Draft Worcestershire Local Nature Recovery Strategy Biodiversity Priority Data Sheets

Data sheets show:

- Relationship between the proposed Biodiversity Priorities and suggested Potential Measures
- UKHab codes for mapped Potential Measures indicating how to achieve consistency with Biodiversity Net Gain habitat creation and enhancement
- The title of each Potential Measure is hyperlinked to an ArcOnline Storymap explaining the development of that measure

Explore the Water and Wetlands Biodiversity Priorities and Potential Measures

Explore the Trees, Scrub and Woodland Biodiversity Priorities and Potential Measures

Explore the Open Habitats Biodiversity Priorities and Potential Measures

Explore the Landscape-scale and Linear Habitat Connectivity Biodiversity Priorities and Potential Measures

Explore the Earth Heritage Biodiversity Priorities and Potential Measures

Explore the Green Infrastructure Biodiversity Priorities and Potential Measures

Explore the Species Priorities and Potential Measures

Rivers and Streams

Priorities for Rivers and Streams

Biodiversity Priority 1: Improve the quality of the water within Worcestershire's rivers and streams

Biodiversity Priority 2: Improve the availability of water within Worcestershire's rivers and streams to improve condition of habitats and increase species' resilience to flood and drought events

Biodiversity Priority 3: Improve the quality and extent of in-channel and riparian habitat for key species, for example shad, brown trout, eel, white-clawed crayfish and water vole

Potential Measures that will support delivery of these Priorities

Potential Measure 1:	De-culvert watercourses to enable improved wildlife passage through or around man-made	Mapped	
De-culvert and re-	barriers. Re-naturalise channels and create or enhance associated wetland habitat to provide	Measure	
naturalise watercourses	feeding, refuge and spawning/breeding habitat for freshwater fish and invertebrate species and		
	mammals such as water vole and otter.		Water quality Water availability Flood risk Climate Health and wellbeing
WRLNRS21 PM1			

UKHab codes for Potential Measure 1: r1~

~ = all further levels and any secondary codes

~ = all further levels and any secondary codes

~ = all further levels and any secondary codes

Create riparian buffer zonesculti 1) rip	eate or enhance riparian buffer zones comprising of a woodland/grassland mosaic with no ltivation or input of agri-chemicals. Within this zone look for opportunities to create or enhance riparian woodland habitat, including wet woodland, 2) the bankside tree resource through new anting, pollarding and coppicing, 3) areas of wet and dry reedbed, 4) areas of wet grassland or arsh.	Mapped Measure	Water quality Image: Constraint of the state of th
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UKHab codes for Potential Measure 2: g1~, g2~, g3a~, g3b~, g3c6, g3c7, g3c8, w1~ 30, f~, h2a, r1~, h3~, 18

Potential Measure 3: Revert land to wet grassland and floodplain meadow Revert arable and horticultural land and intensive pasture to permanent wet grassland, stop agrichemical inputs and manage by grazing and hay cutting. Where possible create or enhance wet grassland habitat quality to MG4 species-rich floodplain meadow. Mapped Measure WRLNRS21_PM3 WRLNRS21_PM3 Water quality Image: Comparison of the pattern of the

UKHab codes for Potential Measure 3: g1~, g2~, g3a~, g3b~, g3c~, 18, 19

Potential Measure 4:	Protect and enhance surface waters and wetlands, at-risk groundwater aquifers and groundwater-	Non-Mapped	
Protect and improve	fed wetland systems by implementing changes to land management that will improve water	Measure	
water resources	quality and availability. Changes could include: reducing soil erosion by creating grassland buffer		
	strips or reverting arable fields to grassland; adopting sustainable soil management practices		Water quality Water availability Flood risk reduction protection Sequestration
WRLNRS21_PM4	such as minimum tillage and use of cover crops; adopting integrated pest management in place of		
	pesticide and herbicide use; re-naturalising hydrological flows by blocking drains, reconnecting		
	watercourses to their floodplain and creating wetland features such as ditches, ponds or scrapes		Pollination Climate
	to slow the flow; taking steps to eradicate invasive non-native plant species and following		Pollination Climate adaptation
	biosecurity protocols to prevent their spread; installing SuDS to capture soil and pollutants and		
	aid infiltration; installing on-farm reservoirs and rainwater harvesting features to reduce the need		
	for abstraction.		2

Rivers and Streams continued...

Rivers and Streams continued

Priorities for Rivers and Streams

Biodiversity Priority 1: Improve the quality of the water within Worcestershire's rivers and streams

Biodiversity Priority 2: Improve the availability of water within Worcestershire's rivers and streams to improve condition of habitats and increase species' resilience to flood and drought events

Biodiversity Priority 3: Improve the quality and extent of in-channel and riparian habitat for key species, for example shad, brown trout, eel, white-clawed crayfish and water vole

Detential Measure 5:	Use coolegical angineering and nature based solutions to re-naturalise local hydrological flows	Non-Mapped				
	Use ecological engineering and nature-based solutions to re-naturalise local hydrological flows,					CO 2
Natural flood	reduce flood risk, promote infiltration, support groundwater recharge, provide feeding, refuge and	Measure			E	
management	spawning/breeding habitat for species, reconnect watercourses to their floodplains and improve			J VVV		
_	water quality and availability by creating and enhancing wetland habitats that will hold back water,		Water quality Water av	Flood risk reduction	Soil health and protection	Carbon sequestration
WRLNRS21_PM5	such as: tree planting to encourage infiltration, creation of attenuation areas, ponds, swales,					
	ditches or wetland habitat such as fen, wet woodland or wet grassland, installing leaky woody					
	dams, reinstating meanders, use of keystone species to contribute to the restoration of					
	ecosystem function.		Climate adaptation			

Groundwater-dependent Habitats

Priorities for Groundwater-dependent Habitats

Biodiversity Priority 4: Improve the hydrological functioning and condition of groundwater-fed wetland sites

Potential Measure 4: Protect and improve water resources	Protect and enhance surface waters and wetlands, at-risk groundwater aquifers and groundwater-fed wetland systems by implementing changes to land management that will improve water quality and availability.	Non-Mapped Measure	Water quality	Water availability	Flood risk reduction	Soil health and	Carbon sequestration
WRLNRS21_PM4	Changes could include: reducing soil erosion by creating grassland buffer strips or reverting arable fields to grassland; adopting sustainable soil management practices such as minimum tillage and use of cover crops; adopting integrated pest management in place of pesticide and herbicide use; re-naturalising hydrological flows by blocking drains, reconnecting watercourses to their floodplain and creating wetland features such as ditches, ponds or scrapes to slow the flow; taking steps to eradicate invasive non-native plant species and following biosecurity protocols to prevent their spread; installing SuDS to capture soil and pollutants and aid infiltration; installing on-farm reservoirs and rainwater harvesting features to reduce the need for abstraction.		Pollination services	Climate adaptation			

Still Freshwater Habitats

Priorities for Still Freshwater Habitats

Biodiversity Priority 5: Increase the number of ponds and the extent and connectivity of wetland and terrestrial habitat between ponds

Biodiversity Priority 6: Improve the condition of ponds and the number of ponds that qualify for priority pond status

Potential Measures that will support delivery of these Priorities

Detential Measure 4			
Potential Measure 4:	Protect and enhance surface waters and wetlands, at-risk groundwater aquifers and groundwater-	Non-Mapped	
Protect and improve	fed wetland systems by implementing changes to land management that will improve water quality	Measure	
water resources	and availability.		
			Water quality Water availability Flood risk reduction Soil health and protection Carbon sequestration
	Changes could include: reducing soil erosion by creating grassland buffer strips or reverting arable		[®] 632 200:
	fields to grassland; adopting sustainable soil management practices such as minimum tillage and		
	use of cover crops; adopting integrated pest management in place of pesticide and herbicide use;		Pollination Climate
	re-naturalising hydrological flows by blocking drains, reconnecting watercourses to their floodplain		services adaptation
	and creating wetland features such as ditches, ponds or scrapes to slow the flow; taking steps to		
	eradicate invasive non-native plant species and following biosecurity protocols to prevent their		
	spread; installing SuDS to capture soil and pollutants and aid infiltration; installing on-farm		
	reservoirs and rainwater harvesting features to reduce the need for abstraction.		
Potential Measure 6:	Create new wildlife ponds including provision of connected terrestrial habitat around pond sites, in	Non-Mapped	
Create wildlife ponds in	particular grassland, scrub and hibernacula.	Measure	
low-density pond areas			
			Water quality Water availability Flood risk reduction Pollination Health and wellbeing
WRLNRS21_PM6			
Potential Measure 7:	Enhance existing pondscapes by improving the quality and quantity of water entering ponds (see	Mapped Measure	
Create and enhance	Potential Measure 4), creating additional ponds and wetland habitat, and creating or enhancing		
wildlife ponds and	connected terrestrial habitat around and between ponds, in particular grassland, scrub and		
surrounding habitat in	hibernacula/refugia suitable for use by amphibians.		Water quality Water availability Flood risk reduction Pollination Health and wellbeing
high-density and high-			
value pond areas			
WRLNRS21_PM7			
UKHab codes for Potent	ial Measure 7: r1 40, r1 41, g1~, g2~, g3a~, g3b~, g3c~, f~		\sim = all further levels and any secondary codes

Still Freshwater Habitats continued...

Still Freshwater Habitats continued

Priorities for Still Freshwater Habitats

Biodiversity Priority 5: Increase the number of ponds and the extent and connectivity of wetland and terrestrial habitat between ponds

Biodiversity Priority 6: Improve the condition of ponds and the number of ponds that qualify for priority pond status

Potential Measure 38:	All built environments should allow wildlife to safely move through them and thrive within them.	Mapped Measure			
	Decisions on the layout and design of built-up areas, at all scales, should seek to make a positive				
connectedness and	contribution to providing more, bigger and better-connected areas of natural habitats. As a				
quality of wildlife	minimum, decision-makers should seek to:		Air quality Water quality Water availability reduction sequestration		
habitats within the built	• Increase urban tree canopy cover, aiming for a minimum of 20%, through, for example,				
environment	planting street trees, trees in green spaces, hedgerows, community orchards, or small woodland blocks, strips or corridors.				
WRLNRS21_PM38	 Make individual homes, gardens and boundary features more wildlife-friendly through, for example, the installation of hedgehog highways, universal swift nest bricks and bat bricks. 		Pollination services Adaptation Health and wellbeing		
	Create more wildlife ponds within public greenspaces and gardens.				
	 Provide green active travel corridors that function as linear wildlife habitats as well as cycleways and footways. Design the layout of new gardens and greenspaces so that they contribute to a cohesive network of green corridors within the built environment. Link urban green spaces to the local nature network in the surrounding countryside via green, wildlife-friendly corridors. 				
UKHab codes for Potent	KHab codes for Potential Measure 38: u1f 80, u~ 86, 87, 88, 89, u~ 841, 842, 843, 848, 849, 850, 830, 27 ~ = all further levels and any secondary codes				

Fen, Marsh, Swamp and Reedbed

Priorities for Fen, Marsh, Swamp and Reedbed

Biodiversity Priority 7: Increase the extent of wetland habitats under restoration and in good condition

Potential Measure 8: Create and enhance wetland habitats WRLNRS21_PM8	Use nature-based solutions to raise and maintain water tables and re-wet land to enable the creation or enhancement of a wetland habitat mosaic and the reconnection of watercourses with their floodplain. As appropriate to the soil type, geology and hydrology seek to create and enhance a mosaic of: fen, marsh, swamp, bog, peat, wet grassland, wet woodland and reedbed habitat.	Mapped Measure	Water quality Image: Climate adaptation Vision Pollination services Image: Climate adaptation
UKHab codes for Potenti	al Measure 8: f~, g~, w1d, 19, 55, 425		~ = all further levels and any secondary codes
Potential Measure 9: Create and restore saline habitats WRLNRS21_PM9	Incorporate restoration of saline conditions when creating or enhancing wetland habitat within the Salwarpe Valley, where this is supported by the geology and hydrology, and work with stakeholders to better understand and promote the value of the unique hydrological conditions in this location.	Mapped Measure	Water quality Image: Constraint of the second s
UKHab codes for Potenti	al Measure 9: t2g~		~ = all further levels and any secondary codes

Saline Habitats

Priorities for Saline Habitats

Biodiversity Priority 8: Increase the extent of saline habitats under restoration and in good condition

Potential Measure 9: Create and restore saline habitats WRLNRS21_PM9	Incorporate restoration of saline conditions when creating or enhancing wetland habitat within the Salwarpe Valley, where this is supported by the geology and hydrology, and work with stakeholders to better understand and promote the value of the unique hydrological conditions in this location.	Mapped Measure	Water quality Water quality Water availability Water availability Water availability Cimate Climate Climate	Rood risk reduction	Carbon sequestration
UKHab codes for Potential	KHab codes for Potential Measure 9: t2g~ ~ = all further levels and any secondary codes				

Native Trees and Woodland

Priorities for Native	Priorities for Native Trees and Woodland					
Biodiversity Priority 10: Im	Biodiversity Priority 9: Increase tree cover in the form of woodland and trees outside woodland, including hedgerow trees, orchards, riparian/wet woodland and urban tree canopy cover Biodiversity Priority 10: Improve the condition of ancient semi-natural woodlands and bring more PAWs woodlands into restorative management Biodiversity Priority 11: Increase the functional connectivity between woodlands at a landscape scale, to allow for species movement					
Potential Measures	that will support delivery of these Priorities					
Potential Measure 2: Create riparian buffer zones WRLNRS21_PM2	Create or enhance riparian buffer zones comprising of a woodland/grassland mosaic with no cultivation or input of agri-chemicals. Within this zone look for opportunities to create or enhance 1) riparian woodland habitat, including wet woodland, 2) the bankside tree resource through new planting, pollarding and coppicing, 3) areas of wet and dry reedbed, 4) areas of wet grassland or marsh.	Mapped Measure	Vater quality Vater availability Vater quality Vater availability			
UKHab codes for Potential	Measure 2: g1~, g2~, g3a~, g3b~, g3c6, g3c7, g3c8, w1~ 30, f~, h2a, r1~, h3~, 18		~ = all further levels and any secondary codes			
Potential Measure 10: Restore PAWS woodlands WRLNRS21_PM10	Restore habitat by gradually removing non-native tree species using recognised forestry techniques such as thinning and clearfell, retaining veteran trees to act as a seed source, allowing natural regeneration where possible, creating structural and species diversity.	Mapped Measure	Soil health and protection			
UKHab codes for Potential	Measure 10: w1~ 28 29		\sim = all further levels and any secondary codes			
Potential Measure 11: Enhance condition of ancient semi-natural woodlands	Enhance condition of ancient woodlands by improving structural and species diversity using techniques such as thinning, coppicing and pollarding, and by taking a habitat mosaic approach to incorporate open space, rides and ponds.	Mapped Measure	Soil health and protection			
WRLNRS21_PM11 UKHab codes for Potential	Measure 11: w1~28 30		~ = all further levels and any secondary codes			
Potential Measure 12: Plant new woodlands and trees outside woodland WRLNRS21_PM12	Create new woodland taking a habitat mosaic approach to incorporate open space, rides and ponds; buffer and extend priority woodland sites; and increase tree-cover connectivity across the landscape.	Mapped Measure				
UKHab codes for Potential	Measure 12: w1~ 30, 33, 200, 201, 202		~ = all further levels and any secondary codes			

Native Trees and Woodland continued...

Native Trees and Woodland continued

Priorities for Native Trees and Woodland

Biodiversity Priority 9: Increase tree cover in the form of woodland and trees outside woodland, including hedgerow trees, orchards, riparian/wet woodland and urban tree canopy cover

Biodiversity Priority 10: Improve the condition of ancient semi-natural woodlands and bring more PAWs woodlands into restorative management

Biodiversity Priority 11: Increase the functional connectivity between woodlands at a landscape scale, to allow for species movement

Potential Measures that will support delivery of these Priorities

Potential Measure 13:	Increase the diversity of shrub and tree species within woodland, woodland edge and scrub	Mapped Measure	
Enhance condition of	habitats to provide a year-round supply of pollen, nectar, fruit and seeds for wildlife.		
existing woodlands for	Increase the volume of deadwood within woodland, both standing and fallen, for		Soil health and protection
wildlife	invertebrates, fungi, mosses, bryophytes, bat and bird spp. Increase the availability of food		Soil health and Pollination protection services
	plants used by invertebrates found within woodland, for example Wood White, White		
WRLNRS21_PM13	Admiral, Grizzled Skipper and Dingy Skipper butterflies. Inoculate woodland with material		
	from adjacent established woodlands, where appropriate, to introduce fungi and ground		
	flora communities.		

UKHab codes for Potential Measure 13: w1~ 30

~ = all further levels and any secondary codes

Potential Measure 14: Increase tree cover in the farmed landscape	Increase tree cover in the farmed landscape (outside existing woodland) using new agroforestry schemes such as silvo-pasture or silvo-arable, as well as planting up shelterbelts, field corners, copses and hedgerow trees.	Non-Mapped Measure	Air quality
WRLNRS21_PM14 Potential Measure 15: Manage deer and squirrel numbers to protect woodland WRLNRS21_PM15	Manage deer and squirrel populations through a landscape scale approach, to allow woodlands to naturally regenerate and to protect newly planted trees, woodland shrub and ground flora layers.	Non-Mapped Measure	Carbon sequestration
Potential Measure 38: Increase the extent, connectedness and quality of wildlife habitats within the built environment WRLNRS21_PM38	 All built environments should allow wildlife to safely move through them and thrive within them. Decisions on the layout and design of built-up areas, at all scales, should seek to make a positive contribution to providing more, bigger and better-connected areas of natural habitats. As a minimum, decision-makers should seek to: Increase urban tree canopy cover, aiming for a minimum of 20%, through, for example, planting street trees, trees in green spaces, hedgerows, community orchards, or small woodland blocks, strips or corridors. Make individual homes, gardens and boundary features more wildlife-friendly through, for example, the installation of hedgehog highways, universal swift nest bricks and bat bricks. Create more wildlife ponds within public greenspaces and gardens. Provide green active travel corridors that function as linear wildlife habitats as well as cycleways and footways. Design the layout of new gardens and greenspaces so that they contribute to a cohesive network of green corridors within the built environment. Link urban green spaces to the local nature network in the surrounding countryside via green, wildlife-friendly corridors. 	Mapped Measure	<image/>

UKHab codes for Potential Measure 38: u1f 80, u~ 86, 87, 88, 89, u~ 841, 842, 843, 848, 849, 850, 830, 27

~ = all further levels and any secondary codes

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Hedgerows

Priorities for Hedgerows

Biodiversity Priority 12: Increase the extent of hedgerow habitat to enhance their ability to function as linear corridors for wildlife

Biodiversity Priority 13: Increase the number of hedgerows in good condition for wildlife by managing them according to best practice guidelines

Biodiversity Priority 14: Improve shrub and ground flora diversity within hedgerows to enhance their function as a food source for wildlife

Potential Measure 16: Create new hedgerows WRLNRS21_PM16	Create new native species hedgerows, including reinstatement of 'ghost' hedgerows, to enhance habitat connectivity across the landscape between areas of priority woodland, scrub or orchard habitat. Seek to include the creation of associated linear features such as banks and ditches with the hedgerow, to widen the range of habitat niches available for species.	Non-Mapped Measure	Water quality
Potential Measure 17: Enhance condition of hedgerows WRLNRS21_PM17	Enhance condition of existing hedgerows informed by regular hedgerow condition assessments using available guidance and tools. Best practice includes planting up gaps, diversifying the native species mix, allowing flowering and fruiting, leaving wide grassy margins at the base, creating or restoring associated linear features such as banks and ditches, and rotational cutting.	Non-Mapped Measure	Water quality Image: Constraint of the services
Potential Measure 18: Increase numbers of hedgerow trees WRLNRS21_PM18	Plant new native species trees in hedgerow gaps or identify existing trees to become part of the future mature and veteran hedgerow tree stock, particularly disease-resistant English elm, black poplar (in appropriate landscapes) and English oak.	Non-Mapped Measure	Soil health and protection Sequestration
Potential Measure 28: Plant hedgerow fruit trees WRLNRS21_PM28	Plant new hedgerow fruit trees using local provenance varieties to create connecting corridors between existing orchards, which provide pollen, nectar and fruit for wildlife.	Non-Mapped Measure	Soil health and protection

Wood Pasture and Parkland

Priorities for Wood	Priorities for Wood Pasture and Parkland					
Biodiversity Priority 15:	Biodiversity Priority 15: Increase the extent of wood pasture and parkland habitat, including to buffer and connect sites of existing importance for biodiversity					
Potential Measure	s that will support delivery of these Priorities					
Potential Measure 19: Enhance wood pasture and parkland habitat WRLNRS21_PM19	Enhance wood pasture and parkland habitat and parkland habitat equestration equestration					
UKHab codes for Potenti	al Measure 19: g~ 20		~ = all further levels and any secondary codes			
Potential Measure 20: Create new wood pasture and parkland habitat WRLNRS21_PM20	Create new wood pasture and parkland habitat and manage using a conservation grazing system to buffer and link up species-rich grassland, scrub and veteran tree habitat.	Mapped Measure	Soit health and protection Carbon sequestration			
VRLNRS21_PM20 JKHab codes for Potential Measure 20: g~ 20 ~ = all further levels and any secondary codes						

Existing and Future Ancient and Veteran Trees

Priorities for Existing and Future Ancient and Veteran Trees						
Biodiversity Priority 16: Increase the number of ancient and veteran trees being sensitively managed to extend their lifespan Biodiversity Priority 17: Increase the amount of standing and fallen deadwood available for wildlife within the wider countryside						
Potential Measure	Potential Measures that will support delivery of these Priorities					
Potential Measure 13: Enhance condition of existing woodlands for wildlife WRLNRS21_PM13	Increase the diversity of shrub and tree species within woodland, woodland edge and scrub habitats to provide a year-round supply of pollen, nectar, fruit and seeds for wildlife. Increase the volume of deadwood within woodland, both standing and fallen, for invertebrates, fungi, mosses, bryophytes, bat and bird spp. Increase the availability of food plants used by invertebrates found within woodland, for example Wood White, White Admiral, Grizzled Skipper and Dingy Skipper butterflies. Inoculate woodland with material from adjacent established woodlands, where appropriate, to introduce fungi and ground flora communities.	Mapped Measure	Soith health and protection			
UKHab codes for Potent	ial Measure 13: w1~ 30		~ = all further levels and any secondary codes			
Potential Measure 21: Enhance condition of pre-veteran, veteran and ancient trees WRLNRS21_PM21	Enhance condition of existing veteran and ancient trees by carrying out appropriate management to prolong life and maintain habitat value for wildlife, including halo thinning within woodland or scrub, crown rebalancing or reduction, protecting root zones, and restoring soil health with a focus on fungi (mycorrhizal) communities.	Mapped Measure	Soil health and protection			
UKHab codes for Potent	ial Measure 21: 204, 205	I	~ = all further levels and any secondary codes			
Potential Measure 22: Enhance landscape connectivity for species using veteran and ancient trees WRLNRS21_PM22	Enhance connectivity and availability of habitat for dead-wood dependent invertebrates, and other species that use veteran and ancient trees including birds and bats, by retaining dead wood, carrying out veteranisation of mature trees and planting new trees, hedgerows and hedgerow trees. Add sources of nectar and pollen into the landscape surrounding veteran and ancient trees.	Mapped Measure	Soil health and protection Carbon sequestration			
WRLNRS21_PM22 Image: Constraint of the second and						

Scrub

Priorities for Scrub

Biodiversity Priority 18: Increase the amount of well-managed scrub habitat

Potential Measure 23: Create and enhance a habitat mosaic WRLNRS21_PM23	Create and enhance a mosaic of locally appropriate habitats, including scrub, woodland, hedgerows, grassland, orchard, ponds and other wetland features. The composition of the mosaic and location of the habitats should be informed by the best ecological fit modelled by the Worcestershire Habitat Mosaic Nature Recovery Network. New and enhanced habitats should be located so as to a) maximise habitat diversity within the mosaic, b) maximise the expansion, buffering and connectivity that can be delivered for (or between) existing on-site or adjacent priority habitats or core sites (APIBs), and c) to create ecotones between habitats. If this Potential Measure is relevant to a BNG site or BNG Habitat Bank: see Section 3.1 Biodiversity Net Gain in LNRS Statement of Biodiversity Priorities.	Mapped Measure	Air qualify Image: Carbon sequestration Carbon sequestration Image: Carbon services
See Section 3.1 of the W	orcestershire Local Nature Recovery Strategy for guidance on creating a habitat mosaic for l	BNG	
Potential Measure 24: Create and enhance scrub habitat WRLNRS21_PM24	Create and enhance scrub habitat as an ecotone, in particular at woodland edges, woodland-grassland transitions, and as a component of wood pasture and traditional orchard habitats.	Non-Mapped Measure	Soil health and protection Carbon sequestration

Traditional Orchard

Priorities for Traditi	Priorities for Traditional Orchard					
Biodiversity Priority 19: Create more traditional orchard habitat Biodiversity Priority 20: Bring more existing traditional orchards into a programme of life-extending, restorative management						
Potential Measures	that will support delivery of these Priorities					
Potential Measure 25: Enhance wildlife value of newly created and younger orchards by carrying out formative pruning, managing without the use of chemicals, protecting trees from pest damage, and controlling grass and scrub at the base of trees. Mapped Measure WRLNRS21_PM25 WRLNRS21_PM25						
UKHab codes for Potentia	l Measure 25: g1~, g2~, g3a~, g3b~, g3c~ 27					
Potential Measure 26: Enhance wildlife value of older traditional orchards WRLNRS21_PM26	Enhance wildlife value of older traditional orchards through retention of dead wood, sensitive pruning and new planting, and through the creation, restoration and management of associated habitats such as hedgerows, species-rich grassland, scrub and ponds. Promote connectivity between orchards through fruit tree planting in hedgerows.	Mapped Measure	Soil health and protection			
	l Measure 26: g1~, g2~, g3a~, g3b~, g3c~ 27		~ = all further levels and any secondary codes			
Potential Measure 27: Create new orchards WRLNRS21_PM27	Create new orchards as part of increasing tree-cover connectivity across the landscape, where possible incorporating a mosaic of associated habitats such as species-rich grassland, hedgerows, scrub and ponds.	Mapped Measure	Soil health and protection services			
UKHab codes for Potentia	KHab codes for Potential Measure 27: g1~, g2~, g3a~, g3b~, g3c~ 27 ~ = all further levels and any secondary codes					

Floodplain Meadow and Wet Grassland

Priorities for Floodplain Meadow and Wet Grassland

Biodiversity Priority 21: Increase the extent of floodplain meadow habitat under restoration and in good condition

Biodiversity Priority 22: Reduce fragmentation and increase the functional connectivity between areas of floodplain meadow

Biodiversity Priority 23: Increase the extent of wet grassland habitat under restoration and in good condition

Potential Measure 3: Revert land to wet grassland and floodplain meadow WRLNRS21_PM3	Revert arable and horticultural land and intensive pasture to permanent wet grassland, stop agri-chemical inputs and manage by grazing and hay cutting. Where possible create or enhance wet grassland habitat quality to MG4 species-rich floodplain meadow.	Mapped Measure	Water quality	Water availability Climate adaptation	Feduction	Soil health and protection	Carbon sequestration
JKHab codes for Potential Measure 3: g1~, g2~, g3a~, g3b~, g3c~, 18, 19							

Lowland Meadow

Priorities for Lowland Meadow Biodiversity Priority 24: Increase the extent of lowland meadow habitat under restoration and in good condition Biodiversity Priority 25: Reduce fragmentation and increase the functional connectivity between areas of lowland meadow Potential Measures that will support delivery of these Priorities **Potential Measure 29:** Create new and/or enhance existing areas of neutral grassland. Seek to buffer, extend **Mapped Measure** Create or enhance and connect the areas of priority habitat which are under restoration and appropriate management and aim to increase botanical species-richness as appropriate to the species-rich neutral habitat type. Take a habitat mosaic approach to incorporate scrub, orchard and ponds <u>grassland</u> where appropriate. Allow for periodic disturbance to make areas of bare ground WRLNRS21_PM29 suitable for use by invertebrate species or by plant species that are intolerant of competition. UKHab codes for Potential Measure 29: g3~18 ~ = all further levels and any secondary codes

Acid Grassland and Lowland Heathland

Priorities for Acid Grassland and Lowland Heathland

Biodiversity Priority 26: Increase the extent of acid grassland and heathland habitats under restoration and in good condition

Biodiversity Priority 27: Reduce fragmentation and increase the functional connectivity between areas of acid grassland and heathland habitats

Potential Measure 30:	Create new and/or enhance existing areas of acid grassland and heathland. Seek to	Mapped Measure		
Create or enhance	buffer, extend and connect the areas of priority habitat which are under restoration and			
species-rich acid	appropriate management and aim to increase botanical species-richness as		View of the second sequestration Soil health and protection Soil health and protection Pollination services	
grassland and lowland	appropriate to the habitat type. Take a habitat mosaic approach to incorporate scrub,		Soil health and protection Carbon sequestration Pollination services	
heathland	fen and ponds where appropriate. Allow for periodic disturbance to make areas of bare			
	ground suitable for use by invertebrate species or by plant species that are intolerant of			
WRLNRS21_PM30	competition.			
UKHab codes for Potential Measure 30: g1~ 18				
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Calcareous Grassland

Priorities for Calcareous Grassland

Biodiversity Priority 28: Increase the extent of calcareous grassland habitat under restoration and in good condition

Biodiversity Priority 29: Reduce fragmentation and increase the functional connectivity between areas of calcareous grassland

Potential Measure 31: Create or enhance species-rich calcareous grassland WRLNRS21_PM31	Create new and/or enhance existing areas of calcareous grassland. Seek to buffer, extend and connect the areas of priority habitat which are under restoration and appropriate management and aim to increase botanical species-richness as appropriate to the habitat type. Take a habitat mosaic approach to incorporate scrub, orchard and ponds where appropriate. Allow for periodic disturbance to make areas of bare ground suitable for use by invertebrate species or by plant species that are intolerant of competition.	Mapped Measure	Water quality	oil health and protection	CO2 DVV Carbon sequestration	Pollination Services	
UKHab codes for Potential Measure 31: g2~ 18							

Habitats associated with Arable Farmland

Priorities for Habita	Priorities for Habitats associated with Arable Farmland					
Biodiversity Priority 30: Increase the number of sites supporting diverse, well-managed populations of arable wildflowers Biodiversity Priority 31: Increase the abundance and diversity of pollinating insect species, birds and small mammals on farmland						
Potential Measures	that will support delivery of these Priorities					
Potential Measure 32: Enhance existing arable margins and headlands to support the expansion of populations of rare arable wildflower species. Mapped Measure wildflowers Soit health and protection For the expansion of services						
WRLNRS21_PM32						
UKHab codes for Potentia	l Measure 32: c1c9		~ = all further levels and any secondary codes			
Potential Measure 33: Create new arable wildflower sites WRLNRS21_PM33	Create new arable margins and headlands and manage these to provide conditions for rare arable wildflowers to flourish. Locate margins and headlands where these can provide buffering, stepping stones or connectivity between existing arable wildflower sites.	Mapped Measure	Soil health and protection			
UKHab codes for Potentia	l Measure 33: c1c9		~ = all further levels and any secondary codes			
Potential Measure 34: Create new wildlife habitats on cropped farmland WRLNRS21_PM34	Create new conservation headlands, margins, over-winter bird food plots, and areas of permanent or temporary set-aside across farmland, using a diverse grassland species mix to provide year-round foraging, commuting and shelter opportunities for a variety of wildlife, including insects, small mammals and birds. Adopt integrated pest management in place of pesticide and herbicide use. If possible, locate new habitat where it can buffer or connect to existing similar habitats, roadside verge nature reserves, or lowland meadow priority habitat.	Non-Mapped Measure	Soil health and protection			

Local Sites Network

Priorities for Local Sites Network

Biodiversity Priority 32: Increase the number of Local Sites that are in positive conservation management with habitats in good or recovering condition

Potential Measures that will support delivery of these Priorities

Potential Measure 41:	Enhance the habitats and other features for which the Local Wildlife Site, Local	Mapped Measure	
Enhance the biodiversity	Geological Site, Roadside Verge Nature Reserve or Grassland Inventory Site has been		
value of non-statutory	designated (including new sites designated since LNRS publication), by implementing or		
nature conservation	continuing appropriate conservation management.		Water quality Flood risk reduction Soil health and protection Carbon sequestration
<u>sites</u>			[®] ക്രും
			Pollination
WRLNRS21_PM41			Pollination
			services

Biodiversity Net Gain: to determine habitat creation and enhancement activity consistent with this measure refer to the Citation document for the relevant non-statutory site(s). Consistency will be achieved by delivering the Potential Measure(s) associated with the habitats for which the site has been designated. The user comments column within the Statutory Biodiversity Metric Calculation Tool should clearly articulate and justify the decision-making process, referring to the relevant LNRS Potential Measures.

Local Wildlife Sites | Worcestershire Wildlife Trust

Local Geological Sites: H&W Earth Heritage Trust

Roadside Verge Nature Reserves | Worcestershire County Council

Contact Ecology Team | Worcestershire County Council

Potential Measure 42:	Within a 50m buffer zone surrounding all Local Wildlife Sites and Grassland Inventory	Mapped Measure	
Buffer and enhance	Sites (including new sites designated since LNRS publication), seek to create and		
habitat connectivity	enhance corridors or stepping stones of habitat to extend, buffer and connect the		
around and between	priority habitats within the nature conservation site with other adjacent or nearby priority		Water quality Water availability Flood risk reduction Protection Sequestration
non-statutory nature	habitat.		<u>ම</u> ැගා
conservation sites			B C C C C C C C C C C C C C C C C C C C
WRLNRS21_PM42			services

Biodiversity Net Gain: to determine habitat creation and enhancement activity consistent with this measure refer to the Citation document for the relevant non-statutory site(s). Consistency will be achieved by delivering the Potential Measure(s) associated with the habitats for which the site has been designated. The user comments column within the Statutory Biodiversity Metric Calculation Tool should clearly articulate and justify the decision-making process, referring to the relevant LNRS Potential Measures.

Local Wildlife Sites | Worcestershire Wildlife Trust

Contact Ecology Team | Worcestershire County Council

Habitat Connectivity within Strategic Nature Corridors

Priorities for Habitat Connectivity within Strategic Nature Corridors

Biodiversity Priority 33: Increase the number of core sites within the Worcestershire Nature Recovery Network which are being effectively conserved and managed for nature

Biodiversity Priority 34: Reduce fragmentation and increase the functional connectivity between core sites within the Worcestershire Nature Recovery Network

Potential Measures that will support delivery of these Priorities

Potential Measure 23: Create and enhance a habitat mosaic WRLNRS21_PM23	Create and enhance a mosaic of locally appropriate habitats, including scrub, woodland, hedgerows, grassland, orchard, ponds and other wetland features. The composition of the mosaic and location of the habitats should be informed by the best ecological fit modelled by the Worcestershire Habitat Mosaic Nature Recovery Network. New and enhanced habitats should be located so as to a) maximise habitat diversity within the mosaic, b) maximise the expansion, buffering and connectivity that can be delivered for (or between) existing on-site or adjacent priority habitats or core sites (APIBs), and c) to create ecotones between habitats. If this Potential Measure is relevant to a BNG site or BNG Habitat Bank: see Section 3.1 Biodiversity Net Gain in LNRS Statement of Biodiversity Priorities.	Mapped Measure	
	Biodiversity Net Gain in LNRS Statement of Biodiversity Priorities.		

See Section 3.1 of the Worcestershire Local Nature Recovery Strategy for guidance on creating a habitat mosaic for BNG

Potential Measure 41: Enhance the biodiversity value of non-statutory nature conservation sites WRLNRS21_PM41	Enhance the habitats and other features for which the Local Wildlife Site, Local Geological Site, Roadside Verge Nature Reserve or Grassland Inventory Site has been designated (including new sites designated since LNRS publication), by implementing or continuing appropriate conservation management.	Mapped Measure	Water quality Image: Constraint of the services Pollination services Pollination
See page 21 'Local Sites N Potential Measure 42: Buffer and enhance habitat connectivity around and between non-statutory nature conservation sites WRLNRS21_PM42	Within a 50m buffer zone surrounding all Local Wildlife Sites and Grassland Inventory Sites (including new sites designated since LNRS publication), seek to create and enhance corridors or stepping stones of habitat to extend, buffer and connect the priority habitats within the nature conservation site with other adjacent or nearby priority habitat.	Mapped Measure	<image/>

See page 21 'Local Sites Network'

Habitat Connectivity within Strategic Nature Corridors continued...

Habitat Connectivity within Strategic Nature Corridors continued

Priorities for Habitat Connectivity within Strategic Nature Corridors Biodiversity Priority 33: Increase the number of core sites within the Worcestershire Nature Recovery Network which are being effectively conserved and managed for nature Biodiversity Priority 34: Reduce fragmentation and increase the functional connectivity between core sites within the Worcestershire Nature Recovery Network

Potential Measures that will support delivery of these Priorities					
Potential Measure 43: Create wildlife crossings over existing rail lines	Incorporate a wildlife crossing/green bridge element into active travel or all-modes bridges.	Non-Mapped Measure			
WRLNRS21_PM43 Potential Measure 44: Create arboreal links between woodland blocks WRLNRS21_PM44	Create new arboreal (hedgerow and tree) links/crossovers/hop-overs for dormice, birds, butterflies and bats through targeted tree retention and identification of future veteran trees at identified crossing points.	Non-Mapped Measure	Soil health and protection services		

Road Verge Management

Priorities for Road Verge Management

Biodiversity Priority 35: Increase the biodiversity value of road verges across Worcestershire

	and the opport activity of theory in the second sec		
Potential Measure 41: Enhance the biodiversity value of non-statutory nature conservation sites WRLNRS21_PM41	Enhance the habitats and other features for which the Local Wildlife Site, Local Geological Site, Roadside Verge Nature Reserve or Grassland Inventory Site has been designated (including new sites designated since LNRS publication), by implementing or continuing appropriate conservation management.	Mapped Measure	Water quality Image: Constraint of the second s
See page 21 'Local Sites N	letwork'		
Potential Measure 47: Enhance the biodiversity value of all road verges WRLNRS21_PM47	Enhance the biodiversity value of all road verges for pollinators, small mammals and other wildlife by managing in line with best practice guidance, including altering the timing and frequency of cutting and removing arisings. Place signage where appropriate on verges to inform and educate the public. New highway verges and works to existing verges that require turf stripping should ensure no topsoil is reintroduced, so that broadcast wildflower seeds can establish on low nutrient soils. Native, perennial species-rich seed mixes should be used within all road verge planting schemes.	Non-Mapped Measure	Soil health and protection

Artificial Light at Night

Priorities for Artificial Light at Night

Biodiversity Priority 36: Reduce the harm to wildlife caused by artificial light at night

Potential Measure 45: Reduce levels of artificial light at night in the countryside WRLNRS21_PM45	 Artificial lighting at night should be used only where and when needed. Existing dark corridors should be maintained and protected. This can be achieved by: Removing harmful and excess light by replacing cold-blue and white light sources (>3000K CCT) with dimmer, more controlled and warmer-coloured LED lighting (<2700K CCT). Controlling light spill to avoid illuminating trees, hedgerows, waterbodies and watercourses. 	Mapped Measure	Air quality Image: Corport Sequestration		
	watercourses.Strengthening lines of linear vegetation such as street trees and hedgerows.				
UKHab codes for Potential Measure 45: w1~, h2a, 200, 201, 202 ~ = all further levels and any secondary codes					
Detential Measure 4C	Noture, consistive lighting and lighting achomese should be used within the built	Mannad Masaura			

Potential Measure 46:	Nature-sensitive lighting and lighting schemes should be used within the built	Mapped Measure			
Reduce the impacts of	environment. Where new lighting is required or upgrades, modernisation or retrofits to				
artificial light at night on	lighting are planned:				
wildlife within the built	Use dimmer, more controlled and warmer-coloured LED lighting (<2700K CCT) in		Carbon Air quality sequestration Sequestration		
environment	place of cold-blue and white light sources (>3000K CCT).				
	Control light spill to avoid illuminating trees, hedgerows, waterbodies and				
WRLNRS21_PM46	watercourses.				
UKHab codes for Potential Measure 46: w1~, h2a, 200, 201, 202 ~ = all further levels and any secondary codes					

Earth Heritage theme

Soils

Priorities for Soils

Biodiversity Priority 37: Halt the loss of soils from agricultural land

Biodiversity Priority 38: Improve organic matter, biodiversity, water retention capacity and carbon content within agricultural soils

Potential Measure 35: Improve soil health WRLNRS21_PM35	Improve the health and resilience of agricultural soils by adopting land management techniques that will support a reduction in soil erosion and an increase in soil organic matter, biodiversity, carbon content and water retention. Share knowledge through research or demonstration.	Non-Mapped Measure	Air quality Image: Carbon sequences Carbon sequences Polimation services Dilimation services Image: Carbon services
Potential Measure 36: Protect soils from erosion WRLNRS21_PM36	Protect soils from erosion by removing cultivation in steeper areas, implementing no- or low-till arable management, planting and restoring hedgerows, and creating in-field and field edge grass buffer strips.	Non-Mapped Measure	<image/>

Earth Heritage theme

Rock and Scree Habitats

Priorities for Rock and Scree Habitats

Biodiversity Priority 39: Increase the number of well managed geological exposures to provide early successional habitats important for a range of plant and invertebrate assemblages and nesting birds, as well as research and educational opportunities

<u>0</u> 1 <u>1</u>	Potential Measure 37: Create and enhance hiche biological habitats within geological exposures	Create new or enhance existing permanent geological exposures and maintain these to provide niches for unique biological habitats to thrive and to provide research and educational opportunities.	Non-Mapped Measure	Pollination services
N	WRLNRS21_PM37			

Green Spaces in the Built Environment

Priorities for Green Spaces in the Built Environment

Biodiversity Priority 40: Cities, towns and villages to be places richer in nature with a greater extent of connected, accessible greenspace within them

Biodiversity Priority 41: All built development to maximise the provision of wildlife-friendly features and corridors within their design

Potential Measures that will support delivery of these Priorities

Potential Measure 38: Increase the extent, connectedness and quality of wildlife habitats within the built environment WRLNRS21_PM38	 All built environments should allow wildlife to safely move through them and thrive within them. Decisions on the layout and design of built-up areas, at all scales, should seek to make a positive contribution to providing more, bigger and better-connected areas of natural habitats. As a minimum, decision-makers should seek to: Increase urban tree canopy cover, aiming for a minimum of 20%, through, for example, planting street trees, trees in green spaces, hedgerows, community orchards, or small woodland blocks, strips or corridors. Make individual homes, gardens and boundary features more wildlife-friendly through, for example, the installation of hedgehog highways, universal swift nest bricks and bat bricks. Create more wildlife ponds within public greenspaces and gardens. Provide green active travel corridors that function as linear wildlife habitats as well as cycleways and footways. Design the layout of new gardens and greenspaces so that they contribute to a cohesive network of green corridors within the built environment. Link urban green spaces to the local nature network in the surrounding countryside via green, wildlife-friendly corridors. 	Mapped Measure	
UKHab codes for Potential	l Measure 38: u1f 80, u~ 86, 87, 88, 89, u~ 841, 842, 843, 848, 849, 850, 830, 27		\sim = all further levels and any secondary codes

Potential Measure 39: Enhance existing community green spaces for wildlife by creating and managing areas of natural habitat appropriate to the location, for example mini-meadows, tussocky grassland, ponds, fruit trees and hedgerows and providing features such as nest boxes and hibernacula for birds, bats, hedgehogs and insects. Encourage the adoption of wildlife-friendly food production methods within growing spaces e.g. the use of natural pest control. Mapped Measure

UKHab codes for Potential Measure 39: r1~, g1~, g2~, g3a~, g3b~, g3c~, w1~, h2a, h3

Potential Measure 40: Install gully-pot escape ladders	Include gully-pot escape ladders within the design of drainage systems for all new roads and retrofit ladders to existing gully pots within landscapes mapped by Potential Measure 7.	Non-Mapped Measure				
WRLNRS21_PM40						

Green Spaces in the Built Environment continued...

~ = all further levels and any secondary codes

Green Spaces in the Built Environment continued

Priorities for Green	Priorities for Green Spaces in the Built Environment				
Biodiversity Priority 40: Cities, towns and villages to be places richer in nature with a greater extent of connected, accessible greenspace within them Biodiversity Priority 41: All built development to maximise the provision of wildlife-friendly features and corridors within their design					
Potential Measures	that will support delivery of these Priorities				
Potential Measure 46: Reduce the impacts of artificial light at night on wildlife within the built environment WRLNRS21_PM46	 Nature-sensitive lighting and lighting schemes should be used within the built environment. Where new lighting is required or upgrades, modernisation or retrofits to lighting are planned: Use dimmer, more controlled and warmer-coloured LED lighting (<2700K CCT) in place of cold-blue and white light sources (>3000K CCT). Control light spill to avoid illuminating trees, hedgerows, waterbodies and watercourses. 	Mapped Measure	Air quality	Image: Services Image: Service s	
UKHab codes for Potential Measure 46: w1~, h2a, 200, 201, 202 ~ = all further levels and any secondary codes					

Prioritisation of Nature Recovery

Priorities for Prioritisation of Nature Recovery

Biodiversity Priority 42: The delivery of nature recovery is integral to both the strategic planning and design of new development and the development management process

Potential Measures that will support delivery of these Priorities

Potential Measure 41:	Enhance the habitats and other features for which the Local Wildlife Site, Local	Mapped Measure	
Enhance the biodiversity	Geological Site, Roadside Verge Nature Reserve or Grassland Inventory Site has been		
value of non-statutory	designated (including new sites designated since LNRS publication), by implementing or		
nature conservation	continuing appropriate conservation management.		Water quality Flood risk reduction Soil health and protection Carbon sequestration
<u>sites</u>			<u> </u>
			Image: Constraint of the second se
WRLNRS21_PM41			
			services

See page 21 'Local Sites Network'

Potential Measure 42: Buffer and enhance habitat connectivity around and between non-statutory nature	Within a 50m buffer zone surrounding all Local Wildlife Sites and Grassland Inventory Sites (including new sites designated since LNRS publication), seek to create and enhance corridors or stepping stones of habitat to extend, buffer and connect the priority habitats within the nature conservation site with other adjacent or nearby priority habitat.	Mapped Measure	Water quality Water availability Image: Control of the state of the
conservation sites WRLNRS21_PM42			Pollination services

See page 21 'Local Sites Network'

Potential Measure 45: Reduce levels of artificial light at night in the countryside	 Artificial lighting at night should be used only where and when needed. Existing dark corridors should be maintained and protected. This can be achieved by: Removing harmful and excess light by replacing cold-blue and white light sources (>3000K CCT) with dimmer, more controlled and warmer-coloured LED lighting (<2700K CCT). 	Mapped Measure	Air quality	Pollination services	Climate adaptation	h and being
WRLNRS21_PM45	 Controlling light spill to avoid illuminating trees, hedgerows, waterbodies and watercourses. Strengthening lines of linear vegetation such as street trees and hedgerows. 					

UKHab codes for Potential Measure 45: w1~, h2a, 200, 201, 202

Potential Measure 46: Reduce the impacts of artificial light at night on wildlife within the built environmentNature-sensitive lighting and lighting schemes should be used within the built environment. Where new lighting is required or upgrades, modernisation or retrofits to lighting are planned:Wildlife within the built environment• Use dimmer, more controlled and warmer-coloured LED lighting (<2700K CCT) in place of cold-blue and white light sources (>3000K CCT).WRLNRS21_PM46• Control light spill to avoid illuminating trees, hedgerows, waterbodies and watercourses.	Mapped Measure	Air quality Image: Carbon sequestration	Health and wellbeing
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UKHab codes for Potential Measure 46: w1~, h2a, 200, 201, 202

~ = all further levels and any secondary codes

~ = all further levels and any secondary codes

Prioritisation of Nature Recovery continued

Priorities for Prioritisation of Nature Recovery

Biodiversity Priority 42: The delivery of nature recovery is integral to both the strategic planning and design of new development and the development management process

Potential Measure 48:	Energy infrastructure developments should contribute to restoring and enhancing local	Non-Mapped	
Maximise the	ecological networks. Actions could include:	Measure	
biodiversity value of	Creation/retention of hedgerows, ditches, stone walls, rough grassland and scrub		
energy infrastructure	within boundary margins.		Soil health and Carbon Pollination protection sequestration services
development sites	Creation of pollen and nectar strips and the use of climbing plants on security		
	fencing.		
WRLNRS21_PM48	• Leaving a 20-30mm gap between the base of fences and the ground.		
	Creating areas of wildflower meadow and tussocky grassland.		
	• Using a wildflower-friendly grazing regime to manage grassland beneath/between PV		
	panels.		
	Installing artificial structures such as nest boxes, hibernacula and log piles.		

Water Vole	Priority: Recovery of Water Vole population
Potential Measure 49: WRLNRS21_SPECIES_PM49 Mink control / eradication WRLNRS21_SPECIES_PM49	Mapped Measure

Adder	Priority: Expand the range of the two core Adder populations
Potential Measure 50: WRLNRS21_SPECIES_PM50	Mapped Measure
 Maintain and expand range via natural colonisation and habitat creation/connectivity/restoration that includes a mosaic of scrub cover, heathland, hibernation areas (including artificial hibernacula) and wildlife corridors (hedges, raised banks, set aside, buffer strips) Ensure open areas maintained within broadleaved woodland (ideally away from footpaths) Restore damper areas, e.g. wet flushes and ephemeral ponds, and maintain humid environments as alternative habitat areas to increasingly drier habitats (due to climate change) Restore areas of PAWS back to broadleaved woodland Sympathetic grazing regimes (stocking density and timings) Manage predator threats (pheasants, dogs and cats) and recreational disturbance, including machinery and vehicles, where adders are present (with buffer) Reducing risk of fires Genetic rescue of populations if appropriate 	

Dormouse		Priority: Habitat creation and enhancement for Dormouse Priority: Carry out Dormouse reintroductions
Potential Measure 51:	WRLNRS21_SPECIES_PM51	Mapped Measure
 Landscape scale habitat restoration/enhancement and connectivity Retain (veteran) trees with cracks/crevices and deadwood Rotational coppicing/removal of woodland to maintain a well-lit understorey Ensure arboreal connections across woodland rides every 50-100m and erect Do not clear understory in winter and do not clear fell in dormouse locations 	t dormouse boxes and/or tubes	
Potential Measure 52:	WRLNRS21_SPECIES_PM52	Non-Mapped Measure
Reintroduction to suitable release sites in northeast Worcestershire.		30

07

Pied Flycatcher		Priority: Increase nesting habitat and food sources for Pied Flycatcher
Potential Measure 53:	WRLNRS21_SPECIES_PM53	Mapped Measure
 • Landscape scale woodland (especially oak) habitat regeneration, expansion and restoration • Provision of nestboxes in suitable woodland (install in sets of 3 within a 10m radius to mitigate against nestbox competition from Tit species) • Manage habitat to increase chick food supply (predominantly caterpillars) • Manage understorey to keep below 1.5m (to improve visibility of displaying males) 		

Hedgehog		Priority: Increase Hedgehog population
Potential Measure 54:	WRLNRS21_SPECIES_PM54	Non-Mapped Measure
 In urban areas install hedgehog highways (in fences and walls) and hedgeh Increased planting of diverse native plant species (structure and diversity) is private gardens Create permanent leave stores and a mosaic of grass heights and bare soil Working with land managers to create wide, grassy field margins (increase hedgehog friendly habitat Increasing habitat complexity - more and denser hedgerows - also increase friendly farms Reduction in use of rodenticides, pesticides, molluscicides and insecticide Integrated Pest Management 	n public greenspaces and in prey availability) and other es connectivity between wildlife	

Nightingale		Priority: Habitat creation and enhancement for Nightingale
Potential Measure 55:	WRLNRS21_SPECIES_PM55	Mapped Measure
 Coppicing and deer management to promote heterogeneous the area of shrub at vigorous thicket stage, typically a 10–15- blocks to create a coarse mosaic of larger patches. Focus ef existing sites (as males migrating individuals attracted to sig Monitor grazing pressure and take preventative measures (i.e. Re-wet woodlands with thicket to improve invertebrate food 	year rotational cutting, using reasonable sized forts on creating new habitats adjacent to ning males). e. rabbit/deer fencing) if it becomes too high	

Brown Hairstreak		Priority: Habitat creation and enhancement for Brown Hairstreak
Potential Measure 56:	WRLNRS21_SPECIES_PM56	Non-Mapped Measure
Potential Measure 56: WRLNRS21_SPECIES_PM56 N • Retain and cut all hedges on a rotation so that each stretch of hedge is cut every other year, or preferably every 3-4 years. • Create new habitat by planting hedges using a good proportion of Blackthorn. Where possible, allow small suckers to grow into field margins • Increase the connectivity of suitable habitats by creating and extending stands, trees, and hedgerows containing blackthorn which connect existing areas. Create wide rides, glades, and scrub edges in and around woodlands. N		

White-clawed Crayfish		Priority: Recovery of White-clawed Crayfish population
Potential Measure 57:	WRLNRS21_SPECIES_PM57	Mapped Measure
 Increased biosecurity If successful methodology created, removal of signal crayfish 		

Toad	Priority: Increase the numbers and distribution of Toad	
Potential Measure 58: WRLNRS21_SPECIES_PM58	Non-Mapped Measure	
 Deliver specific habitat interventions to support safe crossing of roads by migrating toads such as adjustments to timing of verge cutting and installation of natural barriers to direct toads to safer crossing points Support the operation of amphibian road-crossing patrols where these are required including signage 		

Turtle Dove	Priority: Recovery of Turtle Dove population
Potential Measure 64: WRLNRS21_SPECIES_PM64	Mapped Measure
 Provide uncropped margins/plots, rotational set-aside, conservation headlands and buffer strips Reduce use of pesticides and herbicides, i.e. increased uptake of Integrated Pest Management. Provide suitable feeding habitat, e.g. plant a bespoke seed mix, adjacent to nesting habitat and water body Provide scrub or dense hedgerow at a minimum, 3m tall and 4m wide. Cut on a long-term (15+ year) rotation. Encourage and keep native thorny species and climbing plants Restore/create semi-natural grassland with bare ground Provide good quality, buffered freshwater sources, e.g. ponds and streams. Supply supplementary food (see Agri-environment Species Supplement) Implement the national Turtle Dove action plan Re-establish foraging and nesting habitat on historic Turtle Dove sites 	

Kent	ish Glory		Priority: Reintroduction of Kentish Glory moth to Wyre Forest
Potent	tial Measure 67:	WRLNRS21_SPECIES_PM67	Mapped Measure
	ational coppicing and strategic thinning/clear-felling of birch coupes (main otive breeding and reintroduction to suitable release sites	ntain tree height below 3m)	

True Service Tree	I	Priority: Increase the numbers and distribution of True Service Tree
Potential Measure 68: WRLNRS21_SPECIES_PN	68	Mapped Measure
 Propagate trees from local seeds Reintroduce to targeted locations 		

Black Poplar		Priority: Increase the numbers and distribution of Black Poplar
Potential Measure 69:	WRLNRS21_SPECIES_PM69	Non-Mapped Measure
 Reintroduce male and female trees in pairs in targeted location Protect existing Black Poplars, particularly ancient/veteran spec Protect planted Black Poplars from deer, livestock, garden mach Maintain some male and female trees as maiden trees (i.e. do not be the second s	cimens hinery and herbicides	

Six-spotted Pot Beetle		Priority: Increase the numbers and distribution of Six-spotted Pot Beetle
Potential Measure 70:	WRLNRS21_SPECIES_PM70	Mapped Measure
 Regular rotational coppicing of hazel, aspen, birch and crack willow Connect stands of hazel, aspen, birch and crack willow where appropriate 		

Longhorn Lime	Beetle		Priority: Increase the numbers and distribution of Longhorn Lime Beetle
Potential Measure 7	1:	WRLNRS21_SPECIES_PM71	Mapped Measure
	coppicing of small-leaved lime s of small-leaved lime		

Poplar Leaf-rolling Weevil		Priority: Increase the numbers and distribution of Poplar Leaf-rolling Weevil		
Poten	tial Measure 72:	WRLNRS21_SPECIES_PM72	Mapped Measure	
•	Successional planting of aspen (<i>Populus tremula</i>) in woodland at known areas Protect emerging aspen against predation (deer) and trampling Cut regenerating aspen on a 4-year rotation Increase/appropriately manage woodland glades Captive breeding and reintroduction if appropriate	n population sites and expansion		
	oup tive breeding and reintroduction if appropriate		36	

Но	use Martin and Swift	Priority: Increase nesting habitat and food sources for House Martin and Swift
Pote	witial Measure 59: WRLNRS2	S21_SPECIES_PM59 Mapped Measure
• • •	Do not disturb nests or limit/block nest sites Install universal swift nest bricks and play swift calls during breeding season Implement sustainable farming practices to increase invertebrate (prey) populations Enhance/create more green spaces in urban areas to increase invertebrate populatio	

Woodland Bats		Priority: Habitat creation and enhancement for Barbastelle and Bechstein's bats
Potential Measure 60:	WRLNRS21_SPECIES_PM60	Non-Mapped Measure
 These bat species require multiple different habitat-based and enwithin the same location to support feeding and breeding success Restoration, planting and gap-planting of hedgerows (i.e. tall anbroadleaved and ancient woodlands Creation and maintenance of standing deadwood within broad veteranisation of trees) Improved management of broadleaved woodland and establish around woodland ponds etc.) used by these species Restoration and improved management of riparian habitat Maintain and improve quality and quantity of wetland habitats Dark skies initiative/create and maintain ecologically functioning Arable: promote organic/regenerative farming, field margin habitat, and organic/regen farming particularly within 3km of maternity roos 	s: nd bushy), particularly those linking leaved woodlands (and potential n dense understorey in woodland (especially ng dark corridors itat for moths and beetles, reduction d reduction in pesticide use, promote	

Cave and Building Bats		Priority: Habitat creation and enhancement for Greater Horseshoe, Lesser Horseshoe, Brandt's and Serotine Bats
Potential Measure 61:	WRLNRS21_SPECIES_PM61	Non-Mapped Measure
 These bat species require multiple different habitat-based and environ within the same location to support feeding and breeding success: Restoration, planting and gap-planting of hedgerows (i.e. tall and be broadleaved woodland used by these species Improved management of broadleaved woodland and establish dearound woodland ponds etc.) used by these species Dark skies initiative/create and maintain ecologically functioning data arable: reduction in/cessation of anti-parasitic treatments in grazin particularly within 3km of maternity roosts, promote organic/regenergy 	ushy), particularly those linking nse understorey in woodland (especially ark corridors g animals, and reduction in pesticide use	

Migratory Fish		Priority: Remove barriers to migratory fish passage [Eel, Sea Lamprey, River Lamprey, Brown Trout, Atlantic Salmon, Allis Shad, Twaite Shad, Barbel]
Potential Measure 62:	WRLNRS21_SPECIES_PM62	Mapped Measure
Remove or modify in-channel barriers to allow passage		

Watiand and Wadar Kirds		Priority: Create and enhance habitat for wetland and wader birds [Curlew, Redshank, Lapwing]
Potential Measure 63:	WRLNRS21_SPECIES_PM63	Non-Mapped Measure
 Create and enhance habitat (including adjacent fields) to support birds. Pasture and wetland features should include areas of floor water, and rushy damp pasture. Field margins, bare ground and st fields or rotations. Locations away from Public Rights of Way or permissive access st and/or minimise recreational disturbance at sites (including dogs) Legal control/reduction of predator disturbance where possible at Sensitive management of grassland and pasture must include la period of several months to minimise accidental nest destruction 	dplain meadow, scrapes and ditches, open stubbles should be available within arable should be prioritised for habitat provision s) and appropriate te hay cuts or strip-cutting over an extended	

Farmland Birds	Priority: Recovery of Farmland bird populations [Corn Bunting, Grey Partridge, Yellow Wagtail]
Potential Measure 65: WRLNRS21_SPECIES_PM65	Non-Mapped Measure
 Provide uncropped margins/plots, rotational set-aside, conservation headlands, buffer strips and beetle banks Reduce use of pesticides and herbicides, i.e. increased uptake of Integrated Pest Management. Avoid use of broad-spectrum insecticides after 15th March and avoid spraying outer 6m of cereal fields. Restore/create semi-natural grassland Provide suitable foraging and nesting habitats, i.e. manage hedgerows on a 3-year rotation Plant wild bird seed mixes/cereal-rich wild bird cover crops Provide spring sown crops in nesting arable fields to help improve productivity by extending the breeding season, or a mosaic of autumn sown crops for later broods (Corn Bunting) Supply supplementary food Provide good quality, buffered freshwater sources, e.g. ponds, streams, wet ditches. Skylark plots within winter cereals. Delay cutting of silage and hay crops 	

Fritillary Butterflies		Priority: Recovery of Fritillary butterfly populations [Pearl-bordered Fritillary, Small Pearl-bordered Fritillary]
Potential Measure 66:	WRLNRS21_SPECIES_PM66	Mapped Measure
 Open habitat measures: Specific bracken management to establish optimum density of bracken and dog violet. Use of machinery e.g. robo-cutter and/or livestock at suitable stocking density Breeding programme and reintroduction to suitable release sites 		
 Woodland measures: Rotational coppicing PAWS restoration Rotational management of open areas (glades, rides, etc.) which are not g habitats Create/maintain woodland flushes in a mix of shaded and unshaded areas 		

Rare Plants	Priority: Increase the numbers and distribution of rare plants [Tower Mustard, Deptford Pink, Sand Catchfly, Round-leaved Wintergreen, Round-leaved Sundew]
Potential Measure 73: WRLNRS21_SPECIES_PM73	Non-Mapped Measure
 Collect seed, propagate and reintroduce to targeted locations Appropriate habitat management where present/reintroduced (e.g. scrub clearance, periodic disturbance) 	

Helleborines	Priority: Increase the numbers and distribution of helleborine species [Narrow-leaved Helleborine, White Helleborine]
Potential Measure 74: WRLNRS21	_SPECIES_PM74 Non-Mapped Measure
 Habitat management to maintain correct light levels (dappled shade). This includes mana vegetation to prevent overshading Create adjacent areas of exposed soil for seeds to settle on and germinate in 	ging understorey

We	t Woodland Plants		Priority: Increase the numbers and distribution of rare wet woodland species [Elongated Sedge, Alder Bolete, <i>Pholiota lucifera</i> (Scalycap fungus), <i>Laccaria purpureobadia</i> (fungus)]
Pote	ntial Measure 75:	WRLNRS21_SPECIES_PM75	Non-Mapped Measure
•	Replant alder to reconnect habitat Long-term rotational coppicing of alder and willow Retain dead wood (especially alder)		