DORSET LOCAL NATURE RECOVERY STRATEGY HABITAT ASSEMBLAGES

Habitat assemblage:	Species of ancient and long-established woodland
Broad Habitat type:	Woodlands
S41 and Priority Habitat type:	Lowland Mixed Deciduous Woodland Wood-pasture and Parkland Lowland Beech and Yew Woodland
Composite species assemblages:	Woodland birds Woodland mammals Woodland bats Invertebrates of ancient and long-established woodland and parkland Moths of ancient and long-established woodland and parkland Plants of ancient and long-established woodland Ectomycorrhizal and saprotrophic fungi of ancient and long-established woodland

Habitat assemblage description:	Woodlands are among our most biodiversity-rich semi-natural habitats. They have specific soil types and are relatively undisturbed and nutrient-poor and rich in ectomycorrhizal fungi which in turn are important for the establishment and health for many trees species. The micro-climate is warmer and more sheltered than the surrounding countryside which is important for birds and invertebrates. Sites with a longontinuity of wooded cover (e.g. Ancient Woodland) are of particular importance as they are more likely to support specialist species that are confined to such sites and have low powers of dispersal. There are approximately 3820-hectares of ancient woodland (present before 1600) in Dorset plus 3760-ha that has been felled and replanted mostly with non-native commercial forestry trees, referred as Plantations on Ancient Woodland Sites (PAWS woodland). There is a further 7770-ha classed as long-established woodland this includes old plantations. Together, these comprise 29% of all woodland in Dorset. The majority of woods in Dorset are small (<10-ha) ‘farm woods’ with many formerly managed as coppice-with-standards but with the decline in large-scale coppicing many have no management or have effectively become high-forest with the standard trees gradually shading-out the understorey shrubs. The most extensive woodland in the county is found in Cranborne Chase on the Dorset-Wiltshire border. There are three other woodland assemblages for species that have more specific habitat requirements within woodland and wood-pasture sites such as old-growth features or are found in wet woodland.

Other woodland assemblages	Species of open woodland, glades, rides and early-stage coppice Species of veteran and ancient trees and deadwood features of old growth woodland Species of wet woodland

Pressures and Threats	
PA07	**Intensive grazing or overgrazing by livestock**
	Intensive grazing by livestock or wild/feral deer can produce a grassier ground layer and reduction in the diversity and abundance of the woodland specialist flora. It also prevents regeneration of trees and shrubs by the grazing of seedlings and saplings.
PA08	**Extensive grazing or under-grazing by livestock**
	Many woods in Dorset are small (<10-ha) 'farm woodlands' that were partially open to grazing or to provide shelter or access to water in a stream. The fencing out of stock and periodic grazing and disturbance can lead a more homogenous structure without niches provided by small scales disturbances.
PA13	**Application of natural or synthetic fertilisers on agricultural land**
	Many woods are directly adjacent to woodland and the regular application of artificial fertilizers or slurry can lead to localised enrichment at the edge of the wood with a resulting increase in species such as bramble, ivy and stinging nettle. In the long term the ground flora may become more homogenous and species-poor.
PB02	**Conversion from one type of forestry land use to another**
	Felling of native trees and replacement with monocultures of non-native trees is highly detrimental to woodland biodiversity. It can also affect structure by the removal of the shrub layer which is important for many birds and invertebrates. Monocultures, even of some native species, are more susceptible to trees diseases.
PB04	**Abandonment of traditional forest management**
	Traditional small-scale woodland management has ceased in the majority of woods particularly those small 'farm-woods' that are difficult to access by large machinery. This has led to a change in woodland structure and micro-climate with many sites becoming shadier and cooler resulting in the decline of some species particularly those associated with open habitats within woods and the early stage of coppice (see other guidance). Through the efforts of the Dorset Coppice Group there has been a slight increase in coppicing in recent years, and small-scale coppicing is often carried by conservation organisations on nature reserves.
PB06	**Logging or thinning (excluding clear cutting)**
	Felling and thinning are required to obtain a crop in commercial woodlands and for products such as firewood in smaller woods. Such activity can if undertaken sensitively benefit woodland biodiversity and generate income for the owner or site manager. Damage normally occurs in the form of direct damage to the bases of other trees, compaction of the soil and localised erosion. Good forestry practice can significantly reduce any damage. At a few sites on steep

	slopes or where the ground is wet extraction using horses can be preferable to using heavy vehicles. Recent commercial forestry techniques such as Continuous Cover Forestry promote more frequent but smaller and more selective interventions which may lessen the impacts on semi-natural woodland.
PF05	**Sports, tourism and leisure activities**
	With a decline in traditional woodland management in the majority of woods in Dorset and in some other activities are replacing it. In certain (but by no means all) circumstances these leisure activities may cause localised erosion, enrichment and disturbance and be detriment to woodland biodiversity if not managed properly.
PI02	**Other invasive alien species**
	In woodland the main non-native species are those that have been planted for gamebird cover notably cherry laurel and rhododendron, with snowberry and Wilson's honeysuckle on a more localised scale. sika deer are not native to Britain and there are particularly high levels in parts of Dorset which are having a negative impact on woods in reducing or eliminating seedlings and saplings and causing erosion on wet ground and steep slopes. Heavy grazing inside the wood favours a species-poor grassy ground flora at the expense of the many woodland specialist plants. Muntjac are also present and can impact on coppice regrowth. The damage cause by grey squirrel to young broadleaf trees can be a significant problem, especially where the production of quality timber is a management objective. Even in woodlands managed purely for biodiversity, high levels of grey squirrels may result in long-term profound changes to woodland composition and structure as certain trees species are damaged and the development of mature high canopy is impaired. Garden plants are increasingly becoming naturalised along the edges of woods, especially in or near towns and villages, with Spanish bluebell, variegated yellow archangel and lesser periwinkle being the most frequent and potentially invasive.
PI03	**Problematic native species**
	Changes to our woods such as increasing shade due to lack of management plus increasing enrichment and warmer winters has led to an increase in native species such as bramble, ivy, stinging nettle and holly all of which in certain circumstances can have a detrimental effect on other woodland plants, or in the case of Ivy and Holly shading the trunks of trees that support scarce and threatened epiphytes. Other native species such as wood small-reed and pendulous sedge are invasive in particular situations favouring disturbance and / or compaction and can be abundant along forestry rides to the detriment of smaller herbs.
PI04	**Plant and animal diseases, pathogens and pests**
	There are several pathogenic tree diseases effecting native trees and others may colonise as a result of the changing climate. Ash die-back is currently the most damaging as ash is often the most abundant tree in woods on the chalk

	scarp, and it is unclear what will replace the ash once it has died. Sycamore is a possibility but it casts significant shade This shade can affect the hazel understorey and significantly reduce the diversity of the ground flora.
PJ03	**Changes in precipitation regimes due to climate change**
	Increased and prolonged droughts, especially in the spring, can cause stress on trees which may make them more susceptible to pathogenic diseases or fungi such as honey-fungus. High rainfall leading to increased flooding events which may bring sediment in from adjoining areas causing localised enrichment of the soils favouring competitive nitrogen tolerant plants such as stinging nettle, bramble and ivy.
PJ07	**Cyclones, storms, or tornados due to climate change**
	Increased storm events in the forms of periods of high winds will lead to the loss of trees, which is detrimental to those species associated with the trees but can be beneficial in creating canopy gaps promoting a new generation of saplings.
PK04	**Atmospheric N-deposition**
	Many of the specialist plants and fungi prefer nutrient-poor soils and the low levels of deposition of nitrogen compounds over a long period will lead to enrichment and the increased growth of more competitive and faster growing species. The effects are compounded by climate change and the lack of traditional management.

Micro-habitat assemblage: Woodland birds

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Birds	*Accipter nisus*	Sparrowhawk	AMBER	n/a	n/a	**2**	.	.	.	.	.	.	.	.
Birds	*Dendrocopos minor*	Lesser Spotted Woodpecker	RED	n/a	n/a	**1**	.PA07	PI02.	.PI02	.	.	.	.	.
Birds	*Muscicapa striata*	Spotted Flycatcher	RED	n/a	n/a	**1**	.	.	.	.	.	.	.	.
Birds	*Pernis apivorus*	European Honey-buzzard	AMBER	n/a	n/a	**2**	.	.	.	.	.	.	.	.
Birds	*Phoenicurus phoenicurus*	Common Redstart	AMBER	n/a	n/a	**2**	.	.	.	.	.	.	.	.
Birds	*Phylloscopus sibilatrix*	Wood Warbler	RED	n/a	n/a	**1**	.PA08	.	.	.	.	.	.	.
Birds	*Phylloscopus trochilus*	Willow Warbler	AMBER	n/a	n/a	**2**	.	.	.	.	.	.	.	.
Birds	*Poecile palustris*	Marsh Tit	RED	n/a	n/a	**1**	.	.	.	.	.	.	.	.
Birds	*Scolopax rusticola*	Eurasian Woodcock	RED	n/a	n/a	**1**	PA14	.	.	.	.	.	.	.
Birds	*Strix aluco*	Tawny Owl	AMBER	n/a	n/a	**2**	.	.	.	.	.	.	.	.

Micro-habitat assemblage: Woodland mammals

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Mammals	*Sciurus vulgaris*	Eurasian Red Squirrel	EN	EN	LC	**1**	.	.	.	.	.	.	.	.
Mammals	*Muscardinus avellanarius*	Hazel Dormouse	VU	VU	LC	**1**	PA04	PA05	PB04	PB05	.	.	.	.
Mammals	*Martes martes*	Pine Marten	LC	CR	LC	**1, 6**	.	.	.	.	.	.	.	.

Micro-habitat assemblage: Woodland bats

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Bats	*Myotis bechsteinii*	Bechstein's Bat	LC	LC	VU (GRL)	**1**	PA03	PA14	PB04	PB07	PB08	PB14	PB17	.
Bats	*Myotis brandtii*	Brandt's Bat	DD	DD	LC	**?**	.	.	.	.	.	.	.	.
Bats	*Myotis mystacinus*	Whiskererd Bat	DD	DD	LC	**?**	.	.	.	.	.	.	.	.
Bats	*Myotis nattereri*	Natter’s Bat					.	.	.	.	.	.	.	.
Bats	*Myotis daubentonii*	Daubenton's bat					.	.	.	.	.	.	.	.
Bats	*Nyctalus leisleri*	Lesser Noctule	NT	NT	n/a	**2**	PA03	PA14	PB04	PB07	PB08	PB14	PB17	.
Bats	*Rhinolophus hipposideros*	Lesser Horseshoe Bat	LC	LC	NT (ERL)	**1**	PA03	PA14	.	.	.	.	.	.
Bats	*Rhinolophus ferrumequinum*	Greater Horseshoe Bat	LC	LC	NT (ERL)	**1**	PA03	PA14	.	.	.	.	.	.
Bats	*Barbastella barbastellus*	Western Barbastelle	VU	VU	VU (ERL)	**1**	PA03	PA14	PB04	PB07	PB08	PB14	PB17	.
Bats	*Nyctalus noctula*	Noctule	LC	LC			.	.	.	.	.	.	.	.
Bats	*Nyctalus leisleri*	Lesser noctule	NT	NT	n/a	**2**	.	.	.	.	.	.	.	.
Bats	*Pipistrellus pipistrellus*	Common Pipistrelle	LC	LC			.	.	.	.	.	.	.	.
Bats	*Pipistrellus pygmaeus*	Soprano Pipistrelle	LC	LC			.	.	.	.	.	.	.	.
Bats	*Pipistrellus nathusii*	Nathusius's pipistrelle	NT	NT	n/a	**2**	.	.	.	.	.	.	.	.
Bats	*Plecotus auritus*	Brown Long-eared bat	LC	LC			.	.	.	.	.	.	.	.
Bats	*Plecotus austriacus*	Grey long-eared bat	EN	EN	NT (ERL)	**1**	.	.	.	.	.	.	.	.

Micro-habitat assemblage: Invertebrates and moths of ancient and long-established woodland

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Flies	*Cheilosia semifasciata*		LC	n/a	n/a	**4**	.	.	.	.	.	.	.	.
Moths	*Cossus cossus*	Goat Moth		n/a	n/a	**5**	.	.	.	.	.	.	.	.
Moths	*Cymatophorina diluta*	Oak Lutestring	EN	n/a	n/a	**1**	.	.	.	.	.	.	.	.
Moths	*Meganola strigula*	Small Black Arches		n/a	n/a	**5**	.	.	.	.	.	.	.	.
Moths	*Moma alpium*	Scarce Merveille du Jour		n/a	n/a	**5**	.	.	.	.	.	.	.	.
Moths	*Mythimna turca*	Double-line		n/a	n/a	**4**	.	.	.	.	.	.	.	.
Moths	*Plitophora plumigera*	Plumed Prominent				**4**	.	.	.	.	.	.	.	.
Moths	*Acrolepiopsis marcidella*	Ruscus Moth; Elusive Smudge	pRDB	n/a	n/a	**3, 5**	.	.	.	.	.	.	.	.
Moths	*Agrotera nemoralis*	Beautiful Pearl				**4**	.	.	.	.	.	.	.	.
Moths	*Aplota palpellus*	Gold-flecked Hopper; Scarce Brown Streak	pRDB	n/a	n/a	**4**	.	.	.	.	.	.	.	.
Moths	*Anania stachydalis*	Woundwort Pearl				**5**	.	.	.	.	.	.	.	.

Micro-habitat assemblage: Plants of ancient and long-established woodland

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Plants	*Carex depauperata*	Starved Wood-sedge	EN	EN	n/a	**1**	PA08	PI03	.	.	.	.	.	.
Plants	*Cephalanthera damasonium*	White Helleborine	VU	VU	n/a	**1**	PB04	PJ03	PK04		.	.	.	.
Plants	*Melampyrum pratense*	Common Cow-wheat	.	NT	n/a	**2**	PB04	PB15	.	.	.	.	.	.
Plants	*Neottia nidus-avis*	Bird's-nest Orchid	NT	VU	n/a	**1**	PB02	PJ03	PK04	.	.	.	.	.
Plants	*Ophrys insectifera*	Fly Orchid	VU	VU	n/a	**1**	PB04	PK04	.	.	.	.	.	.
Plants	*Platanthera chlorantha*	Greater Butterfly-orchid	NT	LC	n/a	**2**	PA08	PB04	PK04	.	.	.	.	.

Micro-habitat assemblage: Fungi of ancient and long-established woodland

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Fungi	*Aureoboletus gentilis*	Gilded Bolete	NT	n/a	n/a	**2**	PB02	PB03	PB05	PB06	PB09	PB15	PK04	.
Fungi	*Cantharellus ferruginascens*		n/a	n/a	n/a	**4**	PB02	PB03	PB05	PB06	PB09	PB15	PK04	.
Fungi	*Chalciporus rubinus*	Crimson Boletes	VU	n/a	VU(Eur)	**1, 4**	PA08	PK04	.	.	.	.	.	.
Fungi	*Clavariadelphus pistillaris*	Giant Club	n/a	n/a	n/a	**4**	PB02	PB03	PB05	PB06	PB09	PB15	PK04	.
Fungi	*Conocybe aeruginosa*	Verdigris Conecap	n/a	n/a	n/a	**4**	PB06	PB15	PK04	.	.	.	.	.
Fungi	*Hydnellum concrescens*		n/a	n/a	n/a	**4**	PB02	PB03	PB05	PB06	PB09	PB15	PK04	.
Fungi	*Hydnellum ferrugineum*		n/a	n/a	n/a	**4**	PB02	PB03	PB05	PB06	PB09	PB15	PK04	.
Fungi	*Hydnellum scrobiculatum*		n/a	n/a	n/a	**4**	PB02	PB03	PB05	PB06	PB09	PB15	PK04	.
Fungi	*Hydnellum spongiosipes*		n/a	n/a	n/a	**4**	PB02	PB03	PB05	PB06	PB09	PB15	PK04	.
Fungi	*Hygrophorus lindtneri*		n/a	n/a	n/a	**4**	PB02	PB03	PB05	PB06	PB09	PB15	PK04	.

Fungi	*Lactarius flavidus*		n/a	n/a	n/a	**4**	PB02	PB03	PB05	PB06	PB09	PB15	PK04	.
Fungi	*Lactarius spinulosus*		n/a	n/a	n/a	**4**	PB02	PB03	PB05	PB06	PB09	PB15	PK04	.
Fungi	*Limacella delicata var. vinosorubescens*		n/a	n/a	n/a	**4**	PB02	PB03	PB05	PB06	PB09	PB15	PK04	.
Fungi	*Lycoperdon mammiforme*	Flaky Puffball	VU	n/a	n/a	**1**	PB02	PB03	PB05	PB06	PB09	PB15	PK04	.
Fungi	*Phellodon confluens*		n/a	n/a	n/a	**4**	PB02	PB03	PB05	PB06	PB09	PB15	PK04	.
Fungi	*Rubroboletus legaliae*		VU	n/a	n/a	**1**	PB14	PK04	.	.	.	.	.	.
Fungi	*Rubroboletus satanas*	Devil's Bolete	VU	n/a	n/a	**1, 4**	PB14	PK04	.	.	.	.	.	.
Fungi	*Hypocreopsis rhododendri*	Hazel Gloves	n/a	n/a	n/a	**4**	PB07	PB08	.	.	.	.	.	.