



Hertfordshire Climate Change and Sustainability Partnership

Strategic Action Plan for Biodiversity

October 2021

Contents

1. Introduction.....	3
2. Policy context.....	3
2.1 International	3
2.2 National.....	4
2.3 Local	5
3. Defining the problem.....	6
3.1 Intensive agriculture	6
3.2 Development.....	7
3.3 Population Growth	8
3.4 Climate Change	8
3.5 Water Management	9
3.6 Disengagement from Nature	10
3.7 Under-investment.....	11
4. Forthcoming Legislation and Policy	12
5. HCCSP Influence.....	13
6. SMART Actions and Targets	14
7. Funding.....	26

1. Introduction

- 1.1 In response to continuing declines in species and habitat, both locally and nationally, the Strategic Action Plan for Biodiversity outlines the Hertfordshire Climate Change & Sustainability Partnership's (HCCSP) intention to take urgent action which restores and enhances biodiversity across Hertfordshire.
- 1.2 The Plan seeks to address challenges which have prompted the biodiversity declines seen in Hertfordshire since the 1930s¹⁻². Its actions are intended to ensure that outcomes resulting from new development, agricultural practices, and local authority greenspace management, can not only halt but reverse these declines. The Plan also seeks to enhance how we communicate with Hertfordshire residents in order to improve awareness and engagement around biodiversity.
- 1.3 The Action Plan is intended as a live document. It has been developed through a co-production approach of constructive engagement with a broad range of relevant stakeholders. The actions reflect areas which are within the gift of HCCSP members to influence.

2. Policy context

2.1 International

- 2.1.1 Biodiversity is a necessity for the ongoing survival of our natural world. In addition to providing life-enabling conditions to all living organisms, healthy ecosystems provide key contributions to our society including food, fuel, fibre, clean water, medicine, healthy soil, and protection against flooding, erosion and disease. Biodiversity and climate change are strongly interlinked. Fluctuating climatic conditions are causing adverse effects for biodiversity, whilst at the same time, healthy ecosystems can help us mitigate and adapt to climate change.
- 2.1.2 Globally, biodiversity degradation is accelerating, and it is believed to be diminishing faster than ever before in human history³. Human activities such as urban expansion, high resource consumption rates and intensive food production have led to unsustainable practices that have seen the natural world deteriorate faster than it can be replenished. Reports from the United Nations⁴, as well as the recent Dasgupta Review (The Economics of Biodiversity, February 2021)⁵ continue to highlight the urgency of the situation and the significant action that is required in order to achieve necessary change.
- 2.1.3 Over the last decade, EU biodiversity policy has played a significant role in shaping relevant policy in the UK. The EU Biodiversity Strategy to 2020⁶ outlined six target areas for addressing biodiversity loss within Europe, including enhancing implementation of nature legislation, restoring ecosystems and establishing green infrastructure, increasing sustainable

agriculture and forestry, increasing sustainable fisheries, combating alien invasive species and a greater contribution to averting global biodiversity loss.

- 2.1.4 The Habitats Directive⁷ and The Wild Birds Directive⁸ form an integral part of European ecological policy, underpinning the EU Biodiversity Strategy to 2020 and ensuring the conservation of a wide range of habitats and species. This has been primarily accomplished through the formation of the Natura 2000 Network⁹ which is a network of protected areas across Europe, including Special Areas of Conservation (SAC) and Special Protected Areas (SPA) which were designated to protect species and habitats.
- 2.1.5 Following Brexit, the government is introducing UK provisions regarding biodiversity. The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019¹⁰ are adapted from the changes made to The Conservation of Habitats and Species Regulations 2017¹¹. These new UK provisions ensure that key environmental protections established from the EU Nature directives remain in place post-Brexit and that this legislation is transposed into domestic law for the UK. It is intended that habitat and species protection will be implemented in largely the same way after Brexit. Certain changes include the fact that the UK's SACs and SPAs will no longer be included in Europe's Natura 2000 Network and will now form part of the UK's 'National Site Network'. This will ensure that national SACs and SPAs will continue to be protected and new SACs and SPAs can be designated.
- 2.1.6 Whilst the UK is no longer accountable to EU regulatory authorities, the creation of the Office for Environmental Protection (OEP) is to be established through the Environment Bill to ensure that the government can be held to account on environmental policies in the absence of the EU's independent external bodies. At this time, it is unclear how the OEP will mobilise its authority and how it will maintain its independence.
- 2.1.7 This year, the international community is set to review the 'UN's Strategic Plan for Biodiversity 2011-2020' at the UN Biodiversity Conference (CBD COP 15). This plan has provided an overarching framework on biodiversity policy for the last decade. COP 15 will begin virtually in October 2021 and will be concluded at an in-person conference in April/May 2022. Through these negotiations it is expected that the Post-2020 Global Biodiversity Framework will be adopted. It is anticipated that this new framework will aim to stop the loss of biodiversity by 2030 and ensure that natural recovery and restoration can be achieved by 2050.

2.2 National

- 2.2.1 Since 1949 numerous Acts of Parliament, Strategies, Policies, and Guidance have sought to protect wildlife and wild areas in the UK, and govern human action and impact relating to them. A summary of key legislation is presented in Appendix A.

- 2.2.2 The UK's Biodiversity 2020 Strategy¹² set out the strategic direction for biodiversity policy and conservation efforts for the decade leading up to 2020. Its stated aim was to 'halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people'.
- 2.2.3 In 2018, the Government unveiled the 25 Year Environment Plan¹³ which sets out aims to improve the environment within a generation. It includes goals to improve air and water quality, protect threatened wildlife, trees and plants, and to provide richer habitats. It identifies how the government will work with businesses and communities, as well as areas of action such as reducing risks of harm from environmental hazards, using nature's resources more sustainably, enhancing engagement with the natural environment, improving biosecurity, and providing measurable net gain to biodiversity from development.
- 2.2.4 In September 2020, and reaffirmed in May 2021, the Prime Minister made a commitment to protect 30% of the UK's land by 2030¹⁴. With around 26% of English land already protected through means such as National Park or Area of Outstanding Natural Beauty status, this commitment will mean protecting an additional 4% (or over 400,000 hectares) to support recovery of nature.
- 2.2.5 In September 2021, Natural England; Natural Resources Wales; NatureScot; Northern Ireland Environment Agency; and the Joint Nature Conservation Committee together launched the Nature Positive 2030 report. This report emphasises the importance of placing the crisis of biodiversity loss on an equal footing with climate change. It highlights that nature recovery can deliver benefits for human health, well-being, and the economy, and concludes that the aim of reversing biodiversity declines by 2030 is an achievable one, even though we are not currently on track to meet it. The report recommends that businesses, organisations, cities, citizens, and government all have a role to play in reversing biodiversity declines and restoring ecosystems, and should adopt targets to become Nature Positive in the same way that Net Zero Carbon targets have been established.

2.3 Local

- 2.3.1 The Hertfordshire Biodiversity Action Plan¹⁵, originally published by the Hertfordshire Environmental Forum in 1998, sets out a 50-year vision for Hertfordshire's wildlife and natural habitats, and reviews priority habitats and species within a local context. The report details the ecological characteristics of Hertfordshire and identifies Key Biodiversity Areas where conservation action is deemed valuable. It also identifies 5 Species Action Plans and 8 Habitat Action Plans to guide work around improving biodiversity in Hertfordshire. As national policy has progressed over recent years and new challenges and opportunities have arisen, now is a suitable time to identify current actions that local authorities can take to address biodiversity decline in Hertfordshire.

- 2.3.2 Building upon the national State of Nature Report¹⁶ (first published by the State of Nature Partnership in 2013), the Hertfordshire State of Nature Report¹⁷, published in 2020 by the Herts and Middlesex Wildlife Trust, looks at Hertfordshire's wildlife over the last 50 years. It assesses over 7,500 different species and looks at how their numbers have changed from 1970 to 2020, using data from the Herts Environmental Records Centre¹. While the report paints a picture of biodiversity decline, it also points to the huge opportunities that strong partnership working can create for reversing the current fortunes of Hertfordshire's wildlife. The report's findings can act as a valuable tool for guiding the shape of nature conversation as we move forward. The document calls for a target of 30% of land to be protected for nature recovery in Hertfordshire, reflecting the national commitment.
- 2.3.3 Strategic Planning for biodiversity can be supported by green infrastructure through development. Currently the Hertfordshire Green Infrastructure Plan (2011)¹⁸ sets out a vision for Hertfordshire's green infrastructure which in turn is enacted at a district level. A renewed Hertfordshire Green Infrastructure Strategy is in development; this will set a new strategic direction for how green infrastructure will support biodiversity across the county.
- 2.3.4 After declaring a climate emergency in 2019, Hertfordshire County Council adopted its Sustainable Hertfordshire Strategy in 2020. This includes ambitions to improve biodiversity on County Council land by 20% by 2030, as well as to improve wildlife across Hertfordshire's land and water by 20% by 2050¹⁹. Similarly, numerous district councils have adopted strategies and policies to support the enhancement of biodiversity.

3. Defining the problem

3.1 Intensive agriculture

- 3.1.1 Approximately 61% (100,000 Ha) of Hertfordshire's total land area is farmland, with 55% (90,000 Ha) of Hertfordshire being managed as arable farmland, which is far above the national average.²⁰ As is true of the rest of the UK, much of the farming in Hertfordshire is now intensive and carried out on a larger scale than it was in past decades. Much of Hertfordshire's rural land accommodates this intensive farming²¹, although there is a growing interest in more balanced land management approaches such as regenerative agriculture.
- 3.1.2 Modern intensive agriculture seeks to maximise yields and therefore often relies upon heavy use of agrochemicals like herbicides and pesticides, and results in monocultures, less complex rotations, and poor soil management. This leads to reduced insect diversity, and may diminish populations of birds and amphibians, amongst other animals. As a result, this type of agricultural management is a key driver of biodiversity loss in the UK. The Hertfordshire State of Nature Report found that of the 23 species associated with farmland

¹ The records that inform the Herts Environmental Record Centre are generated largely through volunteer efforts on the part of the Herts Natural History Society.

and identified as Hertfordshire Species of Conservation Concern, 4 had gone extinct, while 16 had noticeably declined since 1970.

- 3.1.3 Arable land management may also have wider environmental implications, with an Environment Agency report suggesting that intensive agriculture has caused arable soils to lose 40 to 60% of their organic carbon²². Moreover, intensive cultivation of crops effectively extracts nutrients from the soil, and leads to an impoverished soil structure.
- 3.1.4 Following Brexit, expected changes to the funding landscape for the agricultural sector may provide new opportunities which support farmers' transition to less intensive models, while maintaining profitable businesses and yields which meet demands for high quality produce. These opportunities include land management activities to support key farmland species, engaging with environmental stewardship schemes, improved management of water runoff and chemical inputs, and reinstatement of hedgerows.

3.2 Development

- 3.2.1 Owing to its growing population, Hertfordshire's local strategic plans forecast the need for more than 100,000 new homes to be built over the next 15 years²³. This represents a significant area of land and, alongside other sites, will involve some use of Green Belt land for development. These changes have the potential to increase pressure on biodiversity through habitat loss or fragmentation, as well as increased levels of pollution including: air, light, noise, odour, vibration, and contamination.
- 3.2.2 It is anticipated that the Environment Bill, which is expected to receive Royal Assent in Autumn 2021, will mandate a mechanism for measuring a 10% net gain in biodiversity that will be required through the planning process. Some Hertfordshire local authorities have already specified this expected mechanism in their local plans and planning guidance. However, there remain challenges around implementing robust biodiversity conditions through the planning system and ensuring these gains are delivered by developers.
- 3.2.3 In order to determine the most suitable strategies for delivering biodiversity gains and locations for biodiversity offsets in Hertfordshire, local planning authorities will require a robust baseline outlining current ecological networks. The Hertfordshire Ecological Network Map has provided useful guidance in this area since its production in 2010. Now is an apt time to revisit biodiversity mapping at a county scale to provide an updated evidence base for making these strategic decisions.
- 3.2.4 Furthermore, the anticipated future development in Hertfordshire underlines the importance of local planning authorities continuing to seek expert ecological advice when assessing the suitability of planning applications. Delivering Biodiversity Net Gain, as well as delivering biodiversity enhancements through other funding mechanisms, will require collaborative relationships with local landowners, as well as working together as multi-disciplinary teams in and across public sector bodies.

3.3 Population Growth

- 3.3.1 Within Hertfordshire and across the UK, the human population continues to grow²⁴. Many drivers of biodiversity loss are interlinked and with an increasing population comes increased demand for commodities such as food and water. This can lead to pressure on natural resources, for instance, through over-abstraction of water and increasingly intensive agriculture.
- 3.3.2 Inevitably a growing population has increasing land-use demands. Changes in land use can have a direct impact on local wildlife, with development of new housing, infrastructure and industry often resulting in habitat loss, fragmentation, and isolation of any species previously located in these areas.
- 3.3.3 Local nature reserves and other sites which support wildlife are also at risk from over-use and misuse by visitors. In Hertfordshire, these issues appear to have been exacerbated throughout the COVID-19 lockdowns. Public engagement with wildlife and local greenspaces has many benefits, both to people and nature; however, increasing visitor numbers can bring issues to local wildlife through disturbance, unintentional damage, littering and in some cases anti-social behaviour and vandalism²⁵. Local conservation efforts have the potential to engage the public and lead to more positive engagement with nature.

3.4 Climate Change

- 3.4.1 The UK's State of Nature Report has identified climate change as the second greatest driver of changes in biodiversity²⁶. However, given its combined and cumulative impact alongside other key contributors to biodiversity loss, it can be difficult to measure the specific and direct impact of climate change separate to other drivers²⁷. Nationally, climate change is creating wetter winters and drier summers with more frequent extreme weather events and increased risks of flooding²⁸. Average global temperatures have risen by more than 1°C since the 1850s²⁹, with the UK's ten hottest years on record all occurring within the last twenty years³⁰. These changing weather events have been experienced within Hertfordshire in line with the national climatic trends and are directly impacting Hertfordshire's wildlife³¹.
- 3.4.2 Climate change has influenced the population sizes of different species and has led, predominantly, to declines in wildlife within Hertfordshire, particularly for species that are susceptible to unseasonable or extreme weather. Unpredictable seasons can affect hibernation and nesting patterns as well as food chains. Increasing average annual temperatures can lead to range contraction for certain species and has led to some species moving through or into Hertfordshire as they move North and further inland in response to climate change. In some cases, climate change could lead to an increase of certain species found in Hertfordshire but could also result in a decline in

others³², and these shifts may not remain static over time. There is growing concern that small and fragmented habitats will limit and prevent wildlife from being able to migrate and adapt as needed. Consequently, we should seek to incorporate the Lawton principles of More, Bigger, Better, and Joined³³, to support the recovery of a cohesive network of natural habitats.

- 3.4.3 All of Hertfordshire's habitats are suffering from climate induced impacts on water tables, seasonality and temperature regimes. In particular wetlands and chalk rivers have been badly affected. Warmer temperatures throughout the year and drier summers led to nearly 50km of Hertfordshire's chalk rivers and wetland features drying out in 2019³⁴. Species reliant on these ecosystems suffer as a result.
- 3.4.4 Following the Paris Climate Agreement in 2018, the UK government set out targets to bring all greenhouse gas emissions to net zero by 2050³⁵. Within Hertfordshire, a climate emergency has been declared, with many local authorities setting targets to reduce their carbon emissions significantly by 2030 in order to reduce impact on the climate.
- 3.4.5 Carbon reduction is a significant factor in national and local policies on climate change and there is a reliance on the ability to offset carbon in order to meet carbon reduction targets³⁶. Natural systems have a key role to play in carbon sequestration, and schemes such as the Woodland Carbon Fund³⁷ highlight the emphasis that has been placed on tree planting as a prioritised form of carbon sequestration within the UK. Hertfordshire's mosaic of wetland and grassland habitats are also significant carbon sinks³⁸.
- 3.4.6 Whilst there has been a notable emphasis on tree *planting*, establishment of trees and woodlands can often be best achieved through support for natural regeneration. Where this approach is not practicable, tree planting does represent a viable method of habitat creation. However, there are concerns that inappropriate tree planting may affect important grasslands which are associated with a third of all Hertfordshire's species of conservation concern³⁹. It is therefore important that future carbon sequestration policies take account of local and naturally occurring carbon sinks that already exist in order to protect and limit the impact on existing species and biodiversity.

3.5 Water Management

- 3.5.1 Hertfordshire's water consumption levels are higher than the national average, with demand in this area of the country expected to increase even further over the coming decades⁴⁰.
- 3.5.2 Chalk rivers are a rare habitat, with fewer than 200 globally. They are home to rare and iconic species. 10% of these rivers are found in Hertfordshire and support a diversity of wildlife, as well as acting as a valuable water resource⁴¹. The county relies on the chalk aquifers for the majority (60%) of its tap water⁴², leading to high abstraction levels. This paired with climate change-

induced reductions in 'effective rainfall' means that Hertfordshire's chalk rivers are vulnerable to low-flow and prolonged periods of drought. This has clear ramifications for the rich biodiversity that chalk rivers have traditionally supported.

- 3.5.3 Water companies have made commitments⁴³ to reduce abstraction and look at new water sources to help protect chalk streams. Additionally, Catchment Partnerships have brought a range of stakeholders together to collaborate in support of improving these important habitats.
- 3.5.4 In addition to over-abstraction, the pollution of waterways, both diffuse and point source, is causing significant ecological damage to our rivers and to our wetlands, which are also important habitats particularly in the Lee Valley and Colne Valley Regional Parks⁴⁴⁻⁴⁵.

3.6 Disengagement from Nature

- 3.6.1 Individuals and their choices and behaviours can provide important support for biodiversity. However, such behaviours can also impact in more harmful ways; a scenario which is increasingly perpetuated through human disengagement from the natural world.
- 3.6.2 The government funded 2016 Monitor of Engagement with the Natural Environment study⁴⁶ found that more than 10% of children had not visited any natural environment (such as parks, beaches, forests) in the last twelve months, while a 2019 survey indicated nature language falling out of children's vocabularies and a widespread inability to identify common features of the natural landscape, such as bluebells and blackberries⁴⁷. Other research has found that 69% of Britons feel they are losing touch with nature, with many never having seen creatures such as hedgehogs or toads, and some reflecting that they do not know enough to be able to teach their children about wildlife⁴⁸.
- 3.6.3 Disengagement from nature and its needs might also be seen reflected in apparent preferences for management of both privately and publicly owned open spaces. For example, negative feedback around changes to council verge cutting regimes designed to support biodiversity may reflect either a lack of understanding of the reasons for new mowing patterns, or preferences for landscape aesthetics which happen to be less conducive to biodiversification.
- 3.6.4 There is evidence for such aesthetic or practical preferences in the increase of artificial lawns⁴⁹, and in the paving over of front gardens for parking spaces or design purposes. A 2021 report indicated that almost a third of the 20.8 million homes with front gardens have been converted to hardstanding⁵⁰. Both trends have been noted by wildlife and conservation experts as posing a threat to gardens as habitats for wildlife.

- 3.6.5 Whilst there appears to be no specific data on this disengagement from nature within Hertfordshire, these national trends should be noted amongst potential pressures facing biodiversity. Consequently, thought should be given to how communication can highlight the effects of such choices in order to bring human preferences and biodiversity needs into better alignment.
- 3.6.6 Since the pandemic, there has been a significant increase in the number of people visiting public greenspaces and an increased appreciation of the benefits that these visits provide for health and wellbeing. Interest in conservation volunteering has also risen and should be further encouraged, as this provides an ideal opportunity both to engage people with the natural world and support its management and protection. While this renewed interest is welcome, visitors to outdoor spaces should be encouraged to engage sensitively with their surroundings in order to mitigate the risk of adverse impact from new usage.
- 3.6.7 As well as a focus upon the impact of humans on the natural world, there is increasing interest in the impact of the natural world on the health of people. A growing body of evidence indicates links between increased exposure to nature, and improved physical and mental health and wellbeing. Some evidence has also indicated that people may respond more positively in this regard to more biodiverse greenspace. A number of UK GP practices have already begun prescribing nature-based activities such as gardening or rambling to patients, and in July 2020 the Environment Secretary announced a £4 million investment for a cross-government project aimed at preventing and tackling mental ill health through engaging people with nature - an approach which has been termed 'green social prescribing'.

3.7 Under-investment

- 3.7.1 Ensuring that our public greenspace supports and enhances biodiversity requires a commitment and investment in ongoing management. For example, The Hertfordshire State of Nature Report notes that the biggest threat to woodland biodiversity in Hertfordshire (and the UK) is insufficient woodland management rather than insufficient total area of woodland. This reflects reduced demand for woodland products which consequently drives down the forestry economy.
- 3.7.2 There is a growing evidence base which identifies the human benefits derived from biodiverse natural capital including carbon sequestration, reduced flood risk, improved air quality and better health and wellbeing. Many of these benefits to residents can be derived from public greenspace. However, within the portfolio of local authority duties, greenspace management remains a non-statutory function, and as such budgets for greenspace management have consistently faced competition from statutory and other non-statutory functions. In some cases, this has resulted in a downward trend in real term or

actual budgets. Such restrictions will challenge the ability of local authorities to deliver greenspace management which supports biodiversity.

4. Forthcoming Legislation and Policy

- 4.1 The Environment Bill⁵¹ is proposed to mandate a 10% Biodiversity Net Gain from new developments. While the policy is expected to encourage developers to locate these net gains within the development site, it may also be necessary to offset gains elsewhere. This could create opportunities to target investment to areas within Hertfordshire which would enable the greatest impact by strengthening or joining up of existing ecological networks.
- 4.2 The Environment Bill is also proposed to mandate the development of county-level Local Nature Recovery Strategies (LNRS) to deliver priorities for nature recovery both locally and nationally, driving forward the National Nature Recovery Network. LNRS are intended to guide the effective local delivery of Biodiversity Net Gain. The spatial planning that is part of developing a LNRS will enable investment in nature to be directed to where it most benefits the natural environment. As such, it will involve consistent mapping of existing habitats and use habitat network maps to identify opportunities for habitat creation and restoration. The strategic mapping will build upon previous work such as the Hertfordshire Ecological Networks Maps.
- 4.3 The Agricultural Act 2020 sets out the new Environmental Land Management Scheme (ELMS)⁵², which will replace existing funding from government to the farming sector. The scheme makes provision for farmers and land managers to be rewarded with public money when they provide 'public goods'. These goods could include better air or water quality, improved soil health, or thriving wildlife and biodiversity. The scheme is thus designed to help achieve the aims of the 25 Year Environment Plan and the net zero emissions by 2050 commitment. Trials and tests have already begun ahead of additional national pilots to commence in late 2021, and the scheme will be fully rolled out in 2024.
- 4.4 The Queen's Speech (2021)⁵³, set out the most substantial planning system reforms in decades. The Paper included only limited details for how the planning system would address the climate emergency and declines in biodiversity. Ensuring that future planning policy is fully aligned with the policies and targets that are expected from the Environment Bill will have important implications for biodiversity. As such, changes incorporated into national planning policy will be monitored closely.
- 4.5 The new England Tree Strategy⁵⁴ was consulted on in 2020, and the government has now published its England Tree Action Plan⁵⁵ which sets out its plans for canopy expansion over the coming years. It will also support the commitment of reaching net zero carbon emissions by 2050.

5. HCCSP Influence

- 5.1 Given the forthcoming policy and legislation, HCCSP has the means to meaningfully influence the protection and enhancement of biodiversity and help drive forward required action. The Environment Bill and the Environmental Land Management Scheme both represent opportunities for local authorities to guide the direction of investment into wildlife conservation and enhancement within Hertfordshire.
- 5.2 Collectively, local authorities own substantial amounts of land in Hertfordshire and have the potential to deliver biodiversity enhancements through suitable management of public greenspaces. This provides another sphere of influence for HCCSP to shape action around biodiversity support.
- 5.3 Local authorities also play a leadership role within their communities and have the ability to provide clear communications to Hertfordshire residents to encourage individual and group action around biodiversity.
- 5.5 HCCSP can therefore make a valuable contribution under the following themes:
 - raising awareness of the value and need for protection of biodiversity and promoting behaviour change among residents and businesses
 - enhancing biodiversity through suitable land management and other operations, delivered directly by HCCSP members or through partnership working with multiple stakeholder engagement
 - protecting and enhancing biodiversity through the planning system
 - evidence gathering and establishing appropriate resources to support biodiversity enhancements
 - lobbying or arguing the case for government to make changes in national policy.
- 5.6 In the case of lobbying or arguing the case for change, a decision to do so collectively as a partnership should be considered when there is consensus between all partners on a particular topic. When unanimous consensus is not agreed, this does not preclude each partner from taking individual action on behalf of their own authority/organisation.

6. SMART Actions and Targets

A. Actions to be delivered by partners (HCCSP members) to make changes to their own assets, premises or services

Action number	Priority to address	Action	Numerical target(s) (where appropriate) / or other means of measuring success	Organisation(s) who will deliver the action	Timeframe for delivery inc. intermediary milestones where appropriate
A1	Evidence gathering and establishing appropriate resources to support biodiversity enhancements	Develop a Biodiversity Baseline using Natural England’s metric to quantify existing levels of biodiversity across Hertfordshire. This would produce a live report through a coarse-grain assessment which is subject to further refinement and update as new data becomes available Purpose: Planning and Monitoring	Receipt of a Biodiversity Baseline resource from the appointed contractor	HCC (CRoW) to run procurement process Appointed contractor to deliver baseline	2021/22
A2	Enhancing biodiversity through suitable land management and other operations, delivered directly by HCCSP members or through partnership working with multiple stakeholder engagement	Local authorities to favour the procurement of trees/plants that are UK sown/grown, or where not possible to be from a nursery with “plant healthy” certification² Purpose: Biosecurity	Evidence that each authority has adopted this approach	Each council (individual)	2022/23
A3	Enhancing biodiversity through suitable land	Work with partners to review opportunities to increase canopy in	Evidence that each authority has	Each council (individual)	2022/23

² Native species are those which were present in the UK before the last ice age, with non-native species having arrived subsequently. While native trees are preferable in many instances, non-native trees make an important contribution to the UK’s treescapes, particularly in urban areas. Conversely, UK Sown and grown refers to where a tree is germinated from seed and grown until point of sale, regardless of its species. The benefit of UK Sown and Grown trees is that the biosecurity risk of inadvertently introducing new pests and diseases into the UK is mitigated.

HCCSP: Strategic Action Plan for Biodiversity

Action number	Priority to address	Action	Numerical target(s) (where appropriate) / or other means of measuring success	Organisation(s) who will deliver the action	Timeframe for delivery inc. intermediary milestones where appropriate
	management and other operations, delivered directly by HCCSP members or through partnership working with multiple stakeholder engagement	wards with lower levels of existing canopy cover (below 15%) where this is appropriate, while ensuring the right tree is planted in the right place Purpose: Enhance Green Infrastructure	adopted this approach		
A4	Enhancing biodiversity through suitable land management and other operations, delivered directly by HCCSP members or through partnership working with multiple stakeholder engagement	Ensure robust public engagement on decision making around the management of local authority greenspaces Purpose: Accountability	All authorities agree to build engagement and sharing best practice into their working practice Review individual strategies for details of how communities will be engaged to agree a mandate on proposed actions	Each council (individual) HSSCP/HSOG collectively: sharing best practice	2023/24
A5	Enhancing biodiversity through suitable land management and other operations, delivered directly by HCCSP members or through partnership working with multiple stakeholder engagement	Commitment for local authorities to minimise and where possible exclude use of peat compost, and continue to explore peat-free alternatives as they arise on the market Seek alternative plants that can be more readily grown in peat-free material	Evidence that each authority has adopted this process	Each council (individual)	2022/23

HCCSP: Strategic Action Plan for Biodiversity

Action number	Priority to address	Action	Numerical target(s) (where appropriate) / or other means of measuring success	Organisation(s) who will deliver the action	Timeframe for delivery inc. intermediary milestones where appropriate
		Purpose: Conserve Peatland Habitat and Reduce Carbon Emissions			
A6	Enhancing biodiversity through suitable land management and other operations, delivered directly by HCCSP members or through partnership working with multiple stakeholder engagement	Commitment for local authorities to minimise and where possible exclude use of pesticides/herbicides, where there is not a risk posed to vital infrastructure. Consider design and maintenance regimes to limit the need for such interventions and share best practice on effective pesticide-free grounds maintenance Purpose: Reduce Pesticide Residues Within the Broader Environment	Agreement that each authority has adopted this process	Each council (individual) HSOG: sharing best practice	2022/23
A7	Evidence gathering and establishing appropriate resources to support biodiversity enhancements	In association with Parks Herts, conduct an audit of local authority greenspaces to identify opportunities to support and enhance biodiversity and implement agreed recommendations Purpose: Targeting Areas for Enhancement	Audit report production	HCC (CRoW)	Audits: 2022/23 Implementation to begin by: 2023/24
A8	Evidence gathering and establishing appropriate resources to support biodiversity enhancements	In recognition of increased demand for allotments during the pandemic; and following a prolonged easement in restrictions (12 months); review availability and quality/condition of allotment plots against demand, including assessment of planned	Confirmation that review has been undertaken and recommendations made	Each council (individual)	2023/24

HCCSP: Strategic Action Plan for Biodiversity

Action number	Priority to address	Action	Numerical target(s) (where appropriate) / or other means of measuring success	Organisation(s) who will deliver the action	Timeframe for delivery inc. intermediary milestones where appropriate
		<p>provision in local plans. Review to recommend whether an increase in allotment provision is required. Review existing allotment strategies to ensure they promote biodiversity-positive behaviours</p> <p>Purpose: Support Greenspace Provision and Access</p>			
A9	Evidence gathering and establishing appropriate resources to support biodiversity enhancements	<p>Explore the opportunity to undertake a review around the health and wellbeing benefits of engaging with greenspace and the opportunities for greenspace access in Hertfordshire; with a view to producing guidance to inform greenspace planning and management</p> <p>Purpose: Identify Nature-Based Solutions to Improve Community Health</p>	Confirmation of project viability	HCC (Public Health), each council (collaboration)	2022/23
A10	Enhancing biodiversity through suitable land management and other operations, delivered directly by HCCSP members or through partnership working with multiple stakeholder engagement	<p>Conduct a review of how to incorporate and enhance biodiversity on the greenspace components of non-residential council owned properties</p> <p>Purpose: Targeting Areas for Enhancement</p>	Confirmation that review has been undertaken and recommendations made	Each council (individual) HSOG: drawing up/signposting good practice	2023/24
A11	Enhancing biodiversity	Review the extent to which	Summary report of	Each council –	2022/23

HCCSP: Strategic Action Plan for Biodiversity

Action number	Priority to address	Action	Numerical target(s) (where appropriate) / or other means of measuring success	Organisation(s) who will deliver the action	Timeframe for delivery inc. intermediary milestones where appropriate
	through suitable land management and other operations, delivered directly by HCCSP members or through partnership working with multiple stakeholder engagement	biodiversity is considered within the relevant procurement policies and processes of HCCSP members, and benchmark against national best practice Purpose: Protect and Enhance Biodiversity through Purchasing Power	findings and actions	procurement teams (individual)	
A12	Enhancing biodiversity through suitable land management and other operations, delivered directly by HCCSP members or through partnership working with multiple stakeholder engagement	Identify and implement opportunities for grass verge and other amenity grasslands management which support floral diversity and pollinator habitats Purpose: Enhancing Grassland Habitats for Pollinators	Each authority to report on the area of grassland currently managed to improve biodiversity	HCC (Highways), each council (greenspace management team)	2023/24
A13	Enhancing biodiversity through suitable land management and other operations, delivered directly by HCCSP members or through partnership working with multiple stakeholder engagement	All local authorities agree to incorporate the principles detailed in the Tree Resilience and Recovery Strategy for Hertfordshire into standard operating practices following the strategy's publication by Hertfordshire County Council Purpose: Biosecurity	Agreement that each council has incorporated these principles	Each council (individual)	2022/23

B. Actions requiring others to act in response to partners' (HCCSP members) use of their regulatory powers

Action number	Priority to address	Action	Numerical target(s) (where appropriate) / or other means of measuring success	Organisation(s) who will deliver the action	Timeframe for delivery inc. intermediary milestones where appropriate
B1	Protecting and enhancing biodiversity through the planning system	Seek to maintain and improve consistency of planning policy and decision making on biodiversity across local authorities and maximise Biodiversity Net Gain opportunities within Hertfordshire Engage with planners to aid development of Biodiversity Supplementary Planning Documents (SPDs) within each authority, with consideration to existing local models Purpose: Enhancing Biodiversity Through Planning Policy	Broadly consistent policy Production and adoption of a Biodiversity SPD by each authority	Each council – LPA (individual); HCC (Hertfordshire LEADS) HCC (Hertfordshire LEADS)	As soon as is practicable within each council's planning review policy timetable. Review annually to monitor adoption process. 2023/24
B2	Protecting and enhancing biodiversity through the planning system	Local Authorities to provide developers with guidance that trees/plants procured by developers should be UK sown and grown or where not possible to be procured from a nursery with “plant healthy” certification³ Purpose: Biosecurity	Agreement that each council has adopted this approach	HCC (Hertfordshire LEADS); Each council – LPA (individual)	As soon as is practicable within each council's planning review policy timetable.

³ Native species are those which were present in the UK before the last ice age, with non-native species having arrived subsequently. While native trees are preferable in many instances, non-native trees make an important contribution to the UK's treescapes, particularly in urban areas. Conversely, UK Sown and grown refers to where a tree is germinated from seed and grown until point of sale, regardless of its species. The benefit of UK Sown and Grown trees is that the biosecurity risk of inadvertently introducing new pests and diseases into the UK is mitigated.

HCCSP: Strategic Action Plan for Biodiversity

Action number	Priority to address	Action	Numerical target(s) (where appropriate) / or other means of measuring success	Organisation(s) who will deliver the action	Timeframe for delivery inc. intermediary milestones where appropriate
B3	Protecting and enhancing biodiversity through the planning system	Consider for inclusion within Biodiversity SPDs guidance that as part of the application process for new developments, biodiversity is to be clearly integrated into scheme design, and where practical a landscape-led approach should be required for all major developments (10 houses), ensuring they align to local green infrastructure objectives For details of biodiversity delivery through landscaping design to be included alongside the rest of the planning application from the outset Purpose: Incorporate Landscaping into Planning Decisions	Agreement that all authorities have adopted this approach	Each council - (LPA) individual; HCC (Building Futures)	2023/24
B4	Evidence gathering and establishing appropriate resources to support biodiversity enhancements	Investigate opportunities for capturing ecological data from planning applications to feed into Herts Ecological Records Centre (HERC) Purpose: Enhance Local Biological Records	Agreement of suitable mechanism	HCC (Hertfordshire LEADS)	2022/23
B5	Protecting and enhancing biodiversity through the planning system	Develop and provide good practice ecological design guidance for dissemination by planners Purpose: Establish Local Best Practice	Guidance produced	HCC (Hertfordshire LEADS)	2023/24
B6	Protecting and enhancing biodiversity through the planning system	Enabling Local Planning Authorities (LPAs) to benchmark the breadth of and aspirations within their	Briefing note to LPAs	HCC (Hertfordshire LEADS)	2021/22

HCCSP: Strategic Action Plan for Biodiversity

Action number	Priority to address	Action	Numerical target(s) (where appropriate) / or other means of measuring success	Organisation(s) who will deliver the action	Timeframe for delivery inc. intermediary milestones where appropriate
		<p>biodiversity-related planning policies by collating existing local plan and SPD policies across the County to encourage LPAs to consider how they align with other local districts and to enable mutual learning</p> <p>Purpose: Benchmarking to Optimise Biodiversity Enhancement Through Planning Policies</p>			
B7	Protecting and enhancing biodiversity through the planning system	<p>Organising training for Officers and Members to assist them in creating locally distinctive Biodiversity Net Gain policies or SPDs, and applying this to strategic allocations, masterplans and design codes.</p> <p>Purpose: Enhance Biodiversity in a Locally Distinct Way</p>	Training at least one officer from each district	HCC (Hertfordshire LEADS)	First Round: 2022/23; ongoing

C. Actions which rely on partners (HCCSP members) encouraging, influencing, or facilitating others to change

Action number	Priority to address	Action	Numerical target(s) (where appropriate) / or other means of measuring success	Organisation(s) who will deliver the action	Timeframe for delivery inc. intermediary milestones where appropriate
C1	Enhancing biodiversity through suitable land management and other operations, delivered directly by HCCSP members or through partnership working with multiple stakeholder engagement	Review of opportunities and barriers for local authorities to deliver biodiversity enhancements through greenspace management, and identify opportunities for wider partner engagement Purpose: Gap Analysis	Summary report production	HSOG	2023/24
C2	Enhancing biodiversity through suitable land management and other operations, delivered directly by HCCSP members or through partnership working with multiple stakeholder engagement	Continually review and identify opportunities to secure funding to support biodiversity through partnership engagement; and identify and specify projects which could be funded through external mechanisms Purpose: Funding	Report annually on funding application activity	HSOG	2021/22 ongoing
C3	Lobbying or arguing the case for government to make changes in national policy	Explore appropriate opportunities for lobbying or making evidence-based arguments to government in relation to the safeguarding and enhancement of public greenspace and planning policy as it relates to biodiversity Purpose: Influence and Engagement	Report annually on activity	HSOG	2021/22 ongoing
C4	Raising awareness of the value and need for protection of biodiversity	Explore the opportunity to develop a partnership bid for external funding to develop and deliver a programme	Report of viable options Bid made	HSOG to explore most appropriate	2022/23

HCCSP: Strategic Action Plan for Biodiversity

Action number	Priority to address	Action	Numerical target(s) (where appropriate) / or other means of measuring success	Organisation(s) who will deliver the action	Timeframe for delivery inc. intermediary milestones where appropriate
	and promoting behaviour change among residents and businesses	of communications, outreach, awareness raising, and behaviour change in order to engage and encourage Hertfordshire's communities to take action which supports local wildlife. Purpose: Engagement and Behaviour Change		option	
C5	Enhancing biodiversity through suitable land management and other operations, delivered directly by HCCSP members or through partnership working with multiple stakeholder engagement	HCCSP members to engage with the development of a Local Nature Recovery Strategy for Hertfordshire, in collaboration with Natural England and other local partners, and for this to link with the developing Green Infrastructure Strategy for Hertfordshire Purpose: Planning for Nature Investment and Delivery	Annual progress report	HCC	2022/23 onwards
C6	Enhancing biodiversity through suitable land management and other operations, delivered directly by HCCSP members or through partnership working with multiple stakeholder engagement	Engage with Hertfordshire's farming community and other private landowners to explore opportunities to deliver improvements for biodiversity and other public goods, through management which synchronises with individual business models and considers collaboration at a landscape scale Purpose: Support Biodiversity through Land-Owner Advice	Annual progress report	HCC (CRoW) and individual councils in collaboration with other partners	2022/23
C7	Raising awareness of the value and need for	Explore initiatives to expand and enhance natural habitats and	Report recommendations to	HSOG	2021/22 and ongoing

HCCSP: Strategic Action Plan for Biodiversity

Action number	Priority to address	Action	Numerical target(s) (where appropriate) / or other means of measuring success	Organisation(s) who will deliver the action	Timeframe for delivery inc. intermediary milestones where appropriate
	protection of biodiversity and promoting behaviour change among residents and businesses	biodiversity through community engagement: for example, increasing tree canopy cover Purpose: Green Infrastructure and Public Engagement	HCCSP		
C8	Lobbying or arguing the case for government to make changes in national policy	Each partner to consider supporting the Climate and Ecological Emergency Bill (CEE) Purpose: Political Support	Individual authorities to explore	Each council – (individual)	2021/22
C9	Enhancing biodiversity through suitable land management and other operations, delivered directly by HCCSP members or through partnership working with multiple stakeholder engagement	Take a strategic approach to landscape and catchment management through effective engagement with partners in neighbouring authority areas outside Hertfordshire, as well as organisations operating across county boundaries Purpose: Partnership Engagement	Initially engage with the Buckinghamshire Pilot Local Nature Recovery Strategy The engagement of partners in the development of Hertfordshire's LNRS	HSOG; HCC (Hertfordshire LEADS), each LPA (collaboration)	2022/23 Specific actions dependant on the upcoming Environment Bill
C10	Enhancing biodiversity through suitable land management and other operations, delivered directly by HCCSP members or through partnership working with multiple stakeholder engagement	Explore with members and colleagues the full range of opportunities to maximise biodiversity on council-owned land whether continuing to be held by the authority or disposed of Purpose: Maximise the Potential for Development to Deliver a Net Gain in Biodiversity	Report on project viability	Each council (collaboration)	2023/24
C11	Enhancing biodiversity through suitable land	Deliver at least 5 new ponds each year for the next 5 years within target	Increase in ponds	HCC (CRoW)	2022/23 onwards

HCCSP: Strategic Action Plan for Biodiversity

Action number	Priority to address	Action	Numerical target(s) (where appropriate) / or other means of measuring success	Organisation(s) who will deliver the action	Timeframe for delivery inc. intermediary milestones where appropriate
	management and other operations, delivered directly by HCCSP members or through partnership working with multiple stakeholder engagement	areas to secure and expand existing greater-crested newt populations Purpose: Habitat Creation and Species Protection			
C12	Evidence gathering and establishing appropriate resources to support biodiversity enhancements	Investigate opportunities for establishing a Hertfordshire-wide intern/traineeship programme to foster environmental/sustainability skills within the county Purpose: Ensure Future Workforces in Support of Biodiversity	Report of recommendations	HSOG	2023/24
C13	Evidence gathering and establishing appropriate resources to support biodiversity enhancements	Review mechanism for completing an assessment of Hertfordshire's rivers to identify opportunities for habitat enhancement Purpose: Protect Globally Scarce Chalk River Habitat	Agreement of mechanism	HSOG	2022/23

7. Funding

- 6.1 It is expected that the primary cost associated with these actions will be in the form of officer time; that of the HCCSP personnel and relevant County/District Council officers.
- 6.2 The procurement for the biodiversity baseline has now concluded and contracts awarded to a tender submission within the provisional budget already agreed.
- 6.3 Further to this there may be cost implications for the development of a Biodiversity Communications Plan, and therefore different options will be explored for this.
- 6.4 Funding will be required for increased delivery of habitat creation and restoration projects. Some funding is expected to become available as a result of forthcoming legislation and the new Environmental Land Management Scheme (ELMS). Further funding may also become available through central government grants or via other non-governmental grants through partnership collaboration. However, further funding may also be required in addition to existing budgets.

7. References

¹ [A Biodiversity Action Plan for Hertfordshire](#)

² [Hertfordshire State of Nature Report](#)

³ [IPBES Global Assessment Summary for Policymakers, 2019](#)

⁴ [Food system impacts on biodiversity loss | UNEP - UN Environment Programme// Chatham House](#)

⁵ [Final Report - The Economics of Biodiversity: The Dasgupta Review - GOV.UK](#)

⁶ [EU Biodiversity Strategy to 2020](#)

⁷ [EU Habitats Directive](#)

⁸ [EU Wild Birds Directive](#)

⁹ [Natura 2000 Network](#)

¹⁰ [The Conservation of Habitats and Species \(Amendment\) \(EU Exit\) Regulations 2019](#)

¹¹ [The Conservation of Habitats and Species Regulations 2017](#)

¹² [Biodiversity 2020: A strategy for England's wildlife and ecosystem services](#)

¹³ [A Green Future: Our 25 Year Plan to Improve the Environment](#)

¹⁴ [Commitment to protect 30% of land by 2030](#)

¹⁵ [A Biodiversity Action Plan for Hertfordshire](#)

¹⁶ [State of Nature Report](#)

¹⁷ [Hertfordshire State of Nature Report](#)

¹⁸ [Hertfordshire Green Infrastructure Plan, 2011](#)

¹⁹ [Sustainable Hertfordshire Strategy, 2020](#)

HCCSP: Strategic Action Plan for Biodiversity

- ²⁰ [Hertfordshire's State of Nature Report, 2020](#)
- ²¹ [Hertfordshire's State of Nature Report, 2020](#)
- ²² [The State of the Environment: Soil – The Environment Agency](#)
- ²³ [Hertfordshire County Council, 2019/2020 Annual Prospectus and Budget](#)
- ²⁴ [Data commons website](#)
- ²⁵ [Increase in vandalism and anti-social behaviour on nature reserves during lockdown - Herts Wildlife Trust website](#)
- ²⁶ [State of Nature, 2019, UK Full Report](#)
- ²⁷ [Hertfordshire's State of Nature Report, 2020](#)
- ²⁸ [Met Office, 'Effects of Climate Change'](#)
- ²⁹ [Met Office, 'Effects of Climate Change'](#)
- ³⁰ [Met Office, 'Effects of Climate Change'](#)
- ³¹ [Hertfordshire's State of Nature Report, 2020](#)
- ³² [Hertfordshire's State of Nature Report, 2020](#)
- ³³ [Making Space for Nature: a review of England's wildlife sites and ecological networks \(The Lawton Review\), 2010](#)
- ³⁴ [Hertfordshire's State of Nature Report, 2020](#)
- ³⁵ [HM Government, Ten Point Plan for a Green Industrial Revolution](#)
- ³⁶ [The Carbon Plan: Delivering our Low Carbon Future, 2011](#)
- ³⁷ [Woodland Carbon Fund](#)
- ³⁸ [Hertfordshire's State of Nature Report, 2020](#)
- ³⁹ [Hertfordshire's State of Nature Report, 2020](#)
- ⁴⁰ [A National Framework for Water Resources – The Environment Agency](#)
- ⁴¹ [Hertfordshire's State of Nature Report, 2020](#)
- ⁴² [Hertfordshire's State of Nature Report, 2020](#)
- ⁴³ [Sustainability Reductions - Affinity Water website](#)
- ⁴⁴ [Lee Valley Regional Park's Biodiversity Action Plan 2019/2029](#)
- ⁴⁵ [Green Infrastructure Strategy, Colne and Crane Valleys, 2019](#)
- ⁴⁶ [Monitor of Engagement with the Natural Environment](#)
- ⁴⁷ [Children and nature identification survey](#)
- ⁴⁸ [Brits losing touch with nature, finds research - Countryfile website](#)
- ⁴⁹ [Artificial grass increase](#)
- ⁵⁰ [Front gardens turned into hardstandings](#)
- ⁵¹ [The Environment Bill 2019-21](#)
- ⁵² [The Environmental Land Management Scheme – An Overview](#)
- ⁵³ [Planning for the Future White Paper](#)
- ⁵⁴ [The England Tree Strategy](#)
- ⁵⁵ [The England Trees Action Plan 2021-2024](#)

1. Appendix A

The primary piece of legislation for the protection of wildlife (animals, flora and fauna), and the countryside is the Wildlife and Countryside Act 1981. The act prohibits and limits certain actions relating to wild animals, including taking, injuring, and killing, as well as disturbing places of shelter and protection. The 1991 amendment makes it an offence to knowingly cause or permit to cause some of these actions.

The *Planning and Policy Guidelines* around Nature Conservation (1994) make protected species presence a material consideration for local planning authorities where the proposed development would likely result in harm to the species or its habitat.

The Town and Country (Trees) Regulations 1999 allows local planning authorities to institute a Tree Preservation Order to protect single trees or groups of trees and woodland.

The Countryside and Rights of Way (CRoW) Act 2006 makes provision for public access to the countryside, including the “right to roam”, and enables the making of traffic regulation orders for the purpose of conserving the natural beauty of an area.

The Act also places a duty on local authorities and other public bodies to show regard for biodiversity conservation and to keep lists of priority species and habitats for which conservation measures should be taken.

The Natural Environment and Rural Communities Act 2006 enabled the establishment of a new agency, Natural England. It also places a duty on public authorities and bodies to conserve biodiversity and requires government departments and local authorities to make consideration of biodiversity in the carrying out of their functions.

In addition to the aforementioned legislation, various other Acts relate to or give protection to specific species, features or habitats, such as The Protection of Badgers Act 1992, The Wild Mammals Protection Act 1996, and The Hedgerows Regulations 1997.

Furthermore, the Agriculture Act 2020 provides legislative framework for replacement agricultural support schemes following the UK’s withdrawal from the EU and its Common Agricultural Policy and provides a range of powers to implement new approaches to farm payments and land management. Under the Environmental Land Management Scheme (ELMS) farmers and landowners will be paid public money when they deliver public goods, such as clean air and water, biodiversity, and habitat management.