1	PA05	PA08	PA13	PK04				
Fungi	Entoloma porphyrophaeum	Lilac Pinkgill	n/a	n/a	VU(Eur)	1	PA05	PA08	PA13	PK04			•	
Fungi	Entoloma prunuloides	Mealy Pinkgill	n/a	n/a	VU(Eur)	1	PA05	PA08	PA13	PK04				
Fungi	Gliophorus reginae	Jubilee Waxcap	n/a	n/a	VU(Eur)	1	PA05	PA08	PA13	PK04		•	•	
Fungi	Gloioxanthomyces vitellinus		n/a	n/a	EN(Eur)	1	PA05	PA08	PA13	PK04	•	•	•	
C					•									

VU(Eur) 1 PA05 PA08 PA13 VU(Eur) 1 PA05 PA08 PA13 NT(Eur) 2 PA05 PA08 PA13
IUCN Eng IUCN other Criteria Threats / Pre n/a VU(Eur) 1 PA05 PA08 PA13 PK04 n/a VU(Eur) 1 PA05 PA08 PA13 PK04 n/a NT(Eur) 2 PA05 PA08 PA13 PK04 n/a VU(Eur) 1 PA05 PA08 PA13 PK04
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Threats / Pressures PK04
Pressures

Micro-habitat assemblage: Species associated with dung of extensively grazed animals

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria			Threats / Pres	ressures		
Flies	Asilus crabronifornis	Hornet Robberfly	LC	n/a	n/a	3	PA05	PA14				
Fungi	Poronia punctata	Nail Fungus	n/a	n/a	n/a	3	PA08	PA14				