DORSET LOCAL NATURE RECOVERY STRATEGY SPECIES ASSEMBLAGES

Habitat assemblage:	Species of wet woodland
Broad Habitat type:	Woodlands
S41 and Priority Habitat type:	Wet Woodland
Composite species assemblages:	Invertebrates of wet woodland Plants of wet woodland Bryophytes of wet woodland Fungi of wet woodland

Habitat assemblage description:	Wet woodland is defined by having a permanently high water table leading to trees such alder, downy birch and sallow dominating the canopy. It can occur as small pockets within larger blocks of ancient and long-established woodland or even within conifer plantations. Stands may be ancient in origin or have developed as secondary woodland through the abandonment of management on heaths and floodplains. The ground flora supports specialist plants such as opposite-leaved golden-saxifrage, greater tussock-sedge and bog-moss. Features such as springs, streams, pools and deadwood provide a habitat for many invertebrates particularly flies and hoverflies. In Dorset there is approximately 550-hectares of wet woodland with notable concentrations at the junction of the Gault and Greensand in the west of the county where alder is often dominant, and around the heaths in the Poole Basin where downy birch is the main canopy tree; there are very special wet woods in the acid dune slacks at Studland.

Other related assemblages:	Species of ancient and long-established woodland Species of veteran and ancient trees and deadwood features of old growth woodland Species of rich fens, basic flushes and swamps

Pressures and Threats	
PA04	**Removal of small landscape features for agricultural land parcel consolidation (hedges, stone walls, rushes, open ditches, springs, solitary trees, etc.)**
	Cessation of traditional land management has led to most woods becoming fenced not allowing the occasional access by grazing animals which graze, cause periodic small-scale disturbance and maintain open areas that are particularly important for invertebrates.
PA13	**Application of natural or synthetic fertilisers on agricultural land**
	The regular application of artificial fertilizers and slurry on land adjacent to wet woodland and to watercourses running through the sites can have negative

	impact both on invertebrates using the streams and pools and enriching the soil favouring robust and competitive plants such as stinging nettle, bramble, over smaller species that require more nutrient-poor conditions.
PB19	**Forestry activities generating pollution to surface or ground waters**
	Large vehicles causing disturbance and localised erosion can lead to the release of silt into water courses which can directly impact on species that need stony- or gravelly-based streams, and can also enrich the water itself.
PB24	**Drainage for forestry**
	In the past widespread drainage of sites to plant non-native tree species has led to the direct loss of wet woodland habitat. Restoration can be achieved by removing the trees and blocking drains. This can also be achieved through the reintroduction of 'natural engineers' such as beaver.
PI02	**Other invasive alien species**
	Wet woodland with flowing watercourses are particularly susceptible to invasive plants such as Himalayan balsam and skunk cabbage. In more acid wet woods around the heaths *Rhododendron ponticum* is especially frequent and shades out vegetation and the trunks of old trees that would otherwise support important lichen assemblages.
PI03	**Problematic native species**
	Stinging nettle and bramble are the main problematic invasive native species. In places there has been an increase in hemlock water-dropwort which favours nutrient-rich sites and out-competes smaller species, but it is a very important nectar plant for many invertebrates such as soldierflies and hoverflies that are associated with wet woodlands and fen margins.
PJ03	**Changes in precipitation regimes due to climate change**
	The changing climate is resulting in both increased droughts and flooding events. Prolonged droughts lead to the lowering of the water table resulting in a decrease in the specialist plants and those invertebrates associated with small springs and pools. Flooding events especially when originating outside of the heaths bring sediment and enriched water into the woodland and associated waterbodies and may eventually lead to the over-enrichment of the water and the substrate which may lead to the displacement of specialist by more generalist and competitive invertebrates and plants.
PK04	**Atmospheric N-deposition**
	Low levels of deposition of nitrogen compounds over time will enrich the water and have a fertilizing effect on the vegetation. It can also have an impact on epiphytes which are often abundant wet woods, especially lichens many of which prefer neutral or slightly acidic bark. Over much of lowland Britain these species are being replaced by nitrogen-tolerant lichens, and some such as *Usnea florida* are now rare in the county.

Micro-habitat assemblage: Invertebrates of wet woodland

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Flies	*Oxycera terminata*	Yellow-tipped Soldier	NT	n/a	n/a	**2, 4**	.	.	.	.	.	.	.	.
Hoverflies	*Chalcosyrphus eunotus*		LC	n/a	n/a	**3, 5**	.	.	.	.	.	.	.	.
Moths	*Cossus cossus*	Goat Moth		n/a	n/a	**5**	.	.	.	.	.	.	.	.

Micro-habitat assemblage: Plants of wet woodland

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Plants	*Calamagrostis canescens*	Purple Small-reed	LC	LC	n/a	**4**	.	.	.	.	.	.	.	.
Plants	*Carex elongata*	Gingerbread Sedge	.	NT	n/a	**2**	PB19	PB24	PK04	.	.	.	.	.
Plants	*Dryoptera aemula*	Hay-scented Buckler-fern	LC	LC	n/a	**4**	PB02	PB04	PB24	.	.	.	.	.
Plants	*Wahlenbergia hederacea*	Ivy-leaved Bellflower	NT	NT	n/a	**2, 4**	PA05	PA08	PK04	.	.	.	.	.

Micro-habitat assemblage: Bryophytes of wet woodland

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Liverworts	*Pallavicinia lyellii*	Veilwort	EN	n/a	VU(Eur)	**1**	PI03	PA08	PI03	PK04	.	.	.	.
Liverworts	*Trichocolea tomentella*	Handsome Woollywort	LC	n/a	NT (Eur)	**2**	PB24	PI02	PI03	.	.	.	.	.

Micro-habitat assemblage: Fungi of wet woodland

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Fungi	*Cortinarius bibulus*		n/a	n/a	n/a	**4**	PB24	PI02	.	.	.	.	.	.
Fungi	*Crepidotus subverrucisporus*		n/a	n/a	n/a	**3**	PB07	PB08	PB24	.	.	.	.	.
Fungi	*Gyrodon lividus*		n/a	n/a	n/a	**4**	PB24	PI02	.	.	.	.	.	.
Fungi	*Lactarius cyathuliformis*		n/a	n/a	n/a	**4**	PB24	.	.	.	.	.	.	.
Fungi	*Lactarius lilacinus*		n/a	n/a	n/a	**4**	PB24	.	.	.	.	.	.	.
Fungi	*Paxillus rubicundulus*		n/a	n/a	n/a	**4**	PB24	PI02	.	.	.	.	.	.
Fungi	*Xerocomellus riparielllus*	Riverine Bolete	n/a	n/a	n/a	**4**	PB24	PI02	.	.	.	.	.	.