DORSET LOCAL NATURE RECOVERY STRATEGY HABITAT ASSEMBLAGES

Habitat assemblage:	Species of saltmarsh and brackish-freshwater transitions
Broad Habitat type:	Coastlands
S41 and Priority Habitat type:	Coastal Saltmarsh
Composite species assemblages:	Invertebrates of upper saltmarshes, brackish marshes and freshwater transitions Plants of pioneer, lower and middle saltmarsh Plants of upper saltmarsh and freshwater transitions Plants of brackish ground and coastal grazing marsh

Habitat assemblage description:	Saltmarsh is a habitat that has developed on intertidal sediments and are subject to varying levels of inundation by tidal waters. In Dorset there are approximately 475-hectares on saltmarsh with the vast majority within Christchurch Harbour and Poole Harbour with smaller stands around the Fleet. There are distinct zones from pioneer marsh to upper marsh on the landward side where there are also interesting micro-habitats around freshwater springs and seepages into the back of the marshes that are very important for invertebrates. During the summer saltmarsh is a flower-rich habitat and can provide valuable nectar and forage resource for invertebrates including those found in adjacent habitats.

Other related assemblages:	Species of grazing marsh grasslands and associated ditch systems.

Pressures and Threats	
PA08	**Extensive grazing or under-grazing by livestock**
	Historically many saltmarshes were grazed. The reduction is grazing or the cessation in grazing has resulted in robust and faster growing plants such and cord-grass, sea couch, sea club-rush and common reed to increase and out-compete smaller plants.
PA17	**Agricultural activities generating pollution to surface or ground waters (including marine)**
	Run-off into rivers from agricultural pollution into watercourses has, over decades, resulted in enrichment in the harbours causing algae blooms with a thick layer of certain seaweeds deposited onto intertidal mudflats and the lower saltmarsh to the detriment of feeding birds and vegetation. Nutriemt enrichment (eutrophication) of coastal waters can change the growth habit of saltmarsh plants causing them to invest less in growing their roots. Reduction in root biomass means plants are less able to bind the substrate facilitating erosion of the saltmarsh.

PF05	**Sports, tourism and leisure activities**
	Leisure activities both on land and within harbours can impact of breeding, roosting and feeding birds on saltmarshes and mudflats. In Christchurch and Poole Harbours and on the Fleet zones to minimise disturbance have been put in place.
PI02	**Other invasive alien species**
	There are few invasive non-native plants found in these habitats. However, Sika deer are well-established around Poole Harbour and at certain sites preferentially grazes saltmarsh resulting in a species-poor homogenous vegetation with few species flowering. The sheer numbers of deer can at certain points they can cause localised damage along saltmarsh creeks which can eventually lead to erosion of the saltings.
PI03	**Problematic native species**
	Common cord-grass is a naturally occurring hybrid within has been planted to trap sediment to build up land. It is quite invasive and a tall species which if left ungrazed can swamp smaller plants and produce a species-poor and homogenous type of saltmarsh.
PJ04	**Sea-level rise due to climate change**
	In the long-term sea-level rise is a major threat to saltmarsh in Dorset. There is very limited space for the saltmarsh to move 'inland' due to the nature of our two harbours which support the bulk of the resource which are drowned river valleys rather than true estuaries. There will more saline incursions at the lower end of major rivers where saltmarsh and other brackish habitats can develop. In Poole Harbour there are location where historic sea defences (previously protecting low grade agricultural land) have been or are scheduled to be breached allowing the creation of new saltmarsh and mudflat.
PJ06	**Wave exposure changes due to climate change**
	Increased storm events and stronger winds will hasten erosion by wave action at the seaward edges of saltings.
PM07	**Natural processes without direct or indirect influence from human activities or climate change**
	In Poole Harbour common cord-grass been the major plant for trapping sediment and creating saltmarsh. In has declined through natural die-back in area since the 1950s resulting in a loss of 300+ hectares of saltmarsh, especially islands within the harbour which are import for feeding and roosting birds. In recent years the die-back has mainly been within the larger remaining saltings the reasons for this are unclear and need careful monitoring.

Micro-habitat assemblage: Invertebrates of upper saltmarshes, brackish marshes and freshwater transitions

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Beetles	*Ochthephilum jacquelinii*	a rove beetle	VU	n/a	n/a	**1**	.	.	.	.	.	.	.	.
Flies	*Atylotus latistriatus*	Saltmarsh Horsefly	LC	n/a	n/a	**4**	PA08	PA17	.	.	.	.	.	.
Flies	*Haematopota bigoti*	Big-spotted Cleg	LC	n/a	n/a	**4**	.	.	.	.	.	.	.	.
Hoverflies	*Sphaerophoria loewi*		NT	n/a	n/a	**2, 4**	.	.	.	.	.	.	.	.
Bees	*Colletes halophilus*	Sea Aster Bee	.	n/a	NT(GLRL)	**2**	PJ04	PJ07	.	.	.	.	.	.
Moths	*Scopula emutaria*	Rosy Wave				**5**	.	.	.	.	.	.	.	.
Moths	*Monochroa moyses*	Club-rush Miner; Coast Neb		n/a	n/a	**4**	.	.	.	.	.	.	.	.
Moths	*Pediasia aridella*	Saltern Grass-moth; Saltmarsh Grass-veneer				**4**	.	.	.	.	.	.	.	.
Moths	*Scrobipalpa suaedella*	Southern Blite Moth; Sea-blite Groundling		n/a	n/a	**3, 4**	.	.	.	.	.	.	.	.

Micro-habitat assemblages: Plants of pioneer, lower and middle saltmarsh
Plants of upper saltmarsh and freshwater transitions
Plants of brackish ground and coastal grazing marsh

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Plants	*Althaea officinalis*	Marsh Mallow	LC	NT	n/a	**2**	PA07	PA13	.	.	.	.	.	.
Plants	*Bupleurum tenuissimum*	Slender Hare's-ear	VU	VU	n/a	**1**	PA05	PJ03	.	.	.	.	.	.
Plants	*Carex divisa*	Divided Sedge	VU	VU	n/a	**1**	PA05	PA08	.	.	.	.	.	.
Plants	*Eleocharis parvula*	Dwarf Spike-rush	LC	EN	n/a	**1, 4**	PI03	PK01	.	.	.	.	.	.
Plants	*Puccinellia rupestris*	Stiff Saltmarsh-grass	LC	LC	n/a	**4**	PA05	PF05	.	.	.	.	.	.