DORSET LOCAL NATURE RECOVERY STRATEGY HABITAT ASSEMBLAGES

Habitat assemblage:	Species of arable farmland
Broad Habitat type:	Farm, town and village
S41 and Priority Habitat type:	Arable Field Margins
Composite species assemblages:	Breeding farmland birds Wintering farmland birds Invertebrates of field margins Arable plants of cultivated field margins

Habitat assemblage description:

Arable land has long been a feature of our farmed landscapes and certain assemblages of species have developed alongside it over many centuries. Some, particularly arable plants, are rarely encountered outside of cultivated fields. Since the intensification of agriculture in the 1950s and the widespread use of pesticides many once familiar species have declined and are now scarce or threatened.

In recent decades agri-environment schemes have helped to slow or halt the decline of some species and features such as pollinator patches, cultivated (but unsprayed) margins and beetle banks have had been beneficial to species of the wider countryside including farmland birds, arable plants and pollinators.

Other related	Species of species-rich hedges and hedgebanks
assemblages:	

Pressures and Threats	
PA11	Soil management practices in agriculture (e.g. ploughing)
	The majority of scarce and threatened arable plants are annuals and require regular cultivation for their germination. Recent changes in land management such as no-till can be detrimental to these species. Ploughing less often or bespoke management such as cultivating the first 5-10 metres of the field margins only are potential mitigation measures.
PA14	Use of pesticides and herbicides in agriculture
	Continual use of herbicides along the field edge will deplete the number of plants and therefore the seedbank to maintain a viable population of many arable plants, the majority of which are annuals. Reducing the abundance and diversity of arable plants also reduces the winter seed source for wintering birds.
	The use of pesticides will be harmful to many invertebrates found on field margins, some of which will be useful pollinators for crops such as oil seed rape, others will be natural predators of pests such as aphids. Significantly reducing the abundance of invertebrates will have a knock-on effect on

Dorset Local Nature Recovery Strategy

Species Assemblages Guidance: Species of arable farmland and field margins

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	breeding farmland birds the chicks of otherwise seed-eating birds will require
	invertebrates for food until they fledge.
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PI02	Other invasive alien species
	Some non-native plants are invasive on bare ground including field margins,
	Canadian fleabane (and relatives) is the bast example and is increasing in
	many open habitats and can out-compete smaller annual plants.
PI03	Problematic native species
	Several native plants (some are archaeophytes) are invasive on cultivated ground. Black-grass is a good example as can form dense mats that smother smaller annual plants and is difficult to manage or eradicate without using herbicides.
PJ03	Changes in precipitation regimes due to climate change
	Changing rainfall patterns such as prolonged spring droughts can impact on the germination or growth of annual plants such as found on cultivated field margins.

Micro-habitat assemblage: Breeding farmland birds and Wintering farmland birds

Group	Species	Common Name	GB	IUCN Eng	IUCN other	Criteria			Threats / Pre	Pressures		
Birds	Alauda arvensis	Skylark	RED	n/a	n/a	1	PA14					
Birds	Linaria cannabina	Common Linnet	RED	n/a	n/a	1	PA14					
Birds	Burhinus oedicnemus	Stone Curlew	AMBER	n/a	n/a	6						
Birds	Chloris chloris	Greenfinch	RED	n/a	n/a	1						
Birds	Columba oenas	Stock Pigeon	AMBER	n/a	n/a	2						
Birds	Coturnix coturnix	Common Quail	AMBER	n/a	n/a	2						
Birds	Emberiza calandra	Corn Bunting	RED	n/a	n/a	1	PA14					
Birds	Emberiza cirlus	Cirl Bunting	RED	n/a	n/a	1	PA14					
Birds	Emberiza citrinella	Yellowhammer	RED	n/a	n/a	1	PA14					
Birds	Hirundo rustica	Barn Swallow		n/a	n/a	5						
Birds	Passer montanus	Eurasian Tree Sparrow	RED	n/a	n/a	1, 6	PA14					
Birds	Perdix perdix	Grey Partridge	RED	n/a	n/a	1	PA14					
Birds	Streptopelia turtur	European Turtle Dove	RED	n/a	n/a	1						
Birds	Tyto alba	Barn Owl		n/a	n/a	5					•	
Birds	Vanellus vanellus	Northern Lapwing	RED	n/a	n/a	1				-		•

Micro-habitat assemblage: Invertebrates of field margins

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria			Threats / Press	Pressures		
Beetles	Carabus monilis	Necklace Ground Beetle	EN	n/a	n/a	1						
Beetles	Meloe proscarabaeus	Black Oil Beetle	LC	n/a	n/a	4						
Beetles	Meloe rugosus	Rugged Oil Beetle	LC	n/a	n/a	4						
Beetles	Meloe violaceus	Violet Oil Beetle	LC	n/a	n/a	4				•		
Bees	Andrena proxima	Broad-faced Mining Bee	R	n/a	LC	4	PA14					
Bees	Melitta tricincta	Red Bartsia Bee		n/a	NT(ERLB)	2	PA05	PA08				
Moths	Tyta luctuosa	Four-spotted	NT	n/a	n/a	2	•					

Micro-habitat assemblage: Arable plants of cultivated field margins

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria				Threats / I	Threats / Pressures		
Plants	Adonis annua	Pheasant's-eye	EN	EN	n/a	1	PA11	PA14					
Plants	Anthemis cotula	Stinking Chamomile	VU	VU	n/a	1	PA11	PA14					
Plants	Buglossoides arvensis	Field Gromwell	EN	EN	n/a	1	PA11	PA14					
Plants	Clinopodium acinos	Basil Thyme	VU	VU	n/a	1	PA14						
Plants	Euphorbia exigua	Dwarf Spurge	NT	VU	n/a	1	PA05	PA14					
Plants	Fumaria parviflora	Fine-leaved Fumitory	VU	NT	n/a	1	PA11	PA14					
Plants	Fumaria vaillantii	Few-flowered Fumitory	VU	EN	n/a	1	PA11	PA14					
Plants	Galeopsis angustifolia	Red Hemp-nettle	CR	CR	n/a	_	PA11	PA14	•		•	•	•

Group	Species	Common Name	GB	IUCN Eng	IUCN other	Criteria				Threats / Pre	ressures		
Plants	Glebionis segetum	Corn Marigold	VU	VU	n/a	1	PA11	PA14					
Plants	Misopates orontium	Weasel's-snout	VU	VU	n/a	1	PA11	PA14					
Plants	Ranunculus arvensis	Corn Buttercup	CR	EN	n/a	1	PA11	PA14					
Plants	Rosemeria argemone	Prickly Poppy	VU	EN	n/a	1	PA11	PA14					
Plants	Scandix pecten-veneris	Shepherd's-needle	CR	EN	n/a	1	PA11	PA14				-	
Plants	Silene gallica	Small-flowered Catchfly	EN	EN	n/a	1	PA04	PK04					
Plants	Silene noctiflora	Night-flowering Catchfly	VU	VU	n/a	1	PA14						
Plants	Spergula arvensis	Corn Spurrey	VU	VU	n/a	1	PA14						
Plants	Torilis arvensis	Spreading Hedge- parsley	EN	EN	n/a	1, 4	PA11	PA14					
Plants	Valerianella dentata	Narrow-fruited Cornsalad	EN	EN	n/a	1	PA14	PA19					
Plants	Valerianella rimosa	Broad-fruited Cornsalad	CR	CR	n/a	1, 4	PA14	PA19	PK04				