DORSET LOCAL NATURE RECOVERY STRATEGY HABITAT ASSEMBLAGES

Habitat assemblage:	Species of grazing marsh grasslands and associated ditch systems
Broad Habitat type:	Wetlands
S41 and Priority Habitat type:	Coastal and Floodplain Grazing Marsh
Composite species assemblages:	Wintering birds of seasonally flooded grazing marsh Invertebrates of grazing marsh grasslands and ditches Aquatic and marginal plants of grazing marsh ditches Plants of seasonally flooded grasslands, included hollows and shallow pools

Habitat assemblage description:	The lower parts of floodplains in Dorset especially of the Rivers Frome, Piddle and Avon support areas of semi-natural grassland and intricate ditch systems plus small reedbeds, pollarded trees and other important ecological features. The ditches can support a rich aquatic fauna and flora with species requiring different stages of succession. The grasslands are typically not species-rich but can support specialist species including those tolerant of slightly brackish conditions. Breeding waders are now rare in this habitat but winter floods and shallow scrapes attract wintering and migrating waterfowl and waders.

Other related assemblages:	Species of saltmarsh and brackish-freshwater transitions Species of rich fens, basic flushes and swamps Species of fen-meadows and rush-pastures

Pressures and Threats	
PA04	**Removal of small landscape features for agricultural land parcel consolidation (hedges, stone walls, rushes, open ditches, springs, solitary trees, etc.)**
	The intensification of farming has resulted in the loss of many small-scale features such ditches and ponds, these were filled in as fields were enlarged, or through abandonment, became overgrown and shaded.
PA05	**Abandonment of management/use of grasslands and other agricultural and agro-forestry systems (e.g. cessation of grazing, mowing or traditional farming)**
	Ditches were important features of traditionally farmed landscapes in river valleys and floodplains. They were regularly managed and maintained which kept many open which benefits many of the specialist invertebrates and plants that are present in the ditches. Ditches are labour intensive to maintain and the intensification of farming has meant that many ditches have not been maintained becoming overgrown and / or shaded and losing much of their

	ecological interest. Those that still managed are cleared mechanistically that can be less sympathetic to the wildlife than traditional hand clearance.
PA07	**Intensive grazing or overgrazing by livestock**
	Intensive grazing can remove marginal and emergent vegetation and reduce the structure for invertebrates and breeding birds and also reduces the abundance of flowers for foraging insects. There can also be excessive trampling of the edges of ditches leading to nutrient enrichment.
PA08	**Extensive grazing or under-grazing by livestock**
	Permanently fencing out stock from grazing the ditch margins will eventually lead to the margins becoming species-poor and homogenous favouring robust and competitive species such as lesser and greater pond-sedge, common reed, reed sweet-grass and reed canary-grass which can out-compete smaller flowering herbs.
PA13	**Application of natural or synthetic fertilisers on agricultural land**
	Regular applications of artificial fertilizers and slurry can lead to run-off into ditches leading the enrichment of the water, and the development of abundant alga. Algae often prevent light penetrating beyond the surface to the detriment of other plants, and when they die and decompose, reduce the available oxygen to the detriment of most other wildlife. Marginal vegetation can become dominated by a few robust perennials tolerant of high nitrogen levels such as stinging nettle, reed canary-grass and hemlock water-dropwort. The latter is an important nectar source for many wetland insects, particularly flies and hoverflies.
PE05	**Land, water and air transport activities generating pollution to surface or ground waters**
	Run off from roads into ditches can caused localised pollution and enrichment, including sediments.
PI02	**Other invasive alien species**
	There are several non-native water plants that are very invasive and once established almost impossible to get rid of, most of these originate from garden ponds. New Zealand pygmyweed, parrot's feather and floating pennywort are those most likely to found, particularly the first two. They grow quickly and form a thick mat on the water out-competing smaller native species. On the ditch margins Himalayan balsam can form dense stands shading out smaller species.
PI03	**Problematic native species**
	Most of the invasive species associated with ditches are a result of lack of grazing such as lesser and greater pond-sedge and, common reed and reed sweet-grass which can form species-poor dense stands. Enrichment is also detrimental favouring robust competitive perennials such as hemlock water-dropwort, stinging nettle and reed canary-grass.
PJ03	**Changes in precipitation regimes due to climate change**

	Changes in rainfall patterns can affect the habitat in different ways. Prolonged drought can lower the water table resulting in plants of drier habitats colonising from the margins. Intensive rainfall and increased flood events can bring sediment and pollutants into ditches causing enrichment.
PJ05	**Saline intrusion**
	Sea level rise and increase frequency of storm events will lead to an increase in the potential for incursions of saline water into freshwater ditches. If these become frequent then the invertebrate and plant assemblages will be changed from freshwater species to those favouring or requiring brackish conditions.

Micro-habitat assemblage: Wintering birds of seasonally flooded grazing marsh

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Birds	*Emberiza schoeniclus*	Reed Bunting	AMBER	n/a	n/a	**2**	.	.	.	.	.	.	.	.
Birds	*Gallinago gallinago*	Common Snipe	AMBER	n/a	n/a	**2**	.	.	.	.	.	.	.	.
Birds	*Limosa limosa*	Black-tailed Godwit	RED	n/a	n/a	**1**	.	.	.	.	.	.	.	.
Birds	*Tringa totanus*	Common Redshank	AMBER	n/a	n/a	**2**	.	.	.	.	.	.	.	.
Birds	*Vanellus vanellus*	Northern Lapwing	RED	n/a	n/a	**1**	.	.	.	.	.	.	.	.

Micro-habitat assemblage: Invertebrates of grazing marsh grasslands and ditches

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Moths	*Monochroa niphognatha*	Kentish Neb		n/a	n/a	**4**	.	.	.	.	.	.	.	.
Molluscs	*Vertigo moulinsiana*	Desmoulin's Whorl Snail	VU	n/a	n/a	**1**	.	.	.	.	.	.	.	.

Micro-habitat assemblage: Aquatic and marginal plants of grazing marsh ditches

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Plants	*Apium inundatum*	Lesser Marshwort	LC	VU	n/a	**1**	PA04	PA05	PA13	.	.	.	.	.
Plants	*Carex vesicaria*	Bladder Sedge	LC	VU	n/a	**1**	.				.	.	.	.
Plants	*Comarum palustris*	Marsh Cinquefoil	LC	NT	n/a	**2**	PA04	PA05	PA08	PK04	.	.	.	.
Plants	*Groenlandia densa*	Opposite-leaved Pondweed	VU	VU	n/a	**1**	PA17	PE05	PI02	.	.	.	.	.
Plants	*Oenanthe fistulosa*	Tubular Water-dropwort	LC	VU	n/a	**1**	PA05	PA08	PK04	.	.	.	.	.
Plants	*Potamogeton acutifolius*	Sharp-leaved Pondweed	CR	EN	n/a	**1, 4**	PA17	PJ04	PJ05	.	.	.	.	.
Plants	*Potamogeton alpinus*	Red Pondweed	LC	VU	n/a	**1**	PA17	PJ04	.	.	.	.	.	.
Plants	*Potamogeton berchtoldii x acutifolius* = *P. x sudermanicus*	a hybrid pondweed	VU	LC	n/a	**1**	.	.	.	.	.	.	.	.
Plants	*Stellaria palustris*	Marsh Stitchwort	VU	VU	n/a	**1, 4**	PA05	PA08	PA13	PK04	.	.	.	.

Micro-habitat assemblage: Plants of seasonally flooded grasslands, included hollows and shallow pools

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Plants	*Comarum palustris*	Marsh Cinquefoil	LC	NT	n/a	**2**	PA04	PA05	PA08	PK04	.	.	.	.
Plants	*Oenanthe fistulosa*	Tubular Water-dropwort	LC	VU	n/a	**1**	PA05	PA08	PK04	.	.	.	.	.
Plants	*Persicaria minor*	Small Water-pepper	VU	LC	n/a	**1**	PA05	.	.	.	.	.	.	.