DORSET LOCAL NATURE RECOVERY STRATEGY HABITAT ASSEMBLAGES

Habitat assemblage:	Species of ponds and lakes
Broad Habitat type:	Wetlands
S41 and Priority Habitat type:	Ponds (of high ecological quality) Mesotrophic Lakes
Composite species assemblages:	Breeding birds of ponds and lakes Wintering and passage birds of inland water bodies Amphibians of ponds in the wider countryside and suburban gardens Wetland bats Invertebrates of nutrient-poor water bodies Invertebrates of ponds in the wider countryside and suburban gardens Dragonflies and damselflies of ponds and lakes Plants of nutrient-poor waterbodies Plants of muddy pond, stream and river margins

Habitat assemblage description:	Ponds occur in a wide variety of situations and on different soil types and can support a wide range of invertebrates and plants, as well providing a habitat for breeding and wintering birds, they are a vital resource for Dorset's amphibians. Ponds were once widespread in the countryside as shown on old maps but have become much scarcer in recent decades this having a knock-on effect on those species dependent on them. By contrast small ponds are now a feature of many gardens in more urban settings. Natural lakes are rare in Dorset the best example being the Little Sea at Studland a very rare example of an oligotrophic lake in lowland Britain. While there have been many losses, abandoned mineral workings provide an opportunity to create new waterbodies for biodiversity, these are quickly colonised by some groups such as dragonflies.

Other related assemblages:	Species of heathland pools Species of rivers, streams and riparian habitats

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)**
	The changes in land management have resulted in the loss of many small-scale features from the wider countryside including many ponds. These have either been filled in or been lost through abandonment. Ponds are arguably more frequent now in urban situations such as gardens.
PA07	**Intensive grazing or overgrazing by livestock**
	Excessive grazing can cause erosion of the margins of ponds leading to enrichment and potentially introducing weed species. It may also reduce the

	cover of marginal and emergent vegetation used by invertebrates and nesting birds.
PA08	**Extensive grazing or under-grazing by livestock**
	Ponds that are permanently fenced tend to dominated by a few robust perennial species on the bank and at the margins and these can include invasive plants such as stinging nettle and Himalayan Balsam. These robust species out-compete smaller and less competitive species particularly annuals several of which are declining in Dorset.
PA13	**Application of natural or synthetic fertilisers on agricultural land**
	Regular applications of artificial fertilizers and slurry on land adjacent to watercourses can lead to run-off into the ponds and lakes resulting enrichment of marginal vegetation which can become homogenous and dominated by a few robust perennials tolerant of high levels of nitrogen such as stinging nettle, hogweed, hemlock, hemlock water-dropwort, reed sweet-grass and reed canary-grass. Enrichment of the water results in algal blooms which restrict light penetrating beyond the surface and prevent oxygen from mixing in the water column thus lowering the amount available to other organisms, when they die they reduce the amount of oxygen further.
PF05	**Sports, tourism and leisure activities**
	Watercourses are popular places for leisure activities if unmanaged this can have a detrimental impact on biodiversity. Disturbance is the most obvious pressure on nesting birds in marginal vegetation. Dogs treated with chemicals (flea treatments) to prevent external parasites such as ticks are entering ponds and lakes releasing toxic chemicals into the water that are harmful to aquatic invertebrates and amphibians.
PI02	**Other invasive alien species**
	The few non-native plants found in ponds are among the most invasive and damaging to native species. Parrot's feather and New Zealand pygmyweed are the most widespread and grow quickly and can cover small ponds. Once established they are almost impossible to remove.
PI03	**Problematic native species**
	Most invasive species are related to management issues such as enrichment where robust perennials such as stinging nettle, hemlock water-dropwort, reed sweet-grass and reed canary-grass increase, out-competing smaller plants especially on the margins.
PJ03	**Changes in precipitation regimes due to climate change**
	Changing rainfall patterns may impact the habitat in different ways. Prolonged droughts may lower the water table which favours the encroachment of scrub and other non-wetland species. Increased flooding events could result in enriched water and silt entering the site leading to enrichment.

Micro-habitat assemblage: Breeding birds of ponds and lakes
Wintering and passage birds of inland water bodies

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Birds	*Anas crecca*	Eurasian Teal	AMBER	n/a	n/a	**2**	.	.	.	.	.	.	.	.
Birds	*Anas strepera*	Gadwall	AMBER	n/a	n/a	**2**	.	.	.	.	.	.	.	.
Birds	*Aythya ferina*	Pochard	RED	n/a	n/a	**1**	.	.	.	.	.	.	.	.
Birds	*Cygnus olor*	Mute Swan		n/a	n/a	**3**	.	.	.	.	.	.	.	.
Birds	*Gallinula chloropus*	Moorhen	AMBER	n/a	n/a	**2**	.	.	.	.	.	.	.	.
Birds	*Spatula clypeata*	Northern Shoveler	AMBER	n/a	n/a	**2**	.	.	.	.	.	.	.	.

Micro-habitat assemblage: Amphibians of ponds in the wider countryside and suburban gardens

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Amphibians	*Triturus cristatus*	Great Crested Newt	LC	LC	n/a	**3**	PA04	PA04	PA05	PA17	PF01	PF07	.	.
Amphibians	*Bufo bufo*	Common Toad	NT	NT	n/a	**2**	PA04	PA04	PA05	PA17	PF01	PF07	PI02	PI04
Amphibians	*Rana temporaria*	Common Frog	LC	LC	n/a	**5**	.	.	.	.	.	.	.	.

Micro-habitat assemblage: Wetland bats

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Bats	*Myotis daubentonii*	Daubenton's Bat	LC	LC	n/a	**4**	.	.	.	.	.	.	.	.
Bats	*Myotis nattereri*	Natterer's Bat	LC	LC	n/a	**4**	.	.	.	.	.	.	.	.
Bats	*Nyctalus noctula*	Noctule	LC	LC	n/a	**4**	.	.	.	.	.	.	.	.
Bats	*Eptesicus serotinus*	Serotine	VU	VU	n/a	**1**	.	.	.	.	.	.	.	.
Bats	*Pipistrellus pipistrellus*	Common Pipistrelle	LC	LC	n/a	**4**	.	.	.	.	.	.	.	.
Bats	*Pipistrellus pygmaeus*	Soprano Pipistrelle	LC	LC	n/a	**4**								
Bats	*Pipistrellus nathusii*	Nathusius' Pipistrelle	NT	NT	n/a	**2**	.	.	.	.	.	.	.	.

Micro-habitat assemblage: Invertebrates of ponds in the wider countryside and suburban gardens

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Bugs	*Erotettix cyane*	Pondweed Leafhopper	n/a	n/a	n/a	**3**	.	.	.	.	.	.	.	.

Micro-habitat assemblage: Dragonflies and damselflies of ponds and lakes

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Dragonflies	*Anaciaeshna isoceles*	Norfolk Hawker	EN	n/a	n/a	**1**	PA17	PK01	.	.	.	.	.	.

Micro-habitat assemblage: Plants of nutrient-poor waterbodies

Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria	Threats / Pressures							
Plants	*Elatine hexandra*	Six-stammened Waterwort	LC	LC	n/a	**3**	PI02	PK01	.	.	.	.	.	.

Plants	*Eleocharis acicularis*	Needle Spike-rush	LC	NT	n/a	**2**	PI02	PI03	PK01	PK04	.	.	.	.
Plants	*Persicaria minor*	Small Water-pepper	VU	LC	n/a	**1**	PA05	.	.	.	.	.	.	.
Plants	*Persicaria mitis*	Tasteless Water-pepper	VU	VU	n/a	**1**	PA04	PA05	PA08	.	.	.	.	.