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	Species of heathland pools
assemblages:	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.

Dorset Local Nature Recovery Strategy Species Assemblages Guidance: *Species of ponds and lakes* © DERC: Version 1.0, December 2024

Micro-habit	at assemblage: Breedir Wintering and	g birds of ponds and lakes passage birds of inland wa	ter bodies								
Group	Species	Common Name	GB	IUCN	IUCN	Criteria				Fhreats / P	ressures
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	_	•	•	•	•	•
Birds	Cygnus olor	Mute Swan		n/a	n/a	З	•	•	•		
Birds	Gallinula chloropus	Moorhen	AMBER	n/a	n/a	2					•
Birds	Spatula clypeata	Northern Shoveler	AMBER	n/a	n/a	2					
Micro-habit	at assemblage: Amphibians	of ponds in the wider count	tryside and s	suburban ga	rdens						
Group	Species	Common Name	GB	IUCN	IUCN	Criteria				Threats /	Pressures
Amphibians	Triturus cristatus	Great Crested Newt	ГС	LC	n/a	ω	PA04	PA04	PA05	PA17	PF01
Amphibians	Bufo bufo	Common Toad	TN	TN	n/a	2	PA04	PA04	PA05	PA17	PF01
Amphibians	Rana temporaria	Common Frog	LС	LС	n/a	ъ					•
Micro-habit	at assemblage: Wetland bat	0									
Group	Species	Common Name	GB	IUCN Eng	IUCN other	Criteria				Threats / F	ressures
Bats	Myotis daubentonii	Daubenton's Bat	LC	LC	n/a	4					
Bats	Myotis nattereri	Natterer's Bat	ГС	ГС	n/a	4	-	-	-	-	-
Bats	Nyctalus noctula	Noctule	ГС	С	n/a	4				-	
Bats	Eptesicus serotinus	Serotine	Ś	5	n/a	-			-		
Bats	Pipistrellus pipistrellus	Common Pipistrelle	- Б С	5 6	n/a	4	•	•			
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Bats Micro-habit	<i>Pipistrellus nathusii</i> at assemblage: Invertebrate	Nathusius' Pipistrelle s of ponds in the wider cou	NT Intryside and	NT suburban g	n/a ardens	2					
Group	Species	Common Name	IUCN GB	IUCN Eng	IUCN other	Criteria				Threats / F	ressures
Bugs	Erotettix cyane	Pondweed Leafhopper	n/a	n/a	n/a	3					
Micro-habit	at assemblage: Dragonflies	and damselflies of ponds a	nd lakes								
Group	Species	Common Name	GB	IUCN	IUCN other	Criteria				Fhreats / F	ressures
Dragonflies	Anaciaeshna isoceles	Norfolk Hawker	EN	n/a	n/a	1	PA17	PK01			
Micro-habit	at assemblage: Plants of nut	rient-poor waterbodies									
Group	Species	Common Name	GB IUCN	IUCN Eng	IUCN other	Criteria				Threats / F	ressures
Plants	Elatine hexandra	Six-stammened Waterwort	ГС	Б	n/a	ω	P102	РК01	•		
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Sources			
PF01	PF07	-	-
PF01	PF07	PI02	PI04
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Plants	Plants	Plants	
Persicaria mitis	Persicaria minor	Eleocharis acicularis	
Tasteless Water-pepper	Small Water-pepper	Needle Spike-rush	
VU	VU	LC	
۷V	LC	ΝT	
n/a	n/a	n/a	
1	1	2	
PA04	PA05	PI02	
PA05	-	P103	
PA08	•	PK01	
•	•	PK04	

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