DORSET LOCAL NATURE RECOVERY STRATEGY HABITAT ASSEMBLAGES

Habitat assemblage:	Species of wayside and pasture trees
Broad Habitat type:	Farm, town and village
S41 and Priority Habitat type:	
Composite species assemblages:	Lichens, fungi and bryophytes of mature and veteran wayside and pasture trees Invertebrates of trees in suburban / urban areas

Habitat assemblage description:	Groups, avenues and isolated trees found in rural, suburban and urban situations. Many have planted origins from 19th Century plantings in parks and large gardens and include non-native species, particularly beech[1], common lime, horse chestnut and sycamore. These trees are isolated and more exposed to the sun and the bark can be enriched by dust particles which influences the lichen assemblages that can include species that are not found in closed woodland and restricted to pasture and parkland trees. These species have declined generally in lowland Britain through the loss of trees and an increase in pollution, and as a group are among the most threatened in the UK and seldom occur within SSSIs. The sunlit conditions can create a warm microclimate favoured by many beetles and other invertebrates associated with deadwood features of veteran trees. These species are associated with parkland and wood-pasture rather than closed woodland. Dorset is a national stronghold for epiphytic lichens associated with pasture trees and recent surveys for saproxylic beetles have found sites of regional importance. [1] Beech is only considered native in one small area of northeast Dorset

Other related assemblages:	Species of veteran and ancient trees and deadwood features of old growth woodland

Pressures and Threats	
PA05	**Abandonment of management/use of grasslands and other agricultural and agro-forestry systems (e.g. cessation of grazing, mowing or traditional farming)**
	A loss of small farms and the increase in farm size, and the increasing size of farm machinery coupled with the general intensification of agriculture has led to a significant loss of in-field trees and these have not replaced by new plantings.
PA08	**Extensive grazing or under-grazing by livestock**

	Grazing around the trees keeps the trunks free of species such as Bramble and Ivy. Relaxation of grazing or abandonment can lead to the trunks becoming covered by these fast-growing species to the detriment of lichens in particular.
PA13	**Application of natural or synthetic fertilisers on agricultural land**
	Regular application of artificial fertilizers and slurry close to trees leads to the over-enrichment (hypertrophication) of the bark leading to the loss of most bryophytes and lichens resulting in species-poor communities of a few Ammonia and Nitrogen tolerant species. These applications also reduce the soil microbes and ectomycorrhizal fungi which impacts on the health of the trees themselves.
PI03	**Problematic native species**
	Ivy can become an issue in certain situations where in the absence of grazing it grows quickly covering the trunks and can eliminate the lichens and bryophytes. Bramble is also a problem if it is shading the lower trunk.
PI04	**Plant and animal diseases, pathogens and pests**
	Trees species, native and non-native, are under increasing threat from disease. In the 1970s most large Elm trees were lost from the Dorset landscape through Dutch Elm Disease leading a decline of those invertebrates, fungi and lichens dependent on Elms. At present Ash-dieback is spreading through Dorset and is particularly affecting younger trees but may take longer to affect older trees and veteran. There are also diseases affecting Horse Chestnut, Oak and Sweet Chestnut.
PJ03	**Changes in precipitation regimes due to climate change**
	Changing rainfall patterns can lead to more prolonged droughts which may impact of the long-term health of mature and veteran trees leading to stress on the trees making them more prone to disease or pathogenic fungi such as honey fungus.
PJ07	**Cyclones, storms, or tornados due to climate change**
	The changing climate is leading to more frequent, and potentially stronger, storm events which lead to the loss of trees through wind-throw. Managed trees (pollards) are less prone to this as the trunks are shorter and have a much-reduced canopy.
PK04	**Atmospheric N-deposition**
	Low level, but persistent, atmospheric pollution has an impact on epiphytic favouring species tolerant of medium to high levels of nitrogen compounds.

Micro-habitat assemblage: Lichens, fungi and bryophytes of mature and veteran wayside and pasture trees

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Mosses	*Habrodon perpusillus*	Lesser Squirrel-tail Moss	NT	n/a	n/a	**2**	PH05	PI04	PM01	.	.	.	.	.
Mosses	*Neckera smithii*	Prince-of-Wales Feather-moss	LC	n/a	n/a	**4**	PB07	PB08	PB14	PH05	PI03	PI04	PM06	.
Fungi	*Rhodotus palmatus*	Wrinkled Peach	n/a	n/a	NT(Eur)	**2**	PB07	PB08	PH05	.	.	.	.	.
Fungi	*Volvariella bombycina*	Silky Rosegill	n/a	n/a	n/a	**4**	PB07	PB08	PH05	.	.	.	.	.
Lichens	*Anaptychia ciliaris*		EN	n/a	n/a	**1**	PA18	PI03	PH05	PI04	PK04	PM07	.	.
Lichens	*Bellicidia incompta*		VU	n/a	n/a	**1**	PA18	PB07 and 08	PI03	PH05	PK04	PM07	.	.
Lichens	*Caloplaca flavorubescens*		EN	n/a	n/a	**1, 4**	PK04	PM07	PK04	.	.	.	.	.
Lichens	*Catapyrenium psoromoides*		CR	n/a	n/a	**1, 4**	PK04	PI04	PM07		.	.	.	.
Lichens	*Parmelina carporrhizans*		VU	n/a	n/a	**1**	PI03	PK04	PM07	.	.	.	.	.
Lichens	*Physcia clementei*		NT	n/a	n/a	**2**	PA18	PI03	PH05	PI04	PK04	PM07	.	.
Lichens	*Physcia tribacioides*		VU	n/a	n/a	**1**	PA18	PI03	PH05	PI04	PK04	PM07	.	.
Lichens	*Wadeana dendrographa*		NT	n/a	n/a	**2**	PB07	PB08	PB14	PH05	PI03	PI04	PM07	.
Lichens	*Zwachkia prosodea*		NT	n/a	n/a	**2**	PB08	PI03	PM06	.	.	.	.	.