STRINE INTERNAL DRAINAGE BOARD BIODIVERSITY ACTION PLAN 14/09/2020

This Biodiversity Action Plan has been prepared by the Strine Internal Drainage Board in accordance with the commitment in the Implementation Plan of the DEFRA Internal Drainage Board Review for IDBs to produce their own Biodiversity Action Plans by April, 2010.

It also demonstrates the Board's commitment to fulfilling its duty as a public body under the Natural Environment and Rural Communities Act 2006 to conserve biodiversity.

Many of the Board's activities have benefits for biodiversity, not least its water level management and ditch maintenance work. It is hoped that this Biodiversity Action Plan will help the Board to maximise the biodiversity benefits from its activities and demonstrate its contribution to the Government's UK Biodiversity Action Plan targets.

The Board has adopted the Biodiversity Action Plan as one of its policies and is committed to its implementation. It will review the plan periodically and update it as appropriate.

Bruce Udale (N.B. wet signature held on file)

Date 14/09/2020

Bruce Udale Chairman of the Board

This Biodiversity Action Plan is a public statement by the Board of its biodiversity objectives and the methods by which it intends to achieve them.

We would welcome appropriate involvement in the delivery of the Plan from interested organisations, companies, and individuals.

You can contact us about this Biodiversity Action Plan by writing to the following address:

Strine Internal Drainage Board

Hall Farm Ruyton XI Towns Shrewsbury Shropshire SY4 1LA

or by email: katyjmayne@gmail.com

Further information is available on the Board's website:

http://www.telford.gov.uk/info/20423/land stability flooding and drainage/672/strine internal drainage board sidb

CONTENTS

1	1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8	Introduction
2	2.1 2.2 2.3 2.4 2.5 2.6	THE IDB BAP PROCESS———————————————————————————————————
3	3.1 3.2 3.3 3.4 3.5	THE BIODIVERSITY AUDIT
4	4.1 4.2 4.3 4.4 4.5	NATURE CONSERVATION SITES The Drainage District Geology Landscape Statutory Nature Conservation Sites Non-statutory Local Sites 10
5	5.1 5.2	HABITAT AUDIT
6	6.1 6.2	SPECIES AUDIT
7	7.1	HABITAT AND SPECIES ACTION PLANS
8		HABITAT ACTION PLANS23
9		SPECIES ACTION PLANS26
10		PROCEDURAL ACTION PLAN28
11	11.1	IMPLEMENTATION29 Implementation
12	12.1	MONITORING ERROR! BOOKMARK NOT DEFINED Monitoring
13	13.1	REVIEWING AND REPORTING PROGRESS

1 IDB BIODIVERSITY - AN INTRODUCTION

1.1 Introduction

The IDB has conducted a biodiversity audit of its district and identified those habitats and species that would benefit from particular management or actions by the IDB. Using this information, which is presented in later sections, the IDB's Biodiversity Action Plan has been developed. The Plan identifies objectives for the conservation and enhancement of biodiversity within the drainage district and goes on to describe targets and actions that will hopefully deliver these objectives. The intention is to integrate, as appropriate, biodiversity into the Board's activities, such as annual maintenance programmes and capital works projects.

The action plan will help to safeguard the biodiversity of the drainage district now and for future generations. In particular, it is hoped that implementing the plan will contribute to the achievement of local and national targets for UK BAP priority species and habitats. Species and habitats which are not listed in the UK BAP but may be locally significant for a variety of reasons have also been considered.

The Plan is an evolving document that will be reviewed and updated on a regular basis. It covers the entire drainage district of the IDB, as shown in Figure 1.

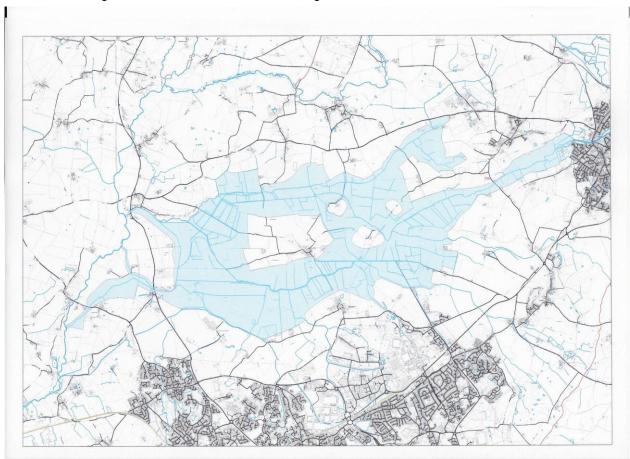


Figure 1. Internal Drainage Board area.

1.2 What is Biodiversity?

The Convention on Biodiversity agreed at the Earth Summit in Rio de Janeiro in 1992 defined biodiversity as:

"The variability among living organisms from all sources, including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems."

Biodiversity can be defined simply as "the variety of life" and encompasses the whole spectrum of living organisms, including plants, birds, mammals, and insects. It includes both common and rare species, as well as the genetic diversity within species. Biodiversity also refers to the habitats and ecosystems that support these species.

1.3 The Importance of Conserving Biodiversity

Biodiversity is a vital resource and it is essential to acknowledge its importance to our lives along with the range of benefits that it produces:

- Supply of ecosystem services water, nutrients, climate change mitigation, pollination
- Life resources food, medicine, energy and raw materials
- Improved health and well-being
- Landscape and cultural distinctiveness
- Direct economic benefits from biodiversity resources and 'added value' through local economic activity and tourism
- Educational, recreational and amenity resources

1.4 The Biodiversity Action Planning Framework

This IDB Biodiversity Action Plan is part of a much larger biodiversity framework that encompasses international, national and local levels of biodiversity action planning and conservation.

1.5 Biodiversity - The International Context

The international commitment to halt the worldwide loss of habitats and species and their genetic resources was agreed in 1992 at United Nations Conference on the Environment and Development, commonly know as the Rio Earth Summit. Over 150 countries, including the United Kingdom, signed the Convention on Biological Diversity, pledging to contribute to the conservation of biodiversity at the global level. These states made a commitment to draw up national strategies to address the losses to global biodiversity and to resolve how economic development could go hand in hand with the maintenance of biodiversity.

The Rio Convention includes a global commitment to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level (www.biodiv.org/convention/default.html). The 2002 World Summit in Johannesburg on Sustainable Development subsequently endorsed this target.

1.6 Biodiversity - The National Context

The UK Biodiversity Action Plan (UK BAP) is the UK commitment to Article 6A of the Rio Convention on Biological Diversity. It describes the UK's priority species and habitats, and seeks to benefit 65 priority habitats and 1149 species in total. It identifies other key areas for action such as the building of partnerships for conserving biodiversity and gathering vital biodiversity data.

In England, *Working with the Grain of Nature* sets out the Government's strategy for conserving and enhancing biological diversity, and establishes programmes of action for integrating biodiversity into policy and planning for key sectors, together with appropriate targets and indicators. The Strategy has a Water and Wetlands Working Group and an associated programme of action that includes:

Integrating biodiversity into whole-catchment management.

• Achieving net gain in water and wetland BAP priority habitats through Water Level Management Plans, Catchment Flood Management Plans, and sustainable flood management approaches.

1.7 Local Biodiversity Action Plans

For the UK Biodiversity Action Plan to be implemented successfully it requires some means of ensuring that the national strategy is translated into effective action at the local level. The UK targets for the management, enhancement, restoration, and creation of habitats and species populations have therefore been translated into targets in Local Biodiversity Action Plans (LBAPs), which tend to operate at the county level.

1.8 Internal Drainage Boards and Biodiversity

The Natural Environment and Rural Communities Act 2006 places a duty on IDBs to conserve biodiversity. As a public body, every IDB must have regard in exercising its functions, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.

The Act states that conserving biodiversity includes restoring or enhancing a population or habitat. In so doing, an IDB should have regard to the list published by the Secretary of State of living organisms and types of habitat that are of principal importance for the purpose of conserving biodiversity. In effect, this list is comprises the Biodiversity Action Plan priority species and habitats for England.

In 2007, the Government's IDB Review Implementation Plan established a commitment that IDBs should produce their own Biodiversity Action Plans.

This IDB Biodiversity Action Plan has been produced to help fulfil these requirements and seeks to set out targets and actions that complement the UK Biodiversity Action Plan and Local Biodiversity Action Plans.

1.9 The Aims of the IDB Biodiversity Action Plan

The aims of this IDB BAP are:

- To ensure that habitat and species targets from the UK Biodiversity Action Plan and the local LBAP are translated into effective action within the drainage district.
- To identify targets for other habitats and species of local importance within the drainage district.
- To develop effective local partnerships to ensure that programs for biodiversity conservation are maintained in the long term.
- To raise awareness within the IDB and locally of the need for biodiversity conservation, and to provide guidance to landowners, occupiers and their representatives on biodiversity and inland water management.
- To ensure that opportunities for conservation and enhancement of biodiversity are fully considered throughout the IDB's operations, and
- To monitor and report on progress in biodiversity conservation.

2 THE IDB BAP PROCESS

2.1 The Biodiversity Audit

To produce this IDB Biodiversity Action Plan, information on the habitats and species present in the catchment was first obtained. This "Biodiversity Audit" involved the collation of existing data held by the IDB and by other biodiversity partners.

2.2 Evaluating and Prioritising Habitats and Species

The Biodiversity Audit identified those priority habitats and species in the UK Biodiversity Action Plan and the Local Biodiversity Action Plan that can be found in the drainage district. Additional non-BAP habitats and species deemed to be important within the drainage district were also identified.

Further habitats and species, together with additional targets and actions, may be added in the future, as knowledge is improved and delivery of the IDB BAP is reviewed.

A range of criteria was then used to select those species and habitats that are of particular importance to the IDB – that is to say, those habitats and species that could benefit from IDB actions. The criteria used included their national and local status, the opportunities for effective IDB action and the resources available.

2.3 Setting Objectives, Targets and Indicators

For each habitat and species identified as being important to the IDB, conservation objectives and targets have been drawn up and set out in the Plan. The objectives express the IDB's broad aims for benefiting a particular habitat or species. The related targets have been set to focus IDB programmes of action and to identify outcomes that can be monitored to measure achievement. For each target an indicator has been set – a measurable feature of the target that, when monitored over time, allows delivery to be assessed.

In order for this BAP to be as effective as possible the targets and actions have been devised to be SMART (Specific, Measurable, Achievable, Relevant and Time-limited). The targets are ambitious, but are also considered to be proportionate and practicable given the resources available.

Procedural targets and actions have also been considered. These are targets that the Board will use to measure the way in which it considers and incorporates biodiversity across the whole range of its operations. These may involve changes to administrative, management and operating procedures.

2.4 Implementation

Once targets have been set for habitats and species, it is important that the actions to deliver the Biodiversity Action Plan are described. The Plan sets out how the Board intends to implement the actions in the plan, often in partnership with other organisations or individuals.

2.5 Monitoring

Achievement of the Plan targets will be measured by a programme of monitoring which the Board will undertake, in some instances with assistance from its partners, and the methods to be used are described in the Plan.

2.6 Reporting and Reviewing Progress

It is important to review the implementation of the BAP, assess changes in the status of habitats and species and the overall feasibility of objectives and targets. In addition, it is vital that the successful achievement of targets is recorded and the gains for biodiversity registered in the public domain.

The Plan sets out the methods the IDB will be using to review the delivery of targets and to communicate progress to partner organisations and the public.

3 THE BIODIVERSITY AUDIT

3.1 Introduction

The following Sections 4, 5 and 6 summarise the results of the Biodiversity Audit, undertaken in 2008. Section 4 provides information about the drainage district and a list of the nature conservation sites that occur within or bordering its boundaries. Sections 5 and 6 list respectively the habitats and species occurring within the district that are of potential importance to the IDB.

3.2 Local Biodiversity Action Plans

The following Local Biodiversity Action Plan cover the IDB's drainage district:

Information on LBAPs can be found at: www.ukbap.org.uk/GenPageText.aspx?id=57 or on BARS at: www.ukbap-reporting.org.uk/plans/lbap.asp

3.3 IDB Biodiversity Audit Boundary

The Biodiversity Audit covers the entire district of the IDB. Where data has been obtained that shows a record of a species in a 1km square or 10km square which the district wholly or partially covers, this has been included in the area of the audit.

3.4 Sources of Data - Habitats

Information on habitats of relevance occurring within the drainage district was obtained from the following sources:

- www.magic.gov.uk
- Local knowledge

3.5 Sources of Data - Species

Information on species of relevance occurring within the drainage district was obtained from the following sources:

Provide brief reference to the sources of species information. Possible sources of data include:

- www.magic.gov.uk
- NBM atlas https://nbnatlas.org/
- Local knowledge

4 NATURE CONSERVATION SITES

4.1 The Drainage District

The drainage district covers an area of 2092ha and contains 28.5km of IDB-maintained watercourses. It is located north of Telford and west of Newport. The district receives water from urban areas via various channels

4.2 Geology

The underlying bedrock geology is almost entirely formed of red and brown Triassic sandstones, silts and muds, from the influx of a major river system from the south. Soils are variable ranging from sandy and clay loams to peat deposits in the central areas of the district.

4.3 Landscape

4.3.1 Landscape Designations

There are no landscape designations within the Strine IDB area.

4.3.2 Landscape Character

Natural England has divided the whole of England into a number of Joint Character Areas (JCA) based on characteristic landforms, wildlife and land use. They are not designations and are not confined by traditional administrative boundaries. For each JCA, Natural England has prepared a profile that characterises the wildlife and natural features, identifies the influences that act upon those features and sets objectives for nature conservation.

The Strine IDB lies in the Shropshire, Cheshire and Staffordshire Plain area. The region is characterised by gently undulating plain with strong field boundaries with hedgerows, mature trees, coppices, wet woodlands, ponds and flood plain grazing marsh. See link below for further details: -

http://publications.naturalengland.org.uk/publication/6076647514046464?category=587130

4.3.3 Sites and Monuments Records

Wappenshall Canal Bridge & associated buildings on the Shropshire Union Canal: -

https://www.heritagegateway.org.uk/Gateway/Results Single.aspx?uid=MSA818&resourceID=1015 (Outside area but in close proximity) – earthworks at Wall Farm:

https://magic.defra.gov.uk/Metadata_for_magic/rsm/34907.pdf

4.3.4 Tree Preservation Orders

Tree preservation orders exist on a number of trees within the drainage district. More information of these can be found at: -

http://maps.telford.gov.uk/LocalViewExternal/Sites/planweb/#

4.4 Statutory Nature Conservation Sites

4.4.1 International Sites

The following internationally-designated conservation sites are found within the district:

Table 1. International Designations

Site name	Designation	Features Relevant to IDB

4.4.2 National Sites

The following nationally-designated conservation sites are found within the district:

Table 2. National Designations

Site name	Designation	Features Relevant to IDB
Newport Canal	SSSI	Water feature upstream of IDB activity: - https://designatedsites.naturalengland.org.uk/UnitDetail.aspx?UnitId=1013931

4.4.3 Local Nature Reserves

The following Local Nature Reserves, which are designated by local authorities under Section 21 of the National Parks and Access to the Countryside Act 1949, are found within the district:

Table 3. Local Designations

Site name	Designation	Features Relevant to IDB

4.5 Non-statutory Local Sites

There are no non-statutory local sites of interest within the drainage district.

Table 4. Non-Statutory Designations

Site name	Designation	Features Relevant to IDB

5 HABITAT AUDIT

5.1 Habitat Audit Summary

This habitat audit summary lists the broad habitat types and UK BAP priority habitats that occur within the IDB district as identified by the information gathering exercise. Also listed are habitats deemed to be of local importance and/or featured in the county Local Biodiversity Action Plan that occur in the IDB district. Habitats that are of potential importance for the IDB, where water level management or other IDB activities may be of benefit, are identified. Finally, brief notes are included on the potential for the IDB to maintain, restore or expand its important habitats.

Table 5. Habitat Audit Summary

Broad Habitat Types	UK BAP Priority Habitat	Local Biodiversity Action Plan Habitat	Habitat of Importance for IDB	Location of Habitat of Importance for IDB	IDB Potential for Maintaining, Restoring or Expanding Habitat
Broadleaved, mixed and yew woodland	Wet woodland http://data.jncc.gov.uk/d ata/2829ce47-1ca5- 41e7-bc1a- 871c1cc0b3ae/UKBAP- BAPHabitats-64- WetWoodland.pdf	Wet woodland	Wet woodland See map in appendix	Rodway plantation Sydney plantation Cobblers Acre Kynnersley Plantation Aqueduct Plantation Hincks plantation Osier Bed Covert Cheswell Wood Unnamed slang between Parsons Oak and Red Strine Old Rookery Poor Piece Bridge slang	N.B. in private ownership / control). Restore condition by water level management. Drying up of woodlands noted as a result of STW abstraction in area. Opportunity for habitat connectivity along watercourses on non-working side of channels
Rivers and streams	Rivers http://archive.jncc.gov.u k/pdf/UKBAP_BAPHabit ats-45-Rivers2011.pdf			The majority of the channels under the control of the IDB are artificial and / or heavily modified	WFD gives the most detailed data on rivers within the Strine drainage district https://environment.data.gov.uk/catchment-planning/OperationalCatchment/3454 Water quality and low flow issue and being investigated. IDB maintains channels to limit farmland flooding from modified urban water carrying assets

Internal Drainage Board – Biodiversity Action Plan

Improved grassland	Coastal and floodplain grazing marsh	Floodplain grazing marsh http://archive.jncc.gov.uk/pdf/UKBAP_BAPHabitats-07-CoastFloodGrazingMarsh.pdf	Grazing marsh	See map in appendix	N.B. in private ownership / control). IDB will continue to work with landowners to ensure habitat is maintained
Fen, marsh and swamp	Purple moor grass and rush pasture	Purple moor grass and rush pasture http://archive.jncc.gov.uk/pdf/UKBAP BAPHabit ats-43- PurpleMoorGrass.pdf	Rush pasture	See map in appendix	N.B. in private ownership / control). IDB will continue to work with landowners to ensure habitat is maintained
Boundary and linear features	Hedgerows	Hedgerows http://archive.jncc.gov.uk/pdf/UKBAP_BAPHabitats-17-Hedgerows.pdf	Hedgerows	Frequent and dominant feature in board area	Maintain in good condition. Cutting back to enable channel maintenance work is limited and within regulatory requirements to protect feature as habitat
Arable and horticultural	Arable field margins	Arable field margins http://archive.jncc.gov.u k/pdf/UKBAP BAPHabit ats-02- ArableFieldMargins.pdf	Arable field margins	Frequent but varying in characteristics	N.B. in private ownership / control. The IDB is informed of areas of botanical or habitat value so that we can avoid disturbing them.
Standing open water and canals	Ponds	Ponds http://archive.jncc.gov.u k/pdf/UKBAP_BAPHabit ats-42-Ponds.pdf	Ponds	Numerous small, wooded and open ponds on farmland and within woods	N.B. in private ownership / control. Maintain and protect from adjacent activities

5.2 Habitats of Importance for the IDB

The following section provides more information on the status and location of the habitats within the drainage district that are of importance for the IDB and may benefit from water level management or other IDB activities.

5.2.1 Wet woodland

Description: Wet woodland occurs on poorly drained or seasonally wet soils on floodplains, usually with alder, birch and willows as the predominant tree species. They are found in the Strine drainage district as part of a mosaic of wetland features, which includes floodplain grazing marsh, rush pasture, ponds, streams and peaty ground.

National status and local county status: There are limited data on the extent of wet woodland habitats in the UK. Shropshire's meres & mosses landscape and floodplain areas are a key location for wet woodland in the UK. Phytophthora alni is a threat to wet woodland habitats, as is ground water abstraction for human consumption.

Status and locations within drainage district: Wet woodland is a common feature of the area, with many of the 'deciduous' woodlands mapped on magic.gov.uk having all the characteristics of wet woodland HAP. Ground water abstraction has seen many of these woodlands dry up significantly over the last 20 – 30 years & we are concerned that further development in Telford & therefore higher abstraction demands will impose further strain of these sites.

Potential improvements: In response to Severn Trent Water's Low Flows enquiry into the Strine River there will be remedial action required locally to make habitats more resilient to ground water abstraction (CaBA and direct meeting with STW December 2019 to January 2020).

5.2.2 Coastal and floodplain grazing marsh

Description: Grazing marsh is defined as periodically inundated pasture, or meadow with ditches which maintain the water levels, containing standing brackish or fresh water. Sites may contain seasonal water-filled hollows and permanent ponds with emergent swamp communities.

National status and local county status: Found mostly in England. Less common now as a result of land drainage. Feature has been restored in various key locations in Shropshire through CS funding.

Status and locations within drainage district: A number of holdings in the drainage district have restored floodplain grazing marsh as part of CS schemes and as a result the area within the IDB area increased during the early 2000s. Changes to schemes however have dis-incentivised this option for landowners causing a contraction of the area present. The existence of flood plain grazing marsh in the IDB district has supported priority bird species and other beneficial species, which spread out and inhabit land adjacent to it.

Potential improvements: Drying up of springs and land drainage engineering has reduced the area's potential for rewetting as floodplain grazing marsh HAP. Pumps have been used in the area to maintain water levels on key sites. Future ELMs schemes may better incentivise the habitat type, resulting in an increase again.

5.2.3 Purple Moor Grass and Rush Pastures

Description: Purple moor grass and rush pastures occur on poorly drained, usually acidic soils in lowland areas. Their vegetation, which has a distinct character, consists of various species-rich types of fen meadow and rush pasture.

National status and local county status: There have been significant declines in the area of this habitat nationally as a result of land drainage. The pockets remaining are often isolated and require connectivity to function better as habitat provision.

Status and locations within drainage district: There is one pocket of rush pasture identified on magic.gov.uk within the drainage district.

Potential improvements: Creating connectivity with other wetland habitats in the drainage district could significantly increase the value of the rush pasture.

5.2.4 Hedgerows

Description: A hedgerow is defined as any boundary line of trees or shrubs over 20m long and less than 5m wide, and where any gaps between the trees or shrub species are less that 20m wide. All hedgerows consisting predominantly (i.e. 80% or more cover) of at least one woody UK native species are covered by this priority habitat. Climbers such as honeysuckle and bramble are recognised as integral to many hedgerows, however they require other woody plants to be present to form a distinct woody boundary feature.

National status and local county status: Shropshire has very many miles of hedgerows, many of high wildlife value due to their species diversity and flowering / berry producing characteristics. Many have historic and landscape character importance.

Status and locations within drainage district: Hedgerows are a strong feature of the IDB district, often planted along side drainage channels. Hedgerows vary in their quality and habitat value and serve as routes to connectivity across farmland.

Potential improvements: Allowing hedgerows to widen and grow up in certain places would increase their habitat value. Key locations for restricting this are along key channels managed by the IDB and also along roadsides and were they restrict visibility or access.

5.2.5 **Ponds**

Description: For the BAP register ponds are defined as permanent and seasonal standing water bodies up to 2ha in extent but with key characteristics of high ecological value or rarity.

National status and local county status: Ponds are widespread in the UK but high value ponds are thought to be threatened and limited in numbers. There are many ponds in Shropshire, creating a common landscape feature in farmland.

Status and locations within drainage district: Lack of data means we are not able to be sure of the ecological status of the ponds in the Strine district, however as part of wetlands landscape connectivity the ponds are an important feature of the area.

Potential improvements: protecting ponds from in-field activities and considering them as part of the local habitat network will increase their value locally. Threats are posed to ponds from water abstraction.

6 SPECIES AUDIT

6.1 Species Audit Summary

This species audit summary lists the BAP priority species that occur within the IDB district as identified by the information gathering exercise. Also listed are species deemed to be of local importance and/or identified in the county Local Biodiversity Action Plan that occur in the IDB district. Species that are of potential importance for the IDB, where water level management or other IDB activities may be of benefit, are identified. Finally, brief notes are included on the potential for the IDB to maintain or increase the population or range of species of importance.

Table 6. Species Audit Summary

Common Name	Group	Order	Scientific Name	UK BAP Priority Species	Local Biodiversity Action Plan(s) Species	Non-BAP Species But Important in IDB District	Location of Species of Importance for IDB	IDB Potential for Maintaining or Increasing Species Population or Range
Water Vole	Terrestrial mammals	Terrestrial mammals	Arvicola terrestris	Yes	e.g. Yes - https://www.sh ropshire.gov.u k/media/1864/ sbap-water- vole-2009.pdf		Non-specified but local knowledge suggests presence in district.	Identify location of water voles. Maintain current population. Leave sections of vegetation undisturbed. Create connectivity to ponds etc.
Reed bunting	Birds	Bird	Emberiza schoeniclus schoeniclus	Yes	Yes		Observed in area	Retain reed fringes in non- essential locations for conveyance. Provide reed habitat beyond drainage channels eg. in ponds
Barn owl	Birds	Bird	Tyto alba	Yes	Yes https://www.sh ropshire.gov.u k/media/1841/ sbap-barn-owl- 2009.pdf		Channel banks	Increase range via new nest box introductions

Lapwing	Birds	Bird	Vanellus vanellus	Yes	Yes - https://www.sh ropshire.gov.u k/media/1855/ sbap-lapwing- 2009.pdf	Preston Moor, Land around wall farm, Sydney moor and Kynnersley Moor.	Support landowners providing wet grassland habitat etc for lapwing.
Corn Bunting	Birds	Bird	Emberiza calandra subsp. calandra/ clanceyi	Yes	In farmland bird suite - https://www.sh ropshire.gov.u k/media/1850/ sbap- farmland- birds-2009.pdf	Observed across district, though not common	Support land managers in providing mosaic of habitats, seed sources and insect provision
Skylark	Birds	Bird	Alauda arvensis subsp. arvensis/scot ica	Yes	In farmland bird suite - https://www.sh ropshire.gov.u k/media/1850/ sbap- farmland- birds-2009.pdf	Observed across district	Support farmers in provision of habitat and feed sources
Song Thrush	Birds	Bird	Turdus philomelos subsp. clarkei		In farmland bird suite - https://www.sh ropshire.gov.u k/media/1850/ sbap- farmland- birds-2009.pdf	As above	As above
Bullfinch	Birds	Bird	Pyrrhula pyrrhula subsp. pileata		In farmland bird suite - https://www.sh ropshire.gov.u k/media/1850/ sbap- farmland- birds-2009.pdf	As above	As above

Yellow wagtail	Brds	Bird	Motacilla flava subsp. flavissima	As above	As above	As above
Yellowham mer	Birds	Bird	Emberiza citrinella	As above	As above	As above
Linnet	Birds	Bird	Carduelis cannabina subsp. autochthona/ cannabina	As above	As above	As above
Snipe	Birds	Bird	Gallinago gallinago	Yes https://www.sh ropshire.gov.u k/media/1859/ sbap-snipe-2009.pdf	Observed across district	Support land managers in the provision of wetland sites in drainage district
Great crested Newt	Herptiles	Amphibian	Triturus cristatus	Yes https://www.sh ropshire.gov.u k/media/1852/ sbap-great-crested-newt-2009.pdf	Known presence across district	Wetland habitat connectivity

6.2 Species of Importance for the IDB

The following section provides more information on the status and location of the species within the drainage district that are of importance for the IDB and may benefit from water level management or other IDB activities.

6.2.1 Lapwing

Description: Lapwings are familiar birds of open farmland and wet grassland habitats. Traditionally lapwing breed on wet meadows in floodplain areas, and wet rush pasture on the edge of moorland. They are also found on farmland habitats such as wet meadows, spring crops and fallow land.

National status and local status: The species has decline significantly over the last 60 years as a result of winter cereals replacing spring drilling and larger machines making it harder see identify nests on the ground. In Shropshire it is believed the lapwing population has fallen by 75%.

Status and locations within drainage district: Within the drainage district there are regularly a number of pairs attempting to nest.

Potential improvements: More scrapes and wetland sites incorporated into farmland would increase chick rearing success here

6.2.2 Corn bunting

Description: Corn Bunting

National status and local status: population of corn bunting has fallen heavily since 1960s but has seen some recovery in recent decades.

Status and locations within drainage district: Locally numbers are low but the mixed farming landscape of Shropshire suits the species well.

Potential improvements: Support land managers in providing mosaic of habitats, seed sources and insect provision

6.2.3 Water vole

Description: Water voles are aquatic mammals that feed on bankside and marginal vegetation including grasses, sedges, rushes and reeds.

Water voles inhabit the banks of rivers, canals, ditches, pools and marshes. They live in a network of burrows within the banks, having territories along the water's edge marked by the presence of latrines. Breeding occurs from April to August and they can produce up to five litters, each containing three to four young.

National status and local status: Water vole are present across North Shropshire, though numbers have been severely impacted on by Mink and by habitat disruption.

Status and locations within drainage district: Sitings have been reported in the IDB district.

Potential improvements: Better records for populations in district. Consideration of marginal habitat that can be left without affecting conveyance in channel.

6.2.4 Barn owl

Description: Barn Owls are nocturnal, but are sometimes seen hunting in daylight, when there are young to feed in the nest, or in the depths of winter when food is scarce. They are highly sedentary, and pairs are very faithful to nest sites. They range over about three square kilometres, and mainly hunt within one kilometre of the nest.

National status and local status: Locally and nationally barn owl numbers have declined.

Status and locations within drainage district: Barn owls are still present in the IDB district by are uncommon.

Potential improvements: work with landowners to encourage provision of nesting locations and consider what channel vegetation can be left on key drainage assets to provide hunting habitat for barn owl.

6.2.5 Snipe

Description: Snipe are secretive wading birds of wet grassland, marshy areas and raised bogs in the lowlands. They are partial migrants, with the UK receiving an influx of birds from the continent during the winter, with local resident breeding birds often moving to coastal areas then.

National status and local status: species present in Shropshire but declined numbers since 1970s

Status and locations within drainage district: Wealdmoors and Strine region are a target location to increase numbers in Shropshire.

Potential improvements: Connectivity of wetland habitats needed & support for farmers providing rush pasture and flood plain grazing marsh.

6.2.6 Farmland birds

Description: seed and insect eating birds including Skylark, linnet, yellowhammer and bullfinch.

National status and local status: National and local declines since 1970s.

Status and locations within drainage district: locally present though in depleted numbers

Potential improvements: Support landowners in the district to provide seed and insect food sources in fields, field margins and hedgerows.

7 HABITAT AND SPECIES ACTION PLANS

7.1 Habitat and Species Action Plans

The following sections contain action plans for each of the habitats and species that have been prioritised for action by the IDB. The plans set out the objectives, targets and actions that the IDB believes are appropriate for each. These plans will be reviewed and updated periodically.

8 HABITAT ACTION PLANS

Wet Woodland

Wet woodland occurs on poorly drained or seasonally wet soils on floodplains, usually with alder, birch and willows as the predominant tree species. They are found in the Strine drainage district as part of a mosaic of wetland features, which includes floodplain grazing marsh, rush pasture, ponds, streams and peaty ground.

Details - see 5.1

IDB Objectives and Targets

Target Referen	Larnet	Action Reference	IDB Actions	Partners	Date	Indicators	Reporting
	Retain existing wet woodland and restore dried out woodland		Consider options to help landowners maintain / restore wet woodland. Work with STW to protect habitat from drying out	STW	03/04/20	CS scheme uptake Mitigation projects with STW	

Associated Species

Otter, woodcock

Flood plain grazing marsh

Grazing marsh is defined as periodically inundated pasture, or meadow with ditches which maintain the water levels, containing standing brackish or fresh water. Sites may contain seasonal water-filled hollows and permanent ponds with emergent swamp communities.

Details - see 5.1

IDB Objectives and Targets

Target Reference	Target	Action Reference	IDB Actions	Partners	Date	Indicators	Reporting
	Support landowners in the uptake of rewetting options		Help rate payers locate funding for habitat maintenance and restoration	STW / SWT		CS scheme uptake. Current area retained / expanded	

Associated Species

Lapwing, curlew, snipe, yellow wagtail.

Rush pasture

Purple moor grass and rush pastures occur on poorly drained, usually acidic soils in lowland areas. Their vegetation, which has a distinct character, consists of various species-rich types of fen meadow and rush pasture.

Details - see 5.1

IDB Objectives and Targets

Target Reference	Target	Action Reference	IDB Actions	Partners	Date	Indicators	Reporting
	Maintain rush pasture		Work with landowners to provide connectivity for rush pasture with other wetland features within district			Current area retained & CS / ELMs agreements providing landscape connectivity	

Associated Species

Lapwing, curlew, yellow wagtail, snipe

Ponds

BAP ponds have specific characteristics required to be identified as priority. We however see value in all ponds when they are connected to other habitat types, wetland or otherwise.

Details - see 5.1

IDB Objectives and Targets

Target Reference	Target	Action Reference	IDB Actions	Partners	Date	Indicators	Reporting
	Maintain & restore ponds in the drainage district		Signpost rate payers to grant funding / support for the management and construction of ponds and where to place them to create connectivity			No. ponds maintained / increased in district	

Associated Species

Greater crested newt

SPECIES ACTION PLANS

Water vole

Details - 6.2.3

Objectives and Targets

Target Reference	Target	Action Reference	IDB Actions	Partners	Date	Indicators	Reporting
1	Maintain and enhance quality of existing water vole habitat		Assess existing habitat suitability for water vole Identify areas where suitable bankside vegetation can be maintained. Communicate with IDB contractors		2020	Map lengths	

Lapwing

Details - 6.2.1

Objectives and Targets

Target Reference	Target	Action Reference	IDB Actions	Partners	Date	Indicators	Reporting
	Maintain lapwing population in district		Assess current location of breeding pairs in district			Mapped lapwing	
2	Improve fledgling success		Assess provision of open water for feeding and support landowners where necessary with habitat improvement / restoration		2020	population. CS / ELMs uptake	

Barn owl

Details - 6.2.4

Objectives and Targets

Target Reference	Target	Action Reference	IDB Actions	Partners	Date	Indicators	Reporting
3	Expand barn owl population in district		Encourage landowners to install owl boxes. Maintain areas of marginal vegetation on drains			Increased population	

Snipe

Details - 6.2.5

Objectives and Targets

Target Reference	Target	Action Reference	IDB Actions	Partners	Date	Indicators	Reporting
4	Provide habitat for wintering snipe		Signpost landowners to grant funding to support wet grassland & rush pasture maintenance / restoration			Increased population	

10 PROCEDURAL ACTION PLAN

Introduction

A number of procedural targets and actions have been established within this Procedural Action Plan. These are intended to integrate biodiversity considerations into IDB practices and procedures.

Objectives and Targets

Target Reference	Target	Action Reference	IDB Actions	Partners	Date	Indicators	Reporting
1	Provide contractors and landowners information on BAP policy		Update info packs in all machines		2020		
2	Provide information on the location of areas identified for species protection / enhancement		Update info packs in all machines		2020		
3	Identify areas for limited maintenance		Develop idea with board		2020		

11 IMPLEMENTATION

11.1 Implementation

- Clerk will take responsibility for rolling out the BAP and its implementation.
- BAP will be discussed as part of maintenance programme planning
- Landowners will be updated as part of this process
- IDB will provide signposting as necessary to any support available to help implement the BAP

11.2 Monitoring

- Clerk will be responsible for ensuring progress is monitored as necessary.
- The BAP will be included on a board meeting agenda for discussion annually

11.3 Reviewing and Reporting Progress

- BAP will be reviewed annually to ensure it is updated
- BAP will be published on the IDB webpage

Annual review & updates

Date	Changes and updates to plan	Reviewed by
8/04/24	Changes:	
	 Clerk's contact details altered 	
	Updates:	
	 IDB has been working with SWT / STW to find 	
	locations for riparian habitat creation as part of the	
	STW low flows mitigation project. This will include	
	the construction of ponds and wetland features	
	within the Strine district.	
	The IDB is contributing to the Patchy Peatland	
	LAPWP Project with Harper Adams Uni, providing	
	input on peatland management for multiple	
	functions. Work on going	
	The IDB is working with HAU & Cranfield Uni on a 5G	
	telemetry project to support sustainable abstraction	
	from the drainage district in times of high flows	