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Foreword



Carmel Kelly, Cathaoirleach, Kildare County Council

I am delighted to introduce Kildare's Biodiversity Action Plan 2026-2031. This plan builds upon the foundations laid out in the "Kildare Heritage Plan" 2019-2025 which emphasised the importance of natural heritage to our lives and in our communities. Having a plan specifically for natural heritage and biodiversity is important at this critical time in society, as we tackle the global biodiversity crisis. The need for unprecedented levels of cooperation at all levels has been made clear in Ireland's National Biodiversity Action Plan 2023-2030, where it lists the first objective as "Adopt a Whole-of-Government,

Whole-of-Society Approach". Kildare's Biodiversity Action Plan 2026-2031 embraces and demonstrates this very well; both in how it has been prepared, and in how it will be implemented as it highlights the central importance of collaboration, cooperation and partnerships.

We are very lucky in Kildare to have highly engaged and proactive communities and organisations working towards nature protection, conservation and restoration. These individuals and groups have contributed time and effort into supporting the development of this plan, and for this we are very grateful. I would also like to acknowledge the role of the individuals on Kildare Biodiversity Working Group, and the Heritage Forum, who have been instrumental in the development of this Plan.

The actions herein, when implemented, will guide the sustainable development of the county in such a way that will ensure that our natural heritage is protected for the benefit of current and future generations.



Sonya Kavanagh, Chief Executive, Kildare County Council

I am very pleased to introduce the Kildare Biodiversity Action Plan 2026-2031 and to thank the many contributors who have generously given their time to guide and support the plan preparation process.

This plan is an important and positive step towards facing the global biodiversity crisis with relevant local action. It sets out a clear path forward to respond in an inclusive, collaborative and meaningful way to the challenge of biodiversity loss in County Kildare.

Kildare Biodiversity Action Plan 2026-2031 has been developed through extensive consultation with local communities, environmental groups, organisations, landowners and agencies. The plan includes key objectives and actions aimed at reversing biodiversity loss, supporting conservation and restoration efforts and tackling threats and pressures impacting on our natural environment. In order to protect and conserve our natural heritage, nature and

biodiversity, an inclusive, collaborative, whole-of-society approach is required. This plan identifies opportunities for such cooperation.

I would like to acknowledge the role of the Heritage Council for their support and as a partner of the Local Authority Biodiversity Officer Programme. I would also like to acknowledge the assistance of the Kildare Biodiversity Working Group, and the Kildare Heritage Forum for their time, input and dedication to delivering this Plan.

I look forward to the implementation of the plan, which will bring significant benefits for our wildlife and habitats, and for the people of Kildare, as we move towards a more nature-connected, climate resilient society.

Heritage Council Foreword - tbc



Acknowledgements

This project is jointly funded by Kildare County Council and The Heritage Council.

Kildare County Council would like to acknowledge the work of the County Kildare Biodiversity Working Group, which worked with the support of the County Kildare Heritage Forum; the contributions and guidance from the members of the Working Group throughout the development of this plan have been invaluable.

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Chapter 1 - Introduction

Defining Biodiversity

Biodiversity is a word that is often used interchangeably with 'nature'. It comes from the words 'biological diversity' and refers to the range and variety of all living things, including plants, animals, fungi, and microorganisms. It is the result of millions of years of evolution.

Biological diversity is important on a number of levels, including:

- Genetic diversity for example consider the variations between humans in terms of body shape, size, complexion or hair colour of individuals. Diversity at this, the genetic level, of a species is important for that species' long-term adaptability, through for instance differential response and resilience to changing or adverse environmental conditions.
- 2. Species diversity for example consider the many types of birds that can be found in Ireland. Each species is unique and has adapted over thousands upon thousands of years to fill a particular niche in its environment. Each species plays a complex role in their ecosystem that typically contributes to an approximate equilibrium within that

- system for example by consuming prey, by changing behaviours of prey species, by physically changing the environment through movements or actions. They also in turn can be food for other species, thus supporting diversity further up the food chain. The full extent of the roles, or the niches, that species play in the complex web of life is often difficult to assess, measure or fully account for.
- 3. Ecosystem diversity for example in Ireland we have a wide range of ecosystems including grasslands, peatlands, woodlands, river, and marine. Each ecosystem has a unique assemblage of habitats, plants, animals and other living things; all interacting in a myriad complex ways, as they have done in many cases, in a finely tuned way, for millennia.

The term biodiversity can also extend to how all these living parts interact, as 'functional diversity'; this relates to the range of biological processes, functions and characteristics within ecological systems.

Why is biodiversity important?

Nature has an intrinsic value in and of itself, and therefore deserves protection based on that merit alone.

In addition, 'biodiversity' or nature meets the most fundamental and critical physical needs for human survival on planet Earth, through the services that it delivers including provision of oxygen, nutrients, calories, fuel for heat, fibres for clothing, materials for building shelter, clean water, clean air, flood control and climate regulation. The biodiversity around us also helps us meet other less tangible, yet important requirements, including cultural, recreational and spiritual needs.

High biodiversity levels are associated with more resilient ecosystems and stable environments, but unfortunately, we know that biodiversity is in decline locally, nationally and worldwide, with habitat loss being the main driver (for more detail on these trends, see Chapter 3).

Scientific research and understanding (as well as plain common sense perhaps!), tell us that long-term human well-being is inextricably linked with and is reliant upon nature continuing to provide the ecosystem services outlined above. It is therefore vital that the declines in biodiversity are halted and reversed, not just for its intrinsic value, but also from a very basic human-centred perspective.

Ecosystem Services

How Biodiversity is helping us

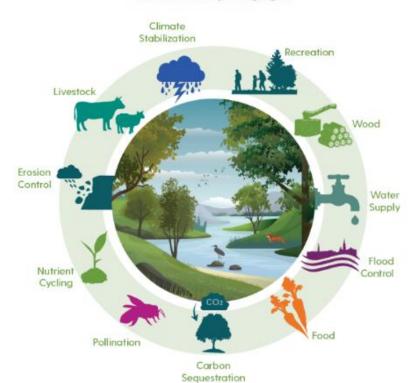
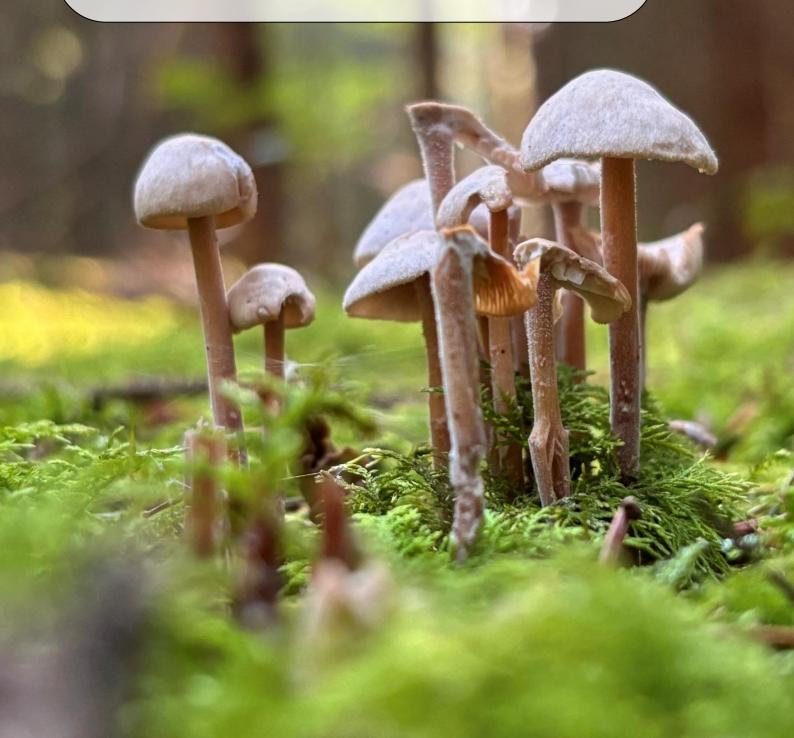


Figure 1: Ecosystem Services

The Vision Statement

"Our vision in Kildare is for a county that leads the way with a step-change in biodiversity protection; where conservation and restoration are prioritised, through urgent, inclusive and targeted actions. These actions will benefit nature, facilitate people connecting to nature, and will grow a legacy of thriving, resilient and sustainable communities in the county."



Kildare's Local Authority Biodiversity Action Plan

Role of Local Authority Biodiversity Action Plans (LABAP)

Local Authority Biodiversity Action Plans...

- provide a structured approach to nature conservation at the local authority level.
- help develop objectives, strategies and actions that are needed to protect and restore biodiversity, within respective local authority areas.
- integrate local, national and international biodiversity commitments and priorities.
- inform the work of the Kildare County Council Biodiversity Office at a local level.

The County Kildare Biodiversity Action
Plan 2026-2031 sets out the strategic
objectives and actions that Kildare County
Council will work to deliver, in partnership
with key stakeholders, over the five-year
timeframe of the Plan.

This plan has been produced following the path laid out by the Heritage Council's Local Authority Biodiversity Action Plan Guidelines.

The priorities and actions in this new
County Kildare Biodiversity Action Plan
2026-2031 will reflect the changes that have
occurred in the physical environment and
wider societal contexts, corresponding to
new realities relating to ecology, legislation,
policy and Directives.

This is the second such plan produced by Kildare County Council; the first **County** Kildare Biodiversity Action Plan covered the period 2009 to 2014. In the meantime, considerations for Kildare's biodiversity have been incorporated into the natural heritage section of the local authority's Heritage Plans, including the most recent one: the County Kildare Heritage Plan 2019-2025. The new Biodiversity Action Plan will state the main actions that the council will take relating to biodiversity, whilst the new County Kildare Heritage Plan 2026-2031 will continue to include the higher-level objectives for all heritage, including natural heritage, in the county from the local authority's perspective.

The Wider Policy Context

The County Kildare Biodiversity Action Plan, like any LABAP, is not an isolated body of work. Through the actions listed in Chapter 5, this Plan aligns with, complements, and reinforces commitments that already exist relating to biodiversity at local, national and international levels.

To address catastrophic biodiversity loss globally, the **United Nations Convention on Biological Diversity** established in 1992, and the **United Nations Sustainable Development Goals** adopted in 2015, provide an overarching international framework with which to work.

These global initiatives have developed targets around wildlife and habitat conservation, ecosystem restoration and sustainable development that set the scene for regional and local action.

At the European level these international ambitions have been embedded into the **EU Biodiversity Strategy to 2030.**



Figure 2: The United Nations Sustainable Development Goals

At the national level in Ireland the most relevant plan is the **National Biodiversity Action Plan 2023-2030** (NBAP).

The overarching Strategic Objectives therein are:

- Adopt a Whole of Government, Whole of Society Approach
- 2) Meet Urgent Conservation and Restoration Needs
- 3) Secure Nature's Contribution to People
- Enhance the Evidence Base for Action on Biodiversity
- 5) Strengthen Ireland's Contribution to International Biodiversity Initiatives

Under these five objectives there are 195 actions. Local authorities have responsibilities relating to 23 of these actions; these actions are listed in **Appendix 1** below.



Ireland's 4th National Biodiversity Action Plan



Figure 3: Cover Page of Ireland's National Biodiversity Action Plan

Other important national plans include, the Water Action Plan, the National Planning Framework Ireland 2040, Ireland's Nature Restoration Plan (by the end of 2026), the Heritage Council Strategic Plan 2023-2028 and the All-Ireland Pollinator Plan. At the local level Kildare's County **Development Plan**, the Kildare Climate Action Plan, the County Kildare Heritage Plan, and the Kildare County Council Corporate Plan 2025-2029 align with national and international obligations. Throughout the development of this, the County Kildare Biodiversity Action Plan 2026-2031, cognisance has been taken of these local plans, with an aim to complement, support and align with them wherever possible. A more detailed account of these strategies and plans can be found in **Appendix 2**.

Legislation

Relevant legislation at the EU level includes: The Birds Directive, The Habitats Directive, The Water Framework Directive, and The Nature Restoration Law. At a national level the 'Wildlife Act' and the Flora Protection Order, 2015, the European Union (Invasive Alien Species) Regulations 2024 and the Planning and Development Acts are central to the legal protection of nature. A more detailed account of the relevant legislation can be found in Appendix 3.

The Biodiversity Working Group

A Biodiversity Working Group is a non-statutory advisory group established by the local authority to provide observations and advice on the preparation, implementation and evaluation of a Local Authority
Biodiversity Action Plan (LABAP) such as this one. The working group collaborates with the Local Authority Biodiversity Officer to develop the plan. Once the plan is finalised the working group assists by providing feedback and guidance on the implementation of the objectives and actions, and with the monitoring of the progress and impact of the plan.

The Biodiversity Working Group is typically made up of representatives from key stakeholder groups and organisations.

There is no prescribed number of members per group. It is important to have a diversity of voices at the table, and a strong network of engaged stakeholder representatives to participate in the process of a LABAP development. However, having a lower number of representatives can arguably

lead to more efficient decision-making, and with speedier progress with the stages and tasks at hand. In trying to balance these two pressures, Kildare's BWG had 27 members, for the key development phases.

The following sectors are represented on the Kildare Biodiversity Working Group:

- Local and national environmental NGOs
- Local heritage and biodiversity organisations
- State agencies with large landholdings and/or with core work of relevance to biodiversity
- Local development and business representatives
- Agricultural representatives
- Locally elected representatives
- Local Authority Staff with roles and responsibilities relating to biodiversity (e.g. Climate team, Parks Team, Planning Department)





Table 1: KCC Biodiversity Working Group Members 2025

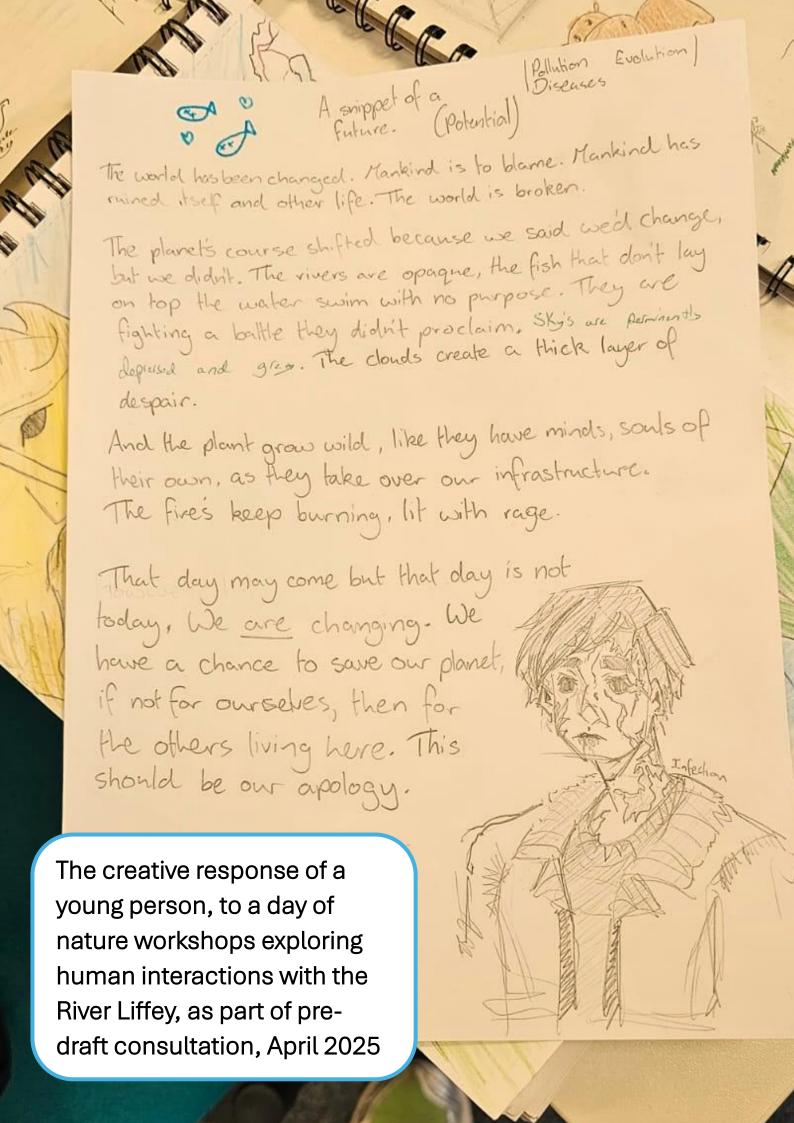
	Organisation	Name
1	KCC Elected Rep	Cllr Noel Heavey
2	KCC Elected Rep	Cllr Brian O'Loughlin
3	KCC Elected Rep	Cllr Claire O'Rourke
4	NPWS	Killian Brennan
5	Coillte	Niall O'Neil / Mary Clifford
6	BnaM	Mark McCorry
7	Inland Fisheries Ireland	Roisin O Callaghan
8	Teagasc	Fiona Doolan
9	Kildare Birdwatch	Neil Bourke
10	An Taisce	Elaine McGoff
11	Waterways Ireland	Hazel Conway
12	Irish Farmers Association	Denis Halpin
13	Farming For Nature	Norman Dunne
14	Kildare Leader Partnership	Maeve Howe
15	Tourism/LEO	Helen Mulhall
16	LAWPRO	Ruth Gaj McKeever
17	Public Participation Network	Brian Mc Cabe
18	KCC Community Climate Action Officer	Stephen O'Reilly
19	KCC Environmental Awareness Officer	Richard Curtin
20	KCC Forward Planning	Martin O'Loughlin
21	KCC Forward Planning	David Jordan
22	KCC Parks Department	Aoife McMullin
23	KCC Forward Planning	Carol Forde
24	KCC Heritage & Nature Team Manager	Patricia Hyland
25	KCC Planning Ecologist	Dr. Mary O'Connor
26	KCC Heritage Officer	Dara Wyer
27	KCC Biodiversity Officer	Dr. Meabh Boylan

Drafting the Plan - The Process Explained

The various stages of the plan development process are outlined and summarised below in Table 2, and in the images and information panels that follow.

Table 2: Plan Development - The Timeline

Time period & Stage	Steps Taken	
Autumn 2024 Preparation	 Status Report on Biodiversity in Kildare developed Engagement with Senior Management, about process and establishment of the Biodiversity Working Group Key stakeholder engagement events held 	
Spring 2025 Vision Statement	 Agreed on the vision for the Plan with the Biodiversity Working Group 	
Spring/Summer 2025 Pre-Draft Public Consultation	 Developed a Discussion Paper Held a six-week period of meetings and consultation events to invite submissions Hosted a live online submissions portal 	
Summer 2025 Plan Development	 Considered submissions, and identified the issues and needs of community Agreed objectives and actions with the Biodiversity Working Group Prepared Draft Plan AA and SEA Screening completed 	
Autumn 2025 Plan Review	 Presented the Draft Pan to the Strategic Policy Committee (SPC) for comment and approval. 	
Autumn 2025 Public Review	 Holding public consultation on the Draft Plan via live online submissions portal, in-person and online meetings, throughout the county. 	
Winter 2025 Plan Approval	 Revision of the Draft Plan in light of consultation submissions, and present to Senior Management, SPC, and the full council for approval. 	
Winter 2025/2026 Publication	 Publication and launch the County Kildare Biodiversity Action Plan. 	



Pre-Draft Consultation Events 2024-2025

- Informal targeted events (3no.), Autumn 2024
- Online public consultation portal with Discussion Paper, live for six weeks,
 Spring 2025
- Formal public consultation events (5no.), Spring 2025
- Formal online consultation event (1no.), Spring 2025
- Youth focused consultation (1.no), April 2025

Kildare Biodiversity Action Plan - Draft Consultation Events 2025

- Online consultation portal, live for six weeks, Autumn 2025
- Formal in-person and online consultation events, Autumn 2025





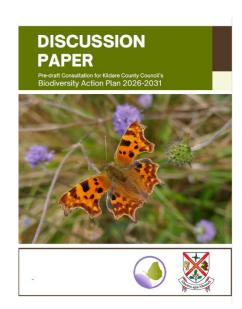
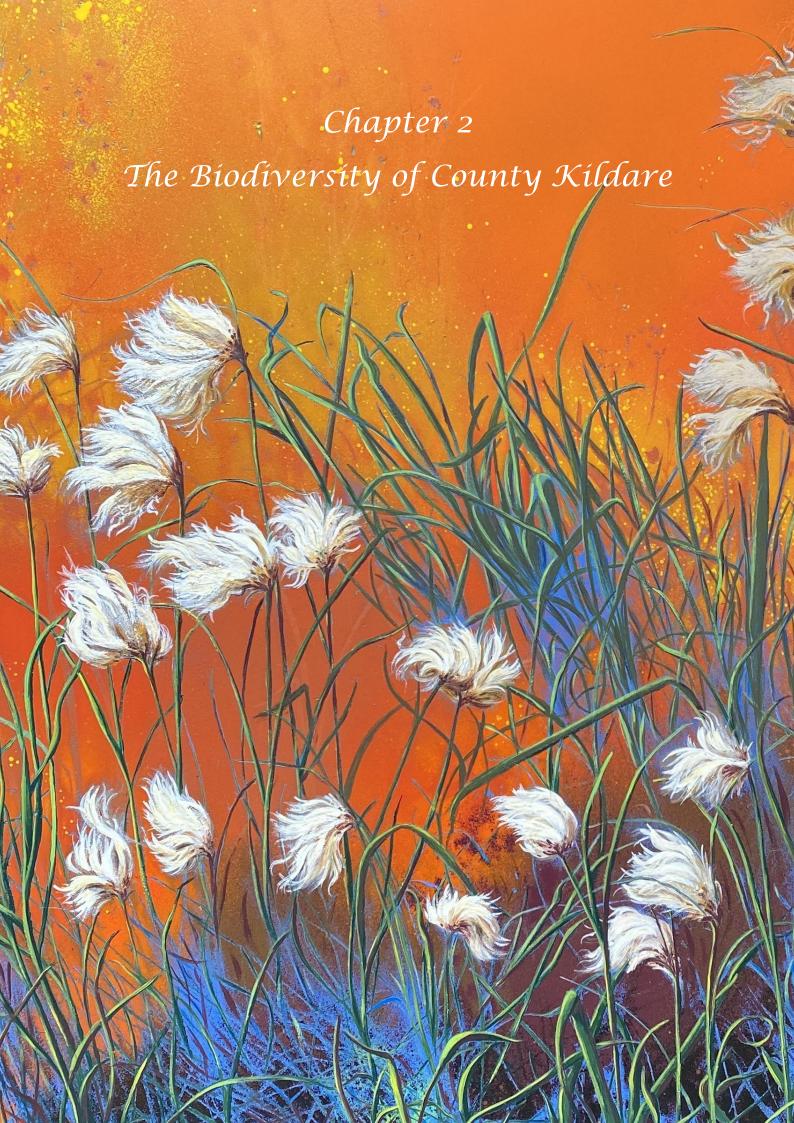




Image 2: Selection of images from the consultation events October 2024 to June 2025



Chapter 2 - The Biodiversity of County Kildare

County Kildare has a rich and diverse natural heritage, deeply intertwined with its unique landscape, geology, soils and past land management. The county is in the East Midlands of Ireland and as of the 2022 census, Kildare has a population of approximately 247,773, with large urban centres in the north of the county, these urban areas are increasing in size with current estimates, as of 2025, placing the county at over 250,000 and growing.

The county's wildlife habitats are varied, including peatlands, grasslands, woodlands, hedgerows, rivers, and canals.

Geology, Soils and Key Habitat Types

Geologically, Kildare is characterized by a low-lying, fertile plain, punctuated by small hills such as the Hill of Allen and Dunmurry Hill. The eastern area of the County bordering Co. Wicklow and the south Co. Dublin features upland areas, adding to the county's topographical diversity. The fertile lowland is predominantly agricultural, interspersed with bogs, fens, and an extensive network of rivers and canals, all of which play a crucial role in sustaining the region's biodiversity.

Kildare has a relatively varied geology with about six distinct general rock types. The soils in County Kildare are mainly made up of a type called luvisols. These soils have clay that has moved from the top layer to deeper down the soil profile. This makes them good for farming because they have a high clay content and can hold nutrients well.

Raised bogs, cover a large area of the western part of the county, circa 10,000ha of deep peatland remain in the County and some of the most easterly raised bogs in the country, e.g. the Kilberry boglands near Athy occur in Co. Kildare. These bogs have developed in old lake basins and in flooded drift depressions in the county with Mouds Bog being particularly well-preserved and an internationally important Special Area of Conservation. Remnant peat soils remain over a much larger area particularly in the west of the county with many areas of residual peatland reclaimed for agricultural pasture.

County Kildare has very limited native woodland and all areas of native woodland appear to have regenerated post clearance. Some areas where a native species assemblage may persist in small patches include areas such as the small NHA woodlands of Corballis Hill near Castledermot, Kilteel wood in the north of the County, and Killinthomas Wood. Elsewhere, deciduous woodlands are

derived from estate plantings, such as at Moore Abbey, Kildangan Stud and Carton Demesne. However, these sites often feature significant proportions of non-native species like sycamore, horse chestnut, beech and non-native conifer species such as firs, cypresses and spruces. On the other hand, afforestation has expanded since the mid-20th century to the present, with a significant amount of coniferous plantation woodlands both state-owned and private, having been developed throughout Kildare, particularly in the west of the county.

Away from the main rivers, open water patches are rare, offering limited value to habitats and species. Natural vegetation has persisted mainly along some riverbanks, though these areas have often been influenced by plantings. The Rye Water area and associated wetlands in Carton Demesne supports populations of two very rare whorl snail species, and the rare plant species green figwort while individual stretches along the Liffey River at Osberstown and Athgarvan are also of

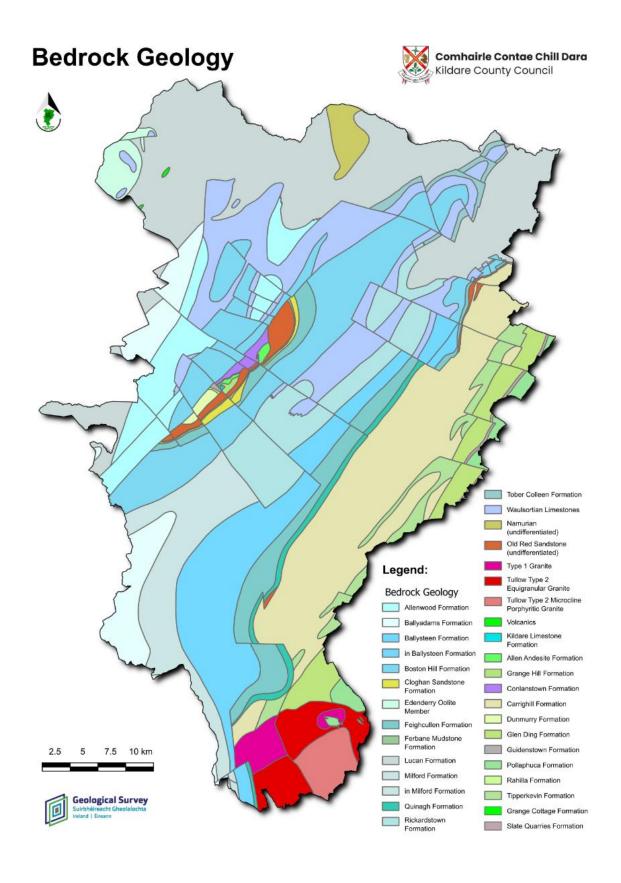
interest, with the riparian corridor at
Osberstown historically supporting a rare
willow tree species.

The artificial lake at Carton, Ballynafagh
Lake near Prosperous, and the Red Bog
Lake near Eadestown are all notable water
bodies in County Kildare. The largest
freshwater lakes in the County are
Blessington Lake and Leixlip Reservoir both
of which are artificial waterbodies.

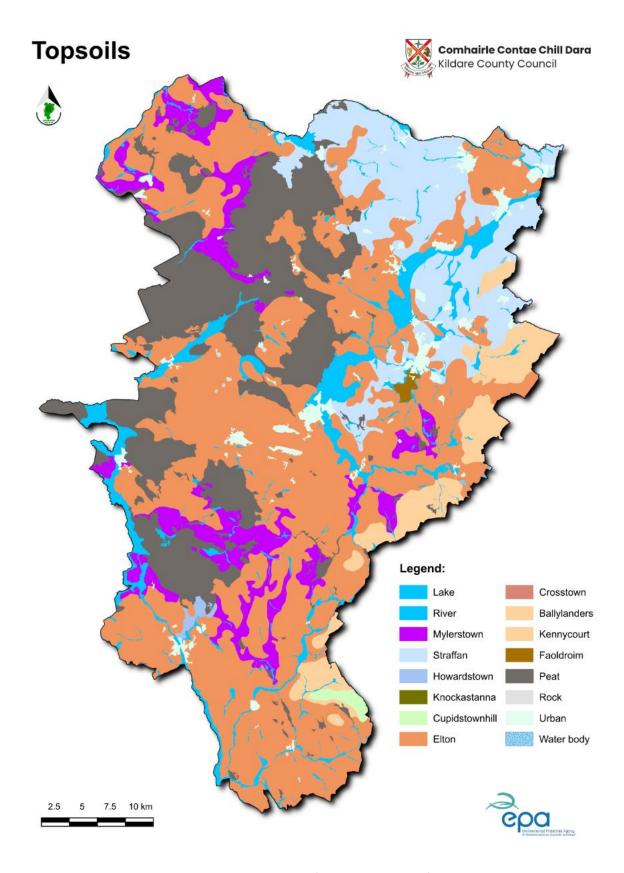
The rivers Barrow, Liffey and Rye Water are the most important river systems in the County with the Barrow and Rye Water Rivers being protected as SACs.

The Royal Canal and Grand Canals have rich flora that for the Royal Canal includes elements from the Shannon alongside typical aquatic plants. Both canals are protected as pNHAs within the County and support a large population of coarse fish and adjacent riparian habitats of importance.

Pollardstown Fen and Mouds Bog are the most important wetland sites in the County; both are protected respectively as European Sites for Alkaline Fen and Raised Bog habitats and associated species



Map 1: Bedrock Geology of County Kildare



Map 2: Topsoil of County Kildare

Designated Sites for Biodiversity

Kildare is home to a diverse range of habitats and associated species, many of which are protected through various conservation designations as legally protected sites. These protected sites play a crucial role in preserving the county's natural heritage and biodiversity.

The main types of protected sites in County Kildare are:

- Special Protection Areas (SPAs):
 These sites are designated under the Birds Directive to protect bird species and their habitats. These form part of the 'Natura 2000 European network' of important ecological sites.
- Special Areas of Conservation (SACs): These sites are established under the EU Natural Habitats Directive to conserve natural habitats and species. These form part of the 'Natura 2000 European network' of important ecological sites.

legally designated under the Wildlife
Act to protect habitats and species
of national importance in areas of
significant natural heritage, whilst
the Proposed Natural Heritage

Areas (pNHAs) are sites identified for their ecological value, awaiting formal designation (pNHAs are protected as sites of nature conservation value in the County Development Plan). Candidate Natural Heritage Areas (cNHAs) are similar, but they are in the process of being evaluated for potential protection.

- Nature Reserves: These are areas
 of importance to wildlife, protected
 under ministerial order. Most nature
 reserves are owned by the state, but
 some are managed by organizations
 or private landowners.
- Ramsar Wetland Sites: Designated under the Ramsar Convention for their international importance as wetlands.
- County Wetland Sites: Protected under various County Development Plans, these sites are recognized for their ecological and biodiversity value.

Natura 2000 Sites

Natura 2000 is a European network of important ecological sites. The EU Habitats Directive (92/43/EEC) placed an obligation on Member States of the EU to establish the Natura 2000 network. The network is made up of Special Protection Areas (SPAs), established under the EU Birds Directive (79/409/EEC), and Special Areas of Conservation (SACs), established under the Habitats Directive itself. Ireland's contribution to Natura 2000 is created under the European Communities (Natural Habitats) Regulations, 1997 (S.I. 94 of 1997 as amended by S.I. 233 of 1998 and S.I. 378 of 2005). These regulations transpose the EU directives into Irish national Law.

Special Areas of Conservation in Kildare

Special Areas of Conservation (SACs) are the premier wildlife conservation areas in Ireland and hold significant importance at the European level. These areas are designated under the "Habitats Directive" (92/43/EEC), which has been transposed into Irish law through the European Union (Natural Habitats) Regulations, and are considered to be protected European Sites as part of the Natura 2000 Network.

This designation provides protection to specific habitats and species, including priority habitats that require special attention. Currently, there are seven SACs designated in County Kildare.

Certain activities within SACs are restricted and can only be carried out with the permission of the Minister for Environment and Local Government. These restricted activities, known as "Notifiable Actions," vary depending on the type of habitat present at the site. Landowners are provided with copies of the relevant notifiable actions when a site is designated.



Image 3: Reed Bunting Emberiza schoeniclus

Pollardstown Fen SAC

This is one of the largest remaining large scale calcareous or alkaline fens in Ireland, covering approximately 220 hectares. It supports a variety of very important habitats including the priority habitats Calcareous Fens with Saw Sedge and Petrifying Springs. It supports a variety of rare plant species such as the Narrow-leaved Marsh Orchid and rare invertebrates such as the very rare snail species Geyer's Whorl Snail, Narrow-mouthed Whorl Snail, Desmoulin's Whorl Snail and the rare Marsh Fritillary butterfly. The fen is also home to several bird species, including the Snipe and the Reed Bunting.

Habitats and Species Protected as Qualifying Interests of the SAC

- *Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210]
- *Petrifying springs with tufa formation (Cratoneurion) [7220]
- Alkaline fens [7230]
- Vertigo geyeri (Geyer's Whorl Snail)
 [1013]
- Vertigo angustior (Narrow-mouthed Whorl Snail) [1014]
- Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]

Mouds Bog SAC

A raised bog of about 250 hectares, Mouds Bog is very important for its raised bog flora and fauna. It supports species like the Bog Rosemary and the Large Heath butterfly and birds such as Snipe and Meadow Pipit. The site is also important for its intactness, with an active layer of bog mosses *Sphagnum* spp. which is very rare in Europe.

Habitats and Species Protected as

Qualifying Interests of the SAC

- Active raised bogs [7110]
- Degraded raised bogs still capable of natural regeneration [7120]
- Depressions on peat substrates of the Rhynchosporion [7150]

River Barrow and River Nore SAC

These rivers are designated for their diverse habitats, including alluvial forests, bankside tall herb vegetation and floating river vegetation. They support species such as the Atlantic Salmon, and Otter. The rivers are also important for their populations of Lamprey species and White Clawed Crayfish (which has been impacted by crayfish plague).

Habitats and Species Protected as

Qualifying Interests of the River Barrow and
River Nore SAC (occurring in Co. Kildare)

 Water courses of plain to montane levels with the Ranunculion

- fluitantis and Callitricho-Batrachion vegetation [3260]
- Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]
- Petrifying springs with tufa formation (Cratoneurion) [7220]
- Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)
 [91E0]
- Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]
- Austropotamobius pallipes (Whiteclawed Crayfish) [1092]
- Lampetra planeri (Brook Lamprey)
 [1096]
- Lampetra fluviatilis (River Lamprey)
 [1099]
- Salmo salar (Salmon) [1106]
- Lutra lutra (Otter) [1355]

Red Bog, Kildare SAC

This site is a good example of a transition mire and quaking bog, covering around 100 hectares. The bog is significant for its hydrological and ecological functions.

Habitats and Species Protected as

Qualifying Interests of the SAC

Transition mires and quaking bogs
 [7140]

Ballynafagh Lake SAC

Ballynafagh Lake, located near Prosperous in Co. Kildare, is a shallow alkaline lake with emergent vegetation and is part of a Special Area of Conservation. The site supports diverse plant communities, including alkaline fen, and is home to rare species like Desmoulin's Whorl Snail and the Marsh Fritillary butterfly. The lake and its surroundings also host a variety of bird species, both breeding and wintering. Breeding birds include Little Grebe, Mallard, Moorhen, Coot, Snipe, and Water Rail. Additionally, Sedge Warbler, Reed Bunting, and Whitethroat breed within the site. Wintering waterfowl such as Whooper Swan, Teal, Mallard, Golden Plover, and Curlew are also found here.

Habitats and Species Protected as

Qualifying Interests of the Ballynafagh Lake
SAC

- Alkaline fens [7230]
- Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]
- Euphydryas aurinia (Marsh Fritillary)
 [1065]

Ballynafagh Bog SAC

Ballynafagh Bog SAC is located near
Prosperous in Co. Kildare. It is a raised bog
underlain by muddy limestones and clayrich tills. The site includes a core of uncut
high bog and surrounding cutover bog, with
habitats such as active raised bog,
degraded raised bog, and Rhynchosporion
vegetation (peat hollow vegetation). The bog
supports diverse plant species, including
bog mosses, White Beak-sedge, and Great
Sundew, and is home to breeding birds like
Merlin, Curlew, and Snipe. Despite damage
from afforestation, peat-cutting, and fire,
Ballynafagh Bog remains an important
conservation area.

Habitats and Species Protected as

Qualifying Interests of the SAC

- Active raised bogs [7110]
- Degraded raised bogs still capable of natural regeneration [7120]
- Depressions on peat substrates of the Rhynchosporion [7150]



Image 4: Reed bed Ballynafagh Lake SAC

Special Protection Areas (SPAs) for Birds in Kildare

SPAs are designated under the European Union Directive on the Conservation of Wild Birds. This directive mandates EU Member States to safeguard habitats for migratory and certain threatened bird species. SPAs are part of the Natura 2000 network, which aims to ensure the long-term survival of Europe's most valuable and threatened species and habitats. Member States are required to manage and conserve these areas, providing a general protection to birds of conservation interest within their territories.

The Poulaphouca Reservoir SPA

Poulaphouca Reservoir SPA, located in the western foothills of the Wicklow Mountains, was created in 1944 by damming the River Liffey for hydropower. It is designated under the EU Birds Directive, highlighting its

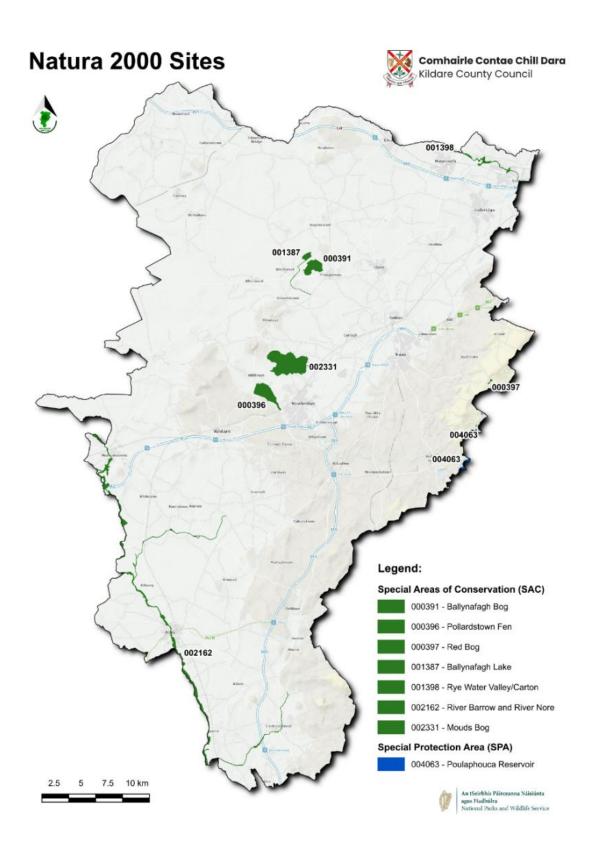
importance for bird conservation. The SPA is designated for the occurrence of populations of Greylag Goose and Lesser Black-backed Gull. The reservoir itself is the largest artificial lake in Ireland, covering an area of 22.26 km² and holding 166 billion litres of fresh water, a small portion of which is in Kildare. The lake has several varieties of fish, including wild brown trout, ferox trout, rainbow trout (stocked by ESB), coarse fish (roach, perch), and pike. The lake also supports a locally important population of Otters. It supports diverse plant species and habitats, including wet grasslands and sandy shores.

Species Protected as Qualifying Interests of the SAC

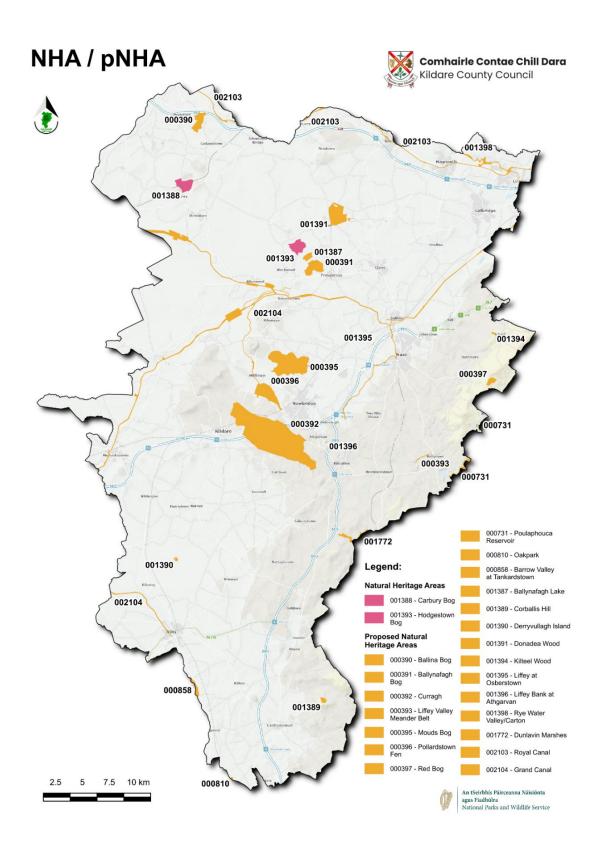
- Greylag Goose (Anser anser) [A043]
- Lesser Black-backed Gull (Larus fuscus) [A183]



Image 5: Otter, Lutra lutra



Map 4: Natura 2000 Sites of County Kildare



Map 5: NHA/pNHA Sites of County Kildare

Natural Heritage Areas in Kildare

In Ireland, Natural Heritage Areas (NHAs) are designated to protect sites of nature conservation value. The Wildlife (Amendment) Act 2000 provides the legal framework for the designation and protection of NHAs. Under the Act NHAs are legally protected from the date they are formally proposed. The National Parks and Wildlife Service (NPWS) oversees the protection of these areas, ensuring that any development or activity within NHAs does not harm the protected habitats and species. As a Local Planning Authority (LPA), Kildare County Council is required to consider biodiversity when assessing planning applications that may affect NHAs.

In 1981, An Foras Forbartha identified 27
Areas of Scientific Interest (ASI) in County
Kildare as part of a national inventory. These

areas were selected for their unique landscape, geological features, habitats, and species. Between 1991 and 1994, these areas of ecological interest were resurveyed and some subsequently designated as NHAs. Some of these sites also received dual designation as Special Areas of Conservation (SAC) and NHAs, only sites with stand-alone designation as NHAs are discussed here.

Before the formal designation under the Wildlife (Amendment) Act, the primary protection mechanism for NHAs was through County Development Plans.

Only two sites in Co. Kildare have been formally designated as NHA these are Ballina Bog and Carbury Bog (in bold in list below). Currently County Kildare has 16 p-NHAs/NHAs. These areas continue to be protected and managed to preserve their ecological significance.



Image 7: Kilteel Wood pNHA

County Kildare's Natural Heritage Areas			
1. Ballina Bog 00390	9. Grand Canal 02104		
2. Barrow Valley at Tankardstown	10. Hodgestown Bog 01393		
Bridge 00858			
3. Carbury Bog 01388	11. Kilteel Wood 01394		
4. Corballis Hill 01389	12. Liffey at Osberstown 01395		
5. Curragh 00392	13. Liffey Bank at Athgarvan 01396		
6. Derryvullagh Island 01390	14. Liffey Valley Meander Belt		
C. Dony vallagin totalia o 1000	00393		
7. Donadea Wood 01391	15. Oakpark 00810		
8. Dunlavin Marshes 01772	16. Royal Canal 0210		

Other Sites Protected for Nature

Nature Reserves in Kildare

A Nature Reserve is an area of importance to wildlife, which is protected under Ministerial order. Most are owned by the State. However, some are owned by organisations or private landowners, and persons interested in acquiring statutory protection for their lands can seek advice on this matter from the Department.

As outlined above, Polllardstown Fen is a SAC. It also carries the status of being a Nature Reserve – it is the county's only one.

Location: Situated on the northern margin of the Curragh approximately 3 km. west-

northwest of Newbridge. Latitude:

53.1835908 Longitude: -6.8457528

Description: The largest (130ha) remaining and best quality example of a spring fed fen in Ireland, possessing a large number of characteristic fenland species and communities.

Established: 1986

Ownership: State-owned Nature Reserve

Ramsar Wetland Sites in Kildare

Pollardstown Fen also has further protection owing to its listing as a Ramsar Site – it is the only one with the latter designation in the county.

County Wetland Sites

Between 2012 to 2014 Kildare County
Council commissioned the survey and
mapping of 141 wetlands in the county as
part of a three-year study called the County
Kildare Wetland Survey. This study found
that wetlands covered an estimated 8,242
hectares or 4.9% of County Kildare which
has a total surface area of approximately
1,695 km2. These sites are protected via the
County Development Plan via

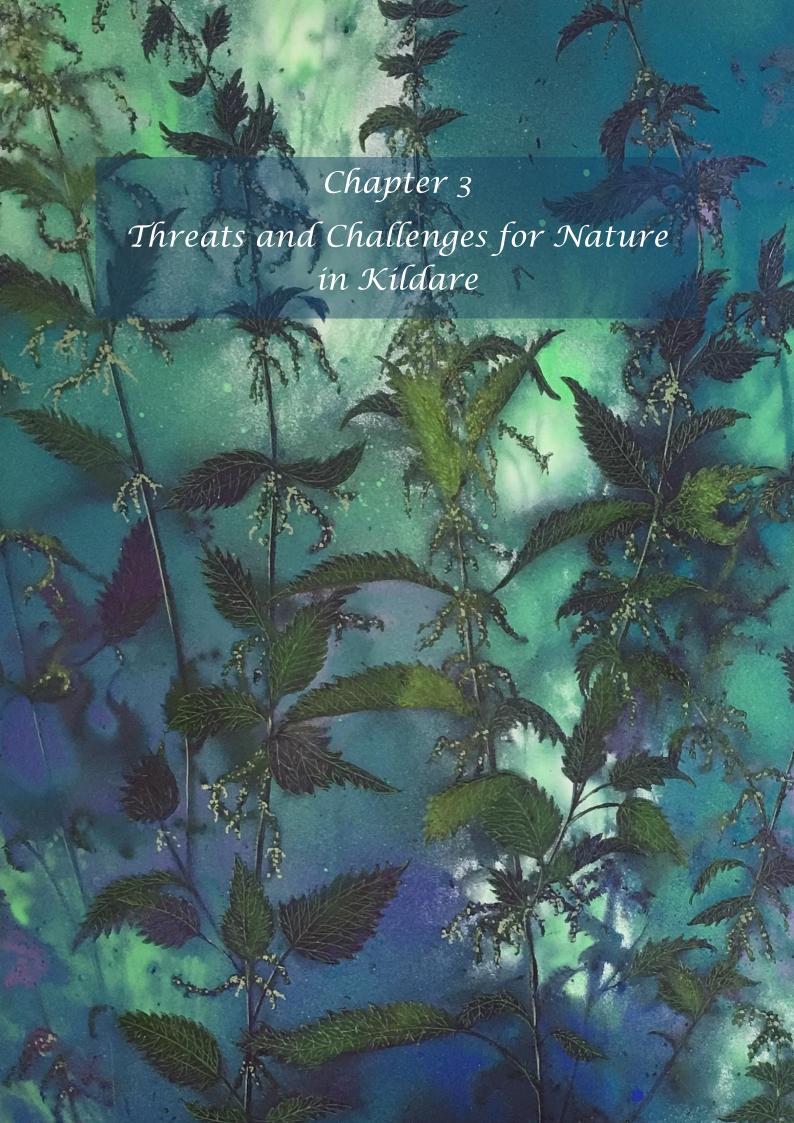
- objective BI O49 "Protect wetland sites that have been rated A (International), B (National) C+ (County) and C (Local) importance as identified in the County Kildare Wetlands Survey 2012-2014. Any development within the zone of influence of these listed wetland sites should be subject to EcIA and where appropriate, hydrological impact assessment, and
- Objective BI O50 Protect and conserve wetlands from infilling,

drainage, fragmentation,
degradation, and resist development
that would destroy, fragment, or
degrade any wetland identified as
part of the County Kildare Wetland
Survey 2012-2014

Other Locally Important Biodiversity Sites

There are many other important sites for biodiversity in Kildare that do not benefit from any formal protection. Many of these ecologically rich sites include less common habitats, such as woodlands, semi-natural grasslands, streams, rivers, other water bodies, and commonages amongst others, and in some instances are only locally known.

Recording and mapping these will support a better understanding of the connectivity (or otherwise), of natural habitats, and wilder areas of the County, through which wildlife can forage, migrate and thrive.



Chapter 3 - Threats and Challenges for Nature in Kildare

Nature has experienced catastrophic declines in very recent history. According to the WWF's Living Planet Report 2024¹ there has been 73% decline in the average size of wildlife populations in just 50 years, revealing a 'system in peril'.

Most of the drivers of these declines can be attributed to direct or indirect impacts of human activities. From habitat destruction, fragmentation and degradation, pollution, over-hunting, and persecution, many species and habitats have suffered severe damage at the hands of human society.

The negative ecological trends continue apace in virtually all corners of the world today. These extraordinary losses are not all happening 'elsewhere' however, they have been and are occurring right here in Ireland and in Kildare.

Through various scientific methods it is possible to 'look back in time' to understand what past landscapes, species, and ecosystems occurred in bygone eras. For example, pollen records can inform us of the dominant habitats and species at various eras in pre-history and history. We can thus glean information about how these landscapes have changed over the

millennia. From more recent historical and scientific recordings in Ireland, including records kept by many devoted naturalists in the 19th and 20th centuries, we can see in quite fine detail many of the relatively rapid changes that have occurred in the natural world in recent times.

The main pressures on biodiversity in the Irish context include agricultural intensification, commercial forestry, the rampant spread of invasive species, development pressures including for largescale wind and solar energy, resource extraction, and increased urbanisation. We are continuing to lose natural landscapes, habitats and species at alarming rates, yet the alarm bells still seem to be relatively quiet. Perhaps we can have a better understanding of why this might be the case, by considering the phenomenon known as "shifting baseline syndrome".

Shifting Baseline Syndrome

This term was coined in 1995 by Daniel
Pauly, a fisheries expert when he recognised
that colleagues tended to evaluate fish
stock populations by comparing them to the
baseline rate at the start of their respective
careers, as opposed to the earliest
available fish data, or to fish populations in
their natural state. As a result, he could see

¹ www.worldwildlife.org/publications/2024-living-planet-report

that each new generation of researcher was essentially redefining what the 'natural' starting point was. Similarly, whenever a child encounters the natural world initially, that experience becomes the baseline against which future judgements and comparisons will be made, and this leads to a distorted perception of 'how' the natural world is doing. The loss of species and ecological richness in the landscape is only just perceptible during an individuals' lifetime. So being told that there is an 'urgency' or 'biodiversity emergency' probably feels discordant to most people's lived experience.

Having a conversation with an octogenarian will likely help anyone to quickly realise how nature has been depleted within the past few decades. Such a conversation would likely also reveal how the relationship

between people and nature has changed greatly, in that same snapshot of time.

Looking at the rate of species and habitat loss from a geological timeframe, it is happening in a blink of an eye.

Systems that have taken eons to evolve are being dismantled essentially overnight. If it continues it will come to affect every facet of human life on planet earth.

Ireland's Biodiversity Trends

Habitat degradation and habitat loss are the main drivers of biodiversity loss in Ireland, including through changes in agricultural practices, poorly managed afforestation, drainage, pollution and the effects of invasive species. Climate change long known to be a driver of biodiversity loss, is also becoming increasingly impactful.



Image 9: Cutaway
bog Carbury, County
Kildare

The Biodiversity Crisis in Ireland:

Some Headline Facts



- Of the approximately 31,000 species known to occur in Ireland, only about 10% have been assessed. Among those assessed, one in five species is threatened with extinction.
- Almost 85% of EU-protected habitats and almost a third of EU-protected species in Ireland have an unfavourable status.
- Over half of native Irish plant species have declined in the last 20 years.
- Over 20% of breeding and 52% of key wintering bird species are declining.
- The marine environment is also under threat, with 48 species facing extinction.
- 80% of non-native species introduced to Ireland since 1500 have increased, with some becoming invasive and negatively impacting native flora and fauna.
- Historically, 61% of rivers achieved satisfactory status in 1987-1990, falling to 55% achieving satisfactory status in 2020-2023 (EPA, 2024).
- Rivers achieving high status have declined from 27% to 16%, with pristine water (i.e. Q5) experiencing the most significant declines.
- The Atlantic salmon and European eel have suffered catastrophic declines.
- The freshwater pearl mussel, Ireland's longest-living animal, is facing extinction, with viable breeding populations now confined to a handful of locations.
- One in every third species of wild bee is threatened with extinction. The Irish
 Bumblebee Monitoring Scheme shows population index declines of 14% over the last six years

SPOTLIGHT: The Plant Atlas 20202



The Plant Atlas 2020 presented the findings of twenty years of research on Irish flora. The atlas reports that more than half of the native plant species in Ireland are in decline, with native grasslands registering the greatest losses.

Almost 3 million plant records of 1,939 species, collected by 2,500 botanists, fed into the Atlas project. The main trends that emerged in the Irish setting included:

- Most Irish plant species (56%) have declined in range and abundance or both.
- Native grassland plants are those that have suffered the most, but many plants of lakes and wetlands have also declined.
- In contrast, the overwhelming majority (80%) of species introduced into Ireland since 1500 have increased. Most of these non-native species are benign but some have become invasive, with a negative impact on the native flora.

According to the report, the impact of farming and forestry on Irish wild plants since the 1950s has been devastating. Many of the habitats that native wild plants depend upon have been destroyed or altered by forestry and farming practices since the 1950s, with grassland plants impacted the most.

Species declines have been attributed to the fallout from re-seeding, over-fertilising, nitrogen deposition, herbicides, soil drainage, and changes in grazing. These practices have also affected lake and wetlands habitats.

Many peatlands have been planted with conifers or converted to agriculture, which results in the exclusion of native bog plants. These habitats are also critical for carbon storage; their restoration is essential if we are to achieve climate action targets.

² https://bsbi.org/plant-atlas-2020-in-ireland





SPOTLIGHT: Atlas of Butterflies in Ireland 2010-20213

The Atlas of Butterflies in Ireland 2010-2021 maps the distribution of all thirty-five butterflies that occur in Ireland; it compares the pre-2010 distributions to the 2010-2021 period. It maps the distribution of each species at the 10km level and has additional more detailed maps for three rare species, plotting their distributions. The records collected for this atlas provide an indication of population trends in the past and act as a baseline to which future records can be compared. In general, the findings of this work are very concerning.

Some of the key findings include:

- The Orange-tip declined by -68% during 2008-2021 and lost more than 10% of its distribution since the 1995-2009 period.
- Other common white species have experienced great losses too:
 - Large White 76%,
 - o Small White 77%
 - o Green-veined White -87.2%.
- For the 15 commonest species, the average decline during 2010-2021 is -55.35%.
- The Ringlet recorded the largest decline, -88%
- The Hedge Brown/Gatekeeper, lost 40% of the distribution it held before 2010
- Only one species, the Holly Blue, has shown an increase in population size during the 2010-2021 period.

³ https://shop.biodiversityireland.ie/products/an-atlas-of-butterflies-in-ireland-2010-2021

Drivers of Biodiversity Loss in Kildare

Habitat Loss and Fragmentation

By making changes to the landscape to meet human wants, needs and desires, natural areas become greatly altered or destroyed. Roads, buildings, houses and other hard infrastructure are inhospitable to most non-human species. In addition to the actual change in those physical areas, developments may curtail free movement between the remaining areas of suitable habitat. This can be through disturbance, lighting, barrier fencing, dangerous roadways and so on. The outcome is many patches of fragmented habitat in the landscape. Smaller patches generally support fewer species. Some creatures such as certain birds may still be able to move relatively freely between multiple patches of remaining habitats, however the fragments can cause many species to be functionally isolated; mammals, invertebrates and amphibians may be unable to successfully reach another patch, and thus their populations suffer inbreeding, and an inability to access sufficient nutrients and energy. Such

pressures can ultimately lead to local extinction.

Commercial Forestry, Agricultural Intensification and Drainage

From the middle of the 20th Century the introduction of commercial forestry and increasingly intensified farming practices began to take their toll on nature in Ireland.

At the time, much of the afforestation was conifer plantation on what was considered 'marginal land' including upland and peatland areas. The drainage works to dry the land to facilitate access by heavy machinery



Image 10: Bog-myrtle Myrica gale

and to encourage tree growth resulted in dramatic changes in the water levels, and had significant impacts on the biodiversity in these, sometimes relatively expansive wilderness areas.

The intensification of farming practices over the same period, which included changes in cutting regimes, hedgerow management, land drainage, use of pesticides, increased nutrient run-off from increased fertilizer-use, and movement towards more monoculture farming, greatly affected terrestrial and freshwater ecosystems.

Invasive Alien Species

'Alien' species are organisms that have been introduced to an area that is outside of their natural range. Some of these species can become 'invasive', depending on where they land, and how much the new environment suits their mode of growth and reproduction. If an alien species finds the new environment very hospitable, it can spread rapidly and outcompete the native flora and fauna. This can be very problematic as it can disrupt entire ecosystems.

In Kildare, most invasive alien species are plants, including Japanese
Knotweed, American Skunk Cabbage,
Himalayan Balsam and Giant Hogweed.

The Crayfish plague is also considered highly invasive and is an now issue across much of the county.

There is a constant threat of new and emerging invasive alien species. For example, at present we are aware of the presence of the invasive Rose-ringed Parakeet at number of sites in Kildare. The Asian Hornet and Alpine Newt have been reported in neighbouring counties and are likely on the horizon for Kildare.

Pollution

Pollution, in all its forms, poses a serious threat to wildlife and habitats throughout Kildare. Waterbodies are most at risk from nutrient and pesticide pollution. The terrestrial environment, including those in riparian areas, are most susceptible to pesticide and light pollution.

Chemicals such as nitrogen and phosphorus are relatively common pollutants in our environment. They generally originate from agricultural

sources where chemical fertilisers and manures are spread on land to enhance crop growth. Excess chemical, that does not get absorbed often runs off the land, finding its way to streams and rivers. High levels of these nutrients in water leads to eutrophication of affected freshwater bodies, which can be very damaging for the ecosystem. Water bodies can also be contaminated by run-off from other terrestrial sources or activities, including sewerage overflow and urban runoff.

Pesticide use in farming and elsewhere is also known to cause negative outcomes for wildlife populations. Herbicides and insect-pesticides are known to negatively affect non-target species such as wild bees and honeybees. Rodenticide is also very problematic in that it passed through the food chain, and is known to accumulate in predators, such as raptors, including Barn Owls. Multiple non-lethal doses gradually build up to make predators too sick to hunt efficiently and often leads to their death. Artificial Light at Night (ALAN) is an ever-increasing problem for species

with whom we share planet earth. Many animals have evolved survival strategies that bring them out at night. Being active at night is likely an adaptation to use the cloak of darkness to avoid being predated (e.g. moths & rodents) and by specialist predators which have evolved to hunt such prey without relying on visual stimuli (e.g. Bats and Barn Owls). These highly specialised creatures have evolved to work in darkness and often to navigate using the natural nighttime light sources: the moon and stars. Artificial lighting at night can greatly interfere with how these creatures go about their work of foraging. Bats are known to delay the time of emergence from their roosts, change their commuting routes, and alter their foraging areas, in response to ALAN4.

Climate Change

The biodiversity crisis and climate crisis are inextricably linked. The destruction of natural spaces such as woodlands and peatlands accelerates the rate at which the climate is changing, and equally the changing climate is affecting the viability of habitats and species through extreme conditions which lead

⁴ <u>Guidance Note 8 Bats and Artificial Lighting |</u> <u>Institution of Lighting Professionals</u>

to floods, wildfires, droughts, and powerful damaging storms.

The timing of our seasons is also subtly shifting, which has a knock-on effect for our wildlife. Many species have their biological clocks finely tuned to match peaks in prey abundance, or flowering periods of particular plants; with these timelines drifting year on year, these dependent species will struggle to survive.

The interconnectedness of the biological and climatic systems can work in our favour as we attempt to remedy the two crises. Nature-based solutions, such as protecting and restoring forests, riparian zones and wetlands, not only protects biodiversity, it also leads to local temperature stabilization, carbon storage and carbon sequestration.

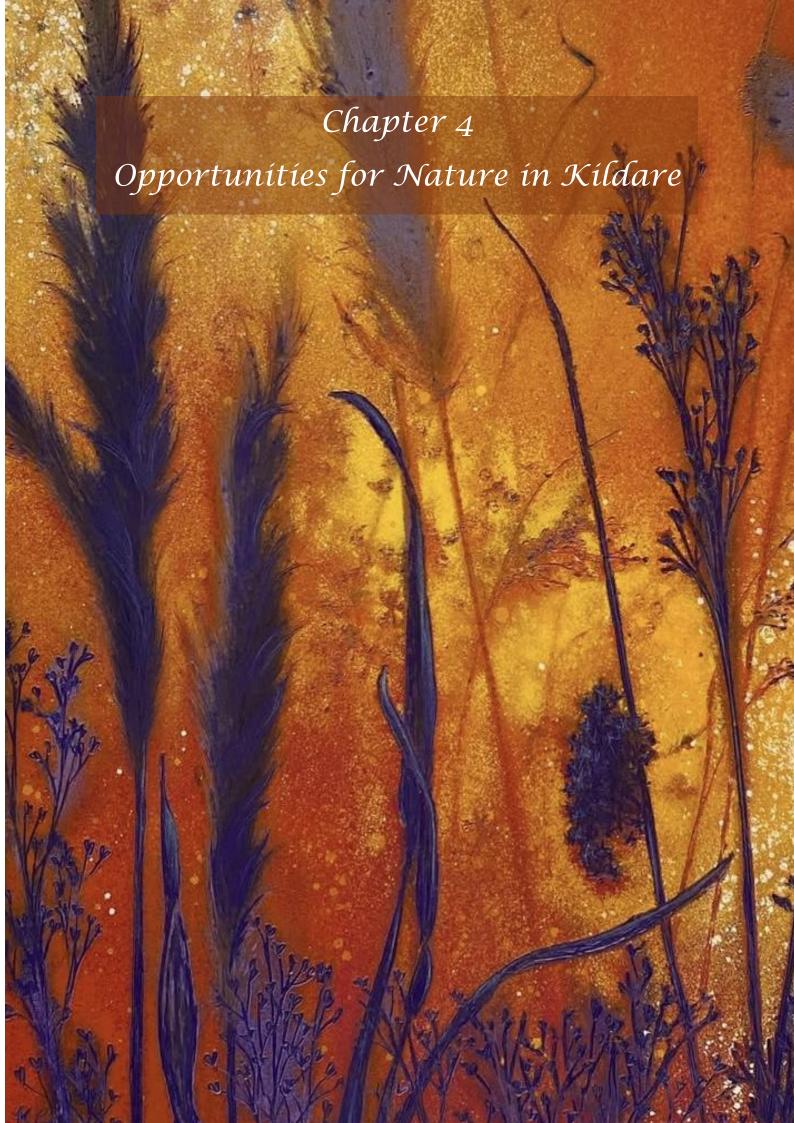
Disturbance

In recent years new walking and cycling infrastructure has made previously secluded wildlife areas more accessible to humans for amenity purposes. We know that green wild spaces bring benefits to human well-being, but it is important that sites are strategically chosen for amenity, and that

appropriate human behaviour is encouraged at natural sites. Some species are extremely shy and sensitive to disturbance. The presence or even regular passing of humans can interfere with a creature's ability to forage in an efficient way. If their vigilance levels are forced to remain high, as they anticipate passersby, their time foraging is reduced. In addition, if they are forced to spend time fleeing regularly, before slowly returning to re-assess the safety level prior to resuming feeding, the result will be a much lower net energy intake rate. This not only affects the health of an individual animal, but it can also greatly affect the breeding outcomes for species in the area that are attempting to raise young.

Dogs pose additional disturbance threats. In areas of ground nesting birds, it can be more than just feeding disturbance, it can lead to the destruction of nests and cause nest-abandonment through stress.

Controlling the flow of people to sensitive sites is important, as is the requirement to keep dogs on leads in wilder areas, at all times of the year, and especially during the bird breeding season (Spring to Autumn).



Chapter 4 - Opportunities for Nature in Kildare

Kildare boasts beautiful landscapes, wide ranging habitats, and strongholds for a range of rare and endangered species. It also is the home to many committed communities, environmental organisations and individuals all dedicated to working on wildlife conservation and habitat restoration across the county.

Kildare County Council also has shown a clear commitment to take action for biodiversity, through staffing, funding allocations, and integration of nature-positive practices, projects and plans being implemented across many sections of the organisation.

Continuing this work and building on the momentum of previous programmes and projects, Kildare County generally, and with the ongoing work and support of the Local Authority, is in a strong position to continue to deliver for biodiversity, and to move towards furthering work in nature protection, conservation and restoration.

This section seeks to highlight just a small sample of projects and activities that have been undertaken or supported by Kildare County Council in recent years. Most initiatives here have been led by specialist individuals and groups in partnership or with support from the Council.

These case-studies presented here are linked thematically to the proposed objectives of the new Kildare Biodiversity Action Plan 2026-2031 (see Chapter 5), and are merely a snapshot of some of the local action taken in Kildare in recent times. For the sake of keeping this document concise, only one example per theme has been selected. There are many other case-studies that could have been used as exemplars and would have been equally as impressive.

- 1. Landscapes for Nature. Case-studies: Feighcullen Woodland Scheme
- Engagement, Raising Awareness and Understanding. Case-study: Himalayan
 Balsam Community Project
- 3. Recording, Monitoring and Data Management. Case-study: Moth Recording
- 4. Embed Action across Kildare County Council. Case-study: Staff Engagement
- Support Community-led Biodiversity Initiatives. Case-study: Kildare Biodiversity Conference

1. Landscapes for Nature.

Case-study: Feighcullen Woodland Project

In 2022 Kildare County Council purchased a 50-acre site of agricultural land in west Kildare with a view to improving the site for nature, through the mechanism of the government supported Woodland Creation on Public Land Scheme. Staff within the Heritage and Nature Unit of the Forward Planning Department have led out on the project, engaging a forester to progress the work. The overall aim on site is to maximise the outputs for biodiversity, where possible. This has meant starting with a year-round ecological survey to establish what the baseline conditions are with regard to habitats, species presence, and key areas for foraging, commuting corridors for wildlife, roost sites, nest sites, dens and so on.

A range of habitats were identified on-site including Improved agricultural grassland, Wet Grassland, Depositing/lowland river, Hedgerows, Treelines, and Drainage ditches.

The non-volent mammals confirmed to be using the site include Woodmouse, Brown Rat, Fox, Badger and Pine marten. It is possible that Hedgehogs, Hares and Otters also use the site, as the habitat is suitable, but recording methods have yet to confirm this. Sound recorders were deployed to track wildlife sounds on a number of occasions throughout the year, which produced an impressive list of wildlife including eight of the nine bat species found in Ireland⁵ – the only one not present was the Lesser horseshoe Bat (*Rhinolophus hipposideros*) who's range is primarily linked to western counties of Kerry, Clare, Cork, Limerick, Galway and Mayo.

Close to 40 bird species have been recorded using the site to date, including at least three Red-Listed Species⁶ - the Meadow Pipit, Yellowhammer and Redwing.

The ecology report has stated that although the establishment of native woodland will befit the site, and support much of the wildlife already there, some of the current features are worth retaining, including high-quality nettle patches, a pond-like water feature at the southern

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⁵ www.batconservationireland.org

⁶ https://birdwatchireland.ie/birds-of-conservation-concern-in-ireland/

boundary and several wet areas, as well as the Wet grassland habitat. These features were deemed to be of ecological benefit, and it was recommended to leave unplanted.

Following a short pause in project works in early 2024, to allow a full Archaeological Impact Assessment to be carried out, the afforestation plan commenced Winter 2025-2026.

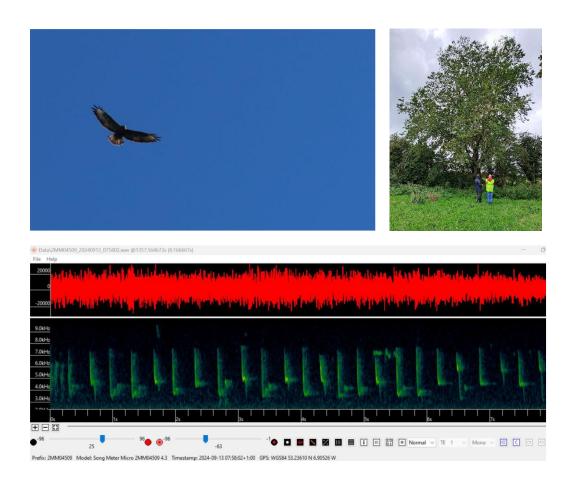


Image 11: Feighcullen afforestation site images: a soaring Buzzard, a mature Elm, and the sonagraph of a Chiffchaff bird.

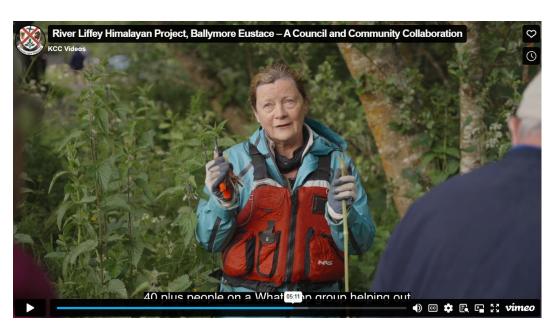
2. Engagement, Raising Awareness and Understanding.

Case-study: Himalayan Balsam Community Project

The Himalayan Balsam Project on the River Liffey in Ballymore Eustace is a Kildare County Council-led multi-annual, collaborative initiative that has become a showcase project for dealing with the significant issue of Himalayan Balsam infestations along riparian corridors. The project is now considered to be an exemplary approach leading the way in how local authorities and other public bodies, can support the management, and potentially the systematic eradication, of such invasive species infestations in public areas. This has been achieved through a collaborative and engaged approach between the local authority, scientific research institutes, the National Parks and Wildlife Service, and key to it all: the local community.

The many positive outputs of the project have included: the development and provision of best-practice, scientific guidance for communities tackling Himalayan Balsam in the Irish context, a framework for collaborative engagement with key stakeholders in tackling invasive species infestations, habitat restoration in treated sections of the River Liffey corridor, and positive wellbeing outcomes for the individuals and community involved.

Since its inception, the project has garnered much interest with many requests to present details of the project, and so in early 2025, Kildare County Council commissioned a short video about the wonderful efforts of the community in Ballymore Eustace. This can be viewed on the Kildare County Council website.



https://kildarecoco.ie/AllServices/Heritage/BiodiversityandNaturalHeritage/BiodiversityVideos/

3. Recording, Monitoring and Data Management.

<u>C</u>	<u>Case-study:</u> Moth Recording					
	Place holder Moth Recording Project					

Place holder Moth Recording Project - IMAGES			

4. Embed Action across Kildare County Council.

Case-study: Staff Engagement

The Heritage and Nature Unit deliver ongoing training, educational and engagement opportunities for staff across the council on biodiversity related topics.

In recent years 'Lunch and Learn' trainings have covered topics including Appropriate Assessment, Biodiversity & Climate Change, and Water Quality Awareness. A series of Winter Lunchtime Webinars covered Citizen Science, Birdwatch Ireland's Garden Bird Survey, Solitary Bee Presentations, and Habitat Management for Butterflies.

Every year in May Ireland celebrates National Biodiversity Week, centred around the UN Day for Biological Diversity, May 22nd. As part of in-house scheduling for this celebration of nature, all staff have been invited to partake in events such as talks, nature themed table quizzes, and screenings of short films such as BirdSong (a documentary about an attempt to record every bird song on the Island of Ireland) and Wilding (a short film documenting the journey of farmers in England deciding to return their estate to nature).

More targeted training also takes place from time to time on key biodiversity issues, relevant to particular sections and staff within the council.



Image 12: Barn Owl – *Tyto alba* (picture taken under license, during Birdwatch Ireland's survey of breeding Barn Owls in Kildare, 2024)

5. Support Community-led Biodiversity Initiatives.

Case-study: Kildare Biodiversity Conference

Kildare Wildlife Rescue in partnership with Kildare County Council's Biodiversity Office, have delivered "The Kildare Biodiversity Conference" annually since 2023.

This event, supported by the National Parks and Wildlife Service via the Local Biodiversity Action Fund, has been a huge success, and has become the annual flagship community biodiversity event for the Council. It is an inspiring gathering, which unites passionate individuals who are committed to making a positive impact on biodiversity in County Kildare and beyond.

The conference typically covers wide-ranging topics from surveying woodland bats, managing wild bee habitats, and community invasive species action, to presentations on interventions to monitor and protect

Kildare
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Kildare
Rescue

Image 13: Farmer Declan Dornan speaking at the Kildare Biodiversity Conference 2024

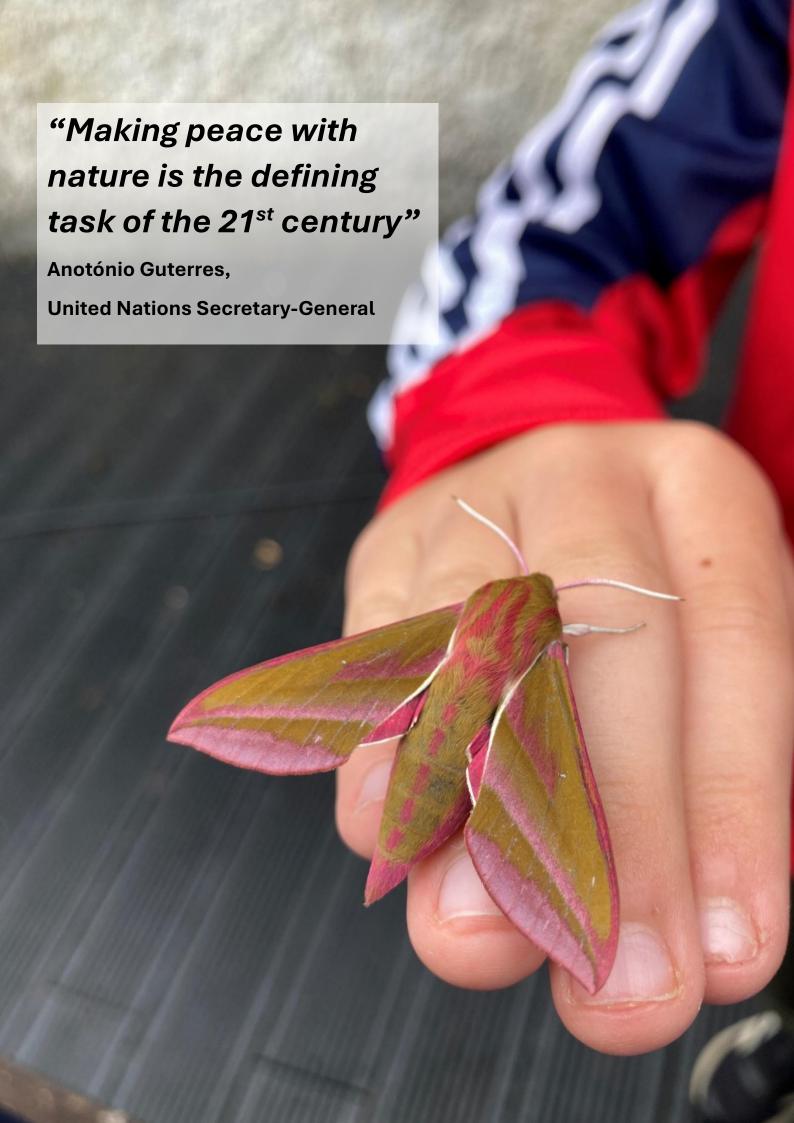
endangered bird species such as Curlew and Lapwing.

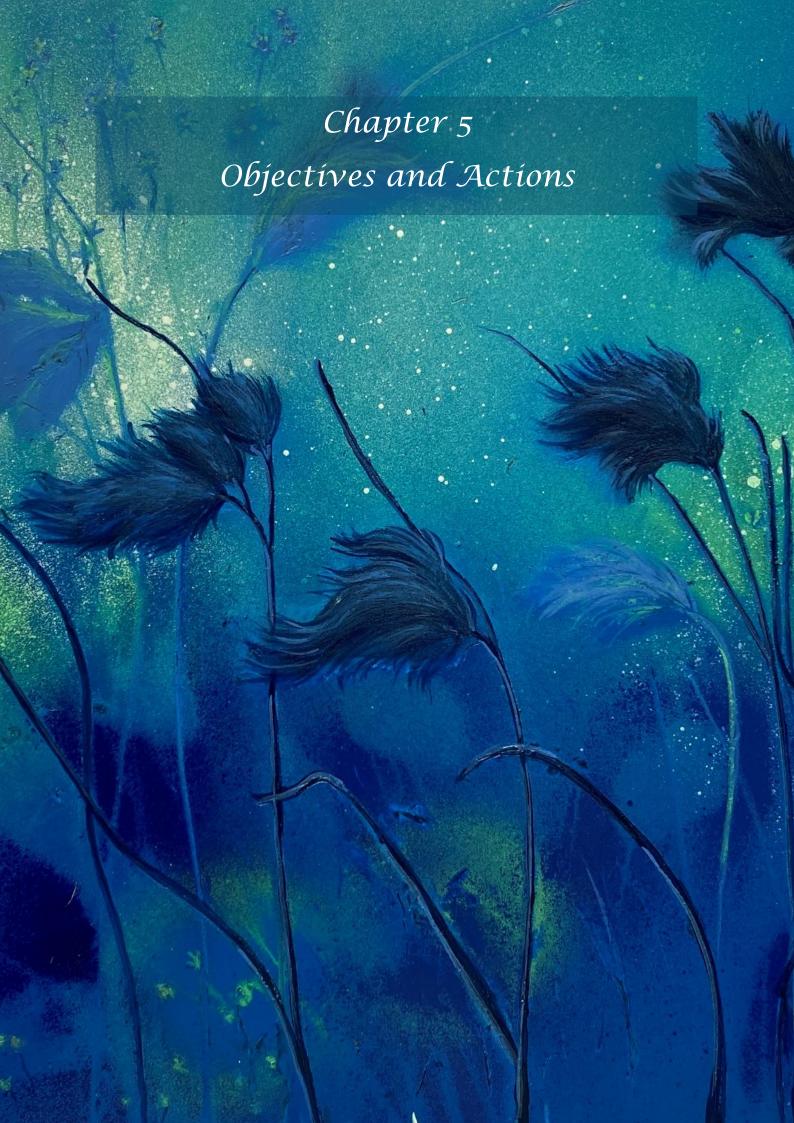
Interested individuals, community groups, and environmental organisations alike, who share the common goal of taking positive action for nature, have wonderful opportunities to engage with, and learn from each other.

Owing to the popularity and great interest in the conference in previous years, the 2025 schedule was expanded to include a second day; the expanded schedule is dedicated to the rehabilitation and veterinary care of native Irish species; showcasing best practices and innovative methods to ensure that healthy rehabilitated animals can thrive and contribute to the preservation of their species.









Chapter 5- Objectives and Actions

The Biodiversity Working Group assessed the submissions that came in through the consultation process and were tasked with putting these into broad thematic areas. Having thematic areas in the plan helps to organize the actions, and put a structure on this large document, making it more accessible and workable.

The process to identify the broad strategic objectives was sometimes blurry around the edges; there are arguably additional thematic areas that could have been included but were not, and there are actions that could have been assigned to more than one thematic area. In the end, after much attention to detail, consideration and dialogue, the Biodiversity Working Group identified five broad strategic objectives to work with.

These are:

- 1. Landscapes for Nature
- 2. Engagement, Raising Awareness and Understanding
- 3. Recording, Monitoring and Data Management
- 4. Embed Action across Kildare County Council
- 5. Support Community-led Biodiversity Initiatives

Within these five overarching objectives, fifty-one actions were identified. These are listed below, under their respective objective areas.

Timeline indicators have also been included for each action. **0** = ongoing, **1** = complete by end of the first year (i.e. early 2027), **2** = complete by end of year 2 (i.e. early 2028), **3** = complete by end of year 3 (i.e. early 2029), **4** = complete by end of year 4 (i.e. early 2030), and **5** = complete before the end of year 5, (i.e. 2031)

Objective 1: Landscapes for Nature

This objective considers the need for a landscape-scale approach for addressing the biodiversity crisis. Having a strategy for delivering spaces for nature requires this broad perspective. It is important to be able to consider the landscape entirely, to identify where quality habitat remains, ensuring these habitats are protected and do not get isolated from other natural areas. If they *are* already isolated, it is important to be able to identify potential wild corridors that could facilitate the reconnection, expansion and restoration of these important areas.

Equally as we plan for future development, identifying the opportunities for building-in spaces for nature, having wildlife friendly landscaping, wildlife corridors and steppingstone wild spaces, to ensure that populations of plants and animals can continue to interact, move and migrate.

The idea of working at the landscape level came up many times in the consultation process, and the Biodiversity Working Group worked to capture this, and deliver it in a set of concrete actions, as listed below.

Objective 1 – Landscapes for Nature				
Ref.	Action	Indicator	Partners	Timeline
1.1	Identify and map all local authority owned land holdings, categorise and rank, then identify: a) Risk to site, b) Suitability for nature restoration, and c) Assess for protection through statutory planning.	 a) Property interest register, b) Ecological Desktop Study, c) Management Plan to be developed 	1. KCC Management Sections, 2. Parks, 3. TII, 4. Schools on KCC Land	5
1.2	Identify, map and where possible create site inventories for Locally Important Biodiversity Sites (LIBS) to determine areas with high biodiversity value. Investigate feasibility of legal protection for high biodiversity value sites, through statutory plans.	List generated, areas mapped, number of site inventories completed, priority sites identified, protections investigated	Landowners, Heritage Council, NBDC, NPWS, BSBI,	5
1.3	Create a "Kildare Ecological Network" map and site list, of all sites of ecological and geological importance to include designated sites.	Delivery of map	NPWS, EPA (water quality)	5
1.4	Review and update the County Kildare Wetland Survey 2012-2014 and develop a Wetlands Action Plan based on the findings.	Publication of the Survey Publication of an Action Plan	WSI, All relevant landowners	4
1.5	Support the development of Management Plans for Locally Important Biodiversity Sites, as appropriate.	Identify appropriate sites for MPs and then number/proportion of MPs developed	Heritage Council, NBDC & BSBI	5
1.6	Prepare a Green and Blue Infrastructure Masterplan (including green, blue and brown infrastructure) that can inform the delineation of core areas, stepping stones, and corridors, that would identify ecologically sensitive areas to be excluded from any potential amenity/ tourism plans and that may inform the designation of an interconnected Nature Reserve, Regional Park, a potential National Peatlands Park, inter alia.	Map Existing Infrastructure. Identify Potential New Links	Landowners, Community Groups	3

Ref.	Action	Indicator	Partners	Timeline
1.7	Support LAWPRO and other key stakeholders to identify and support waterbody, wetland and water quality projects to develop cobenefits for climate action and biodiversity	Number of water quality projects supported	IFI, LAWPRO, KCC Environment, Planning, Parks	0
1.8	Continue to promote 'Nature Based Solutions' in urban and rural areas, and in existing towns and villages.	Proportion of new urban developments with SUDS features	Planning Ecologist, KCC Environment, IFI	0
1.9	Prepare a County Policy for Wildlife-Friendly Lighting	Lighting Policy published	KCC Planning, Dark Skies Ireland & others	3
1.10	Actively support the implementation of national biodiversity initiatives, including the All-Ireland Pollinator Plan.	Number of activities, events and engagements completed that support relevant initiatives	KCC Planning, Roads, Parks, NBDC	0
1.11	 a) Devise a Kildare County Council Tree Management Plan b) Promote native tree and broadleaf planting within the council and throughout the community c) Promote the "Right Tree, Right Place" message 	a) Plan produced and b) number of activities, events, engagements completed promoting native tree planting	KCC Planning, Parks Dept	5
1.12	Support the development of an Invasive Alien Species Management Plan for County Kildare	Number of actions taken in support of a management plan	TII, NBDC Invasives Team, Parks Dept., Roads Dept., MD Offices, Env. Dept (graveyards)	0
1.13	Promote habitat mapping in all Master Plans, Settlement Plans, including in smaller settlements, towns, villages, rural settlements and nodes, and require that trees and hedgerows are also identified for surface water management properties.	Number of plans worked on.	KCC Planning	0

Objective 2: Engagement, Awareness & Understanding

This objective addresses the dearth of awareness about how important nature is to supporting human society, and how nature has been so negatively impacted by human activities in very recent times. Through specific actions, new audiences will be engaged, and engagement with already active communities will be re-energised, to bring about a better whole-of-society understanding about the biodiversity crisis in general. This will include highlighting the science around why biodiversity is so crucial to our own wellbeing as humans, and supporting individuals, communities and organisations to reconnect with the natural world, and take action following best-practice guidance to create and maintain spaces for nature.

	Objective 2 – Engagement, Awareness & Understanding					
Ref.	Action	Indicator	Partners	Timeline		
2.1	Contribute to the development a of communications 'toolkit', with materials ⁷ , messaging and informative content on key biodiversity topics ⁸	central location for resources created, online views, reach/readership/ listenership, resources created, no. of comms,	NBDC, Teagasc, Agri Aware, IPCC, KCC Libraries, LAWPRO, Schools, Comms	5		
2.2	Develop a 'Community Biodiversity Demonstration Garden' for use in training and capacity-building on all aspects of biodiversity (and climate action) for Community Groups, KCC Staff and potentially as a best practice regional demonstration site.	site identified, logistics organised and agreed (access, insurance, management plan), landscape projects initiated	MDs, KCC Planning, Parks, local community, business, training providers, Teagasc	5		
2.3	Explore opportunities to encourage and/or grant-aid local nurseries (business and community) to cultivate indigenous hedgerow species and indigenous broadleaf tree species, with best practice guidance, logistical and potentially financial supports where possible.	number of events, resources, number of suppliers	Funding potential via LAWPRO, RETHINK Ireland, other social enterprise supports	0		

⁷ materials potentially including print, broadcast, signage, social media, podcasts, online video, short films etc.

⁸ include topics on the fundamental role of biodiversity in our lives, managing pets on high nature value areas, Invasive Alien Species, Impacts of lighting, Traditional Skills (such as seed saving and hedge laying), Wildlife and the Law, Peat Free gardening, Glyphosate science and alternatives etc.

Ref.	Action	Indicator	Partners	Timeline
2.4	Continue to pursue an inclusive and targeted approach towards working with new and already engaged/active groups ⁹ by supporting them to raise awareness of biodiversity and take nature-positive actions.	number of new groups/sectors proactively engaged, number of events, engagements and webpage visits Information events, signposting actions, communications and engagements	KCC Biodiversity Office, NDBC's AIPP, External ecological contractors KCC Biodiversity Office, KCC Sports Partnership, LAWPRO, KCC EAO	0
2.5	Actively investigate opportunities to improve incentivisation of community biodiversity actions through awards and grants schemes, e.g. Pride of Place and TidyTowns scoring, and via implementing biodiversity conditions on KCC-administered community funding.	Changes/ improvements in scoring schemes, incentives etc that lead towards improved actions for biodiversity	KCC Environment KCC CAT, KCC TidyTowns, LAWPRO, PPN	2
2.6	Support the KCC Environmental Awareness Officer in providing composting educational materials and workshops to community groups, schools, residential and industrial estates and businesses to increase basic horticulture skills within the public space, such as group composting schemes where food and gardening waste is collected and can be used locally.	a) information events, signposting actions, communications and engagements	KCC EAO	1
2.7	Engage with young people through targeted youth-focused nature-positive projects being run by Scouts, pre-schools, schools, youth clubs and community biodiversity groups/organisations. Encourage and support actions that work with the staff who maintain and manage the grounds and campuses for these young people, to embed the learning.	Number of events, number young people engaged	Youth groups, schools, scouts, community groups and eNGOs, LAWPRO, KCC EAO, KCC Community.	0

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⁹ faith communities, GAA Green Clubs, landscaping contractors, architects, garden nurseries, artists, amongst others.

Ref.	Action	Indicator	Partners	Timeline
2.8	Support the preservation and passing on of ecological field-skills and knowledge, through: a) supporting/hosting specialist field clubs b) knowledge-share events and opportunities c) supporting third-level placements for ecology/zoology/botany amongst others, and d) explore course development with the Education and Training Board (ETB)	a) number of events supported, b) number of student placements c) course content/delivery progressed d) course content/delivery progressed	Third level institutes, DNFC, BSBI, BWI, BCI, KBG, Wild Kildare, ETB	5
2.9	Work with relevant agencies, public bodies and local groups annually to continue to assess wildfire risk to bogs and upland habitats and their management and explore publication of "fire risk maps".	a) number of sites mapped and monitored, b) number reports/ records	KCC Fire Service, NPWS, Tochar, Neighbourhood watch, local bog groups/owners	5
2.10	 Work with Kildare Local Enterprise Office to a) Promote biodiversity friendly initiatives via demo projects at regional hubs b) Promote biodiversity friendly initiatives as part of sustainable economic development (e.g. farm diversification opportunities) 	a) number of projects/ events supported b) number of people engaged	KCC LEO, Into Kildare, Failte Ireland (EUJTF)	0
2.11	Support collaborative projects with farming groups to: a) raise awareness of positive action already being taken, b) highlight importance of farmland for biodiversity, c) facilitate community connecting to the land, natural and cultural heritage, d) focus on semi-natural grasslands e) promote EIP opportunities, Hare's Corner, Farming for Nature, inter alia.	a) number of events supported, b) number of people engaged	Agri Aware, IFA, Teagasc, Burren Beo, Farming for Nature etc.	0
2.12	Investigate the feasibility of a national campaign to dissuade the public from planting Laurel hedging via the Biodiversity Officer Network	a) number of ads airedb) number of events heldc) number of people engaged	HC, Biodiversity Officers,	3
2.13	Provide guidance and supports to develop nature-based tourism responsibly.	a) number of events supported	Failte Ireland, Into Kildare, Failte Ireland (EUJTF) and others	0

Objective 3: Recording, Monitoring & Data Management

This objective seeks to continue to gather strong sets of scientific data relating to the living world in Kildare, and where appropriate, make this information available and accessible to key policy and decision makers. Having strong baseline ecological data helps to guide development and can drive better decisions for nature. Gathering data before, during and after altering landscapes is critical to our understanding of the true impacts of development and human activity on local habitats and local species. All of these data have the potential to feed into better science-informed judgments around future development and planning at the local and regional level.

Ref.	Action	Indicator	Partners	Timeline
3.1	Continue to commission and publish ecological surveys, where appropriate ¹⁰ , to gather baseline and/or regular monitoring data on under-surveyed aspects of Kildare's natural heritage, for the purposes of informing county policies and priorities and to provide an evidence base for the Council in meeting its obligations under European and Irish Environmental legislation, subject to available resources.	a) funding secured for survey work, b) number/areas of expert surveys conducted c) spread of species and habitats surveyed d) improvements in accessibility of data	NPWS, eNGOs, Consultants, KCC Parks	0
3.2	Update Kildare County Council's Pollinator Plan, and as part of that process design-in ways to assess changes in sample local pollinator populations, resulting from the implementation of the All-Ireland Pollinator Plan actions at site level.	Research commenced and/or published	KCC Parks, NBDC, AIPP, Research Institutes.	2
3.3	Review accessibility of and provide signposting and training on the accessing and interpretation of, water quality data, to inform the public.	KCC's 'Heritage Hub' website going live, with respective information and data available to the public	KCC Heritage & Nature Team, Uisce Eireann, EPA, LAWPRO etc	2
3.4	Support the National Biodiversity Data Centre (NBDC) to have up to date biological records for Kildare by ensuring survey results from KCC projects and surveys are fed into the national database.	Number of surveys' data being shared with the NBDC annually.	NBDC, NPWS, Collite, BnM, BWI, BSBI, NGOs, Public and Research Institutes	0
3.5	Develop a 'Citizen Science Strategy for Kildare' – in conjunction with existing environmental non-governmental organisations and natural heritage groups in the county.	a) policy/strategy published, b) heritage hub portal delivered	KBG, BWI, BCI, Wild Kildare, NBDC, NPWS, EPA, etc	3

¹⁰ Some ecological datasets are sensitive and for conservation purposes it is necessary to keep the data unpublished, for example the location of rare plants, or the breeding sites of rare birds; as revealing location data may open the species up to illegal exploitation.

Objective 4: Embed Action Across Kildare County Council

Through this objective, the Kildare County Council Biodiversity Office will work to ensure that biodiversity considerations are included (through practical support, facilitation and encouragement where needed), at all levels and in all sections of the council. This will be achieved through many strands of engagement and action, as outlined below:

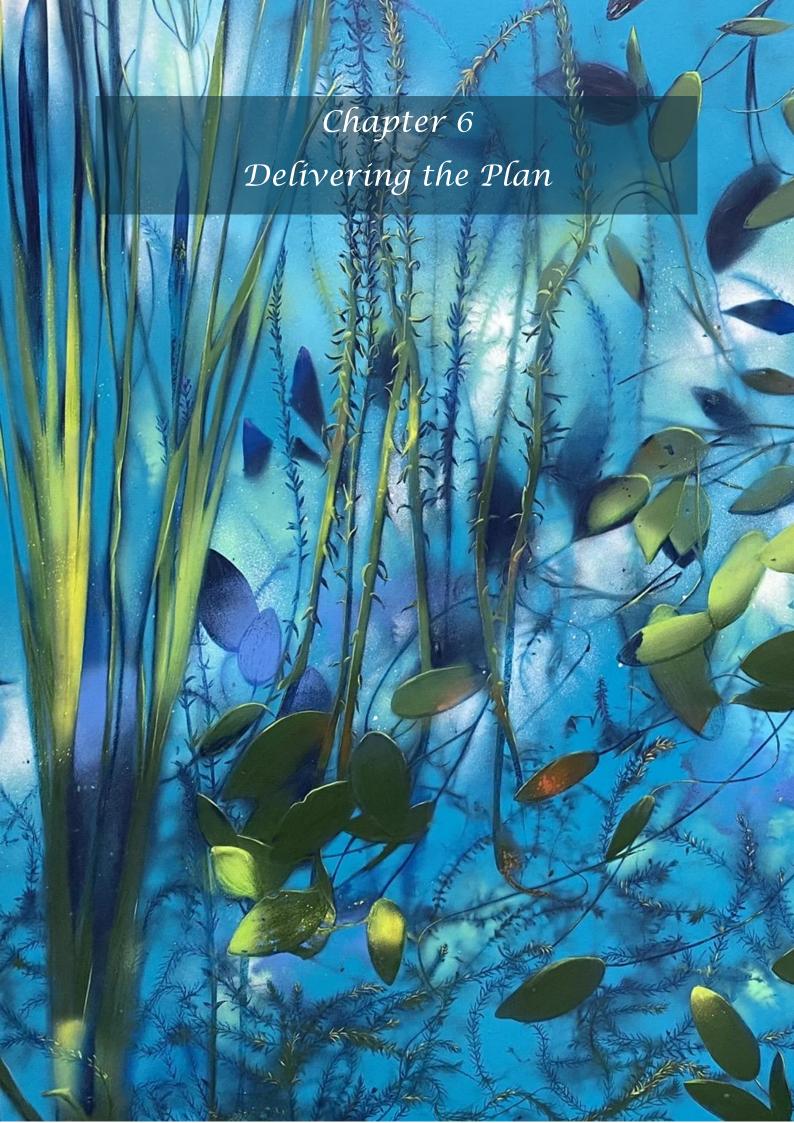
Ref.	Action	Indicator	Partners	Timeline
4.1	Support delivery of Part 8 projects and local authority owned development with best practice guidance for development, at inception, design and delivery, with best-practice guidance for development	Number of Part 8 projects supported, and guidance docs produced	Planning, Housing and other KCC depts	0
4.2	Develop and deliver a biodiversity education programme for all staff, including elected members, to upskill awareness, knowledge and understanding, especially with regard to the council's legal obligations to nature protection, invasive species management, nature restoration and reporting.	Training modules developed. Modules delivered. Number of trainees.	Collab. with other Local Authority Biodiversity Officers to develop full suite of training	0
4.3	Develop a regional working group for professional stakeholders of (internationally and nationally) protected sites for infrequent but regular information sharing, and to coordinate the monitoring, protection and management of these sites.	Group establishment	NPWS, EMRA, Regional LA's	3
4.4	Consider the progression of a bond scheme on landscaping and biodiversity conditions for new developments	feasibility study published, scheme approved by full council	Internal Depts in KCC	1
4.5	Strengthen hedgerow preservation by establishing a hedgerow protection policy using a quality rating system (e.g. Level 1 - Retain at all costs = townland boundary, Level 2 - Consider alternatives = other high quality / high nature value hedgerows, Level 3 – minimise removal = medium quality nature value, Level 4- Low value hedgerows, such as non-native, invasive species, e.g. Laurel, Leylandii).	action incorporated into CDP Policy/ Objective	Planning Dept. CDP Policy Team	3
4.6	Advance a policy of 'biodiversity net gain' (BNG), wherever possible, through strategies, plans, developments, mitigation measures, appropriate off-setting and/or investment in Green and Blue Infrastructure with specific evidence-based and locally relevant biodiversity and environmental measures, through the review of the next County Development Plan	BNG policy incorporated into all relevant Plans and Strategies	All KCC Depts.	0

Ref.	Action	Indicator	Partners	Timeline
4.7	Introduce a specific land use zoning purely for nature preservation and restoration (i.e. stronger protection than the F: Open Space and Amenity zoning, currently offers) through the review of the next County Development Plan	Feasibility Study, New KCC Policy	KCC Facilities, KCC Depts, Area Offices	3
4.8	Investigate the feasibility of phasing out rodenticide and pesticide use in Kildare County Council operated facilities, campuses, depots and in service-provision throughout the county (except for ecological necessity, e.g. relating to the eradication of invasive species)	Feasibility Study New KCC Policy	KCC Facilities, KCC Depts, Area Offices	2
4.9	Continue to develop biodiversity measures as part of housing estate management responsibilities, once 'taken in charge' by KCC.	Number of measures	KCC Parks	0
4.10	Support the work of environmental non-governmental organisations and communities working to promote and conserve peatlands throughout the county.	Number of engagements and events	Community Wetlands Forum, BWI, IPCC, amongst others	0
4.11	Support the establishment and expansion of community gardens and allotments through local authority initiatives in conjunction with private landowners and on public land, in both urban and rural communities, as set out in the KCC Allotment Strategy and County Development Plan.	Number of community gardens and allotments established	KCC Planning and KCC Parks	0
4.12	Update biodiversity guidelines for developers, private gardens and community action for County Kildare	Guidelines updated	KCC Heritage & Nature Team	2
4.13	Report annually on the Public Sector Duty on Biodiversity, as mandated by the Wildlife (Amendment) Act 2023, for Kildare County Council.	Annual reports submitted	KCC Biodiversity Officer	0
4.14	Increase funding and capacity in the Nature and Heritage Team, to provide for additional roles, such as a team of ecologists for cross-department all support, including Parks, Roads, Environment, and Planning, and Biodiversity Officers with specific responsibilities for Community and Project work.	Additional funding secured and positions filled	KCC Forward Planning	5
4.15	Investigate the feasibility of a percentage of development contributions to be ring-fenced for nature restoration efforts/projects.	Meetings held, research conducted, advancement of cause	KCC	2

Objective 5: Support Community-led Initiatives

Kildare County has many regionally and nationally significant organizations and communities working with a focus on practical nature protection, conservation and restoration. In addition, many of these organizations have roles in species recording and in experiential nature education, reconnecting people and nature, and in raising awareness of the importance of biodiversity generally. Supporting these local initiatives and specialists to continue to deliver for biodiversity will pay dividends in supporting many of the other objectives of this plan.

Ref.	Action	Indicator	Partners	Timeline
5.1	Provide funding and practical supports to local community, TidyTowns and other voluntary groups, engaged in actions addressing biodiversity loss and restoration, e.g. managing landscapes for wildlife, managing invasive species, participating in citizen science, creating biodiverse spaces, and protecting and monitoring the health of the local environment.	a) funding secured b) number of projects supported, c) geographic distribution	Tidy Towns, Angling Groups, Community groups, Community Orgs etc	0
5.2	Support the biodiversity/e-NGO groups in the county with their work relating to training communities in citizen science initiatives (including those focusing on water quality).	a) funding secured b) number of groups engaged	BWI, LAWPRO, NBDC, NPWS, IFI etc	0
5.3	Continue to prepare, roll-out and update Local Biodiversity Action Plans (LBAPs), in partnership, where appropriate with LEADER, subject to funding.	Number of LBAPS produced	LEADER, LAWPRO, Community Foundation Ireland,	5
5.4	Continue to run a biodiversity 'small grants' scheme, and provide information and support for the public, to undertake biodiversity action in public spaces.	a) funding securedb) number ofprojects supported,c) geographicdistribution	MD Offices (LPT), LEADER, CFI, HC, LAWPRO, other	0
5.5	Conservation-focused community groups should be supported with tools and equipment to carry out citizen science, particularly to monitor regenerating habitats.	a) funding secured b) number of projects supported, c) geographic distribution	NPWS, LAWPRO, IFI, BCI etc	0



Chapter 6 – Delivering The Kildare Biodiversity Action Plan Implementation, Monitoring and Reporting

Implementation of the Kildare Biodiversity Action Plan 2026-2031

The biodiversity crisis is complex, and the pressures on nature are so varied, that the only way to move forward to tackle this problem is with a 'Whole-of-Government, Whole-of-Society Approach' as promoted by the National Biodiversity Action Plan 2023-2030.

Consultation and collaboration have been central to the development of this Plan to date; and for this Plan to successfully deliver for nature, continuing this spirit of collaboration and partnership will be key. Kildare County Council will continue to work to build strong relationships with and to support the many local communities, groups, organisations and businesses, state agencies, and landowners involved in or with responsibilities for the protection of nature in Kildare.

Kildare County Council will lead the coordination and the implementation of the Kildare Biodiversity Action Plan 2026-2031.

The Kildare Biodiversity Officer will lead on the delivery of the Plan, and will thus be the point of contact for matters relating to the



implementation of the Plan. The plan will guide the activities and projects being

Image 12: Jay - Garrulus glandarius

undertaken by the KCC Biodiversity Office, and jointly by parties associated with this plan.

Support and Resourcing

Kildare County Council will support
stakeholders on progressing the actions in
the plan through provision of training,
information provision, and consultation and
financial support where possible through
the relevant funding streams (e.g. Local
Biodiversity Action Fund and the Heritage
Council biodiversity action schemes) and

through partnerships on other biodiversity projects within the council.

Currently within Kildare County Council there is one full-time Biodiversity Officer tasked with delivering the Kildare Biodiversity Action Plan 2026-2031.

At time of writing the current budget directly available for financing the plan is around €140,000 per annum. This includes the National Parks and Wildlife Service's Local Biodiversity Action Fund, and the Heritage Councils annual grant for development and

delivery of LABAPs, and Kildare County Council's internal budget.

Monitoring & Reporting

Implementation of the Kildare Biodiversity
Action Plan will be monitored on an ongoing basis, by the Biodiversity Working Group.
The Kildare Heritage Forum will be updated on progress at regular intervals. A mid-term review will be undertaken in 2028, to ensure the plan is on track for completion within the allocated five-year timeframe, and reporting will be made via the Kildare County Council Annual Report.



Appendix 1 – NBAP Actions of relevance to Local Authorities

The full plan can be found here: https://www.npws.ie/legislation/national-biodiversity-action-plan.

Objective 1: Adopt a Whole-of-Government, Whole of-Society Approach to Biodiversity

Outcome 1A. Governance structures and reporting outputs have improved

Action 1A8: The Minister will receive a report on progress on the implementation on the NBAP at least once a year and will bring that report to Cabinet

Outcome 1B. Organisational capacity and resources for biodiversity have increased at all levels of Government

Action 1B3: All relevant Departments and Government Bodies will explore the biodiversity expertise and training requirements across government to ensure the appropriate expertise is available to implement this Plan

Action 1B9: The Heritage Council will work with Local Authorities on establishing a Biodiversity Officer Programme with a dedicated Biodiversity Officer in each Local Authority

Outcome 1C: Responsibility for biodiversity is shared across the whole of government

Action 1C6: All Local Authorities will have a Biodiversity Action Plan adopted by the end of 2026 which is subject to regular review and revision processes in line with relevant guideline standards

Outcome 1D: Biodiversity initiatives are supported across the whole of society

Action 1D5: NPWS will continue to support Local Authorities biodiversity projects through the LBAF, which includes action on invasive alien species, throughout the lifetime of this Plan

Action 1D12: DAFM, DHLGH and other relevant stakeholders will build and enhance engagement with terrestrial, freshwater, coastal and marine stakeholders and the wider community to promote the benefits of biodiversity and ecosystem services, and the responsible, sustainable use of resources.

Objective 2: Meet Urgent Conservation and Restoration Needs

Outcome 2A: The protection of existing designated areas and protected species is strengthened and conservation and restoration within the existing protected area network are enhanced

Action 2A8: NPWS, with relevant stakeholders will identify areas that will be pledged as protected areas following the criteria laid out under the EU Biodiversity Strategy

Outcome 2B: Biodiversity and ecosystem services in the wider countryside are conserved and restored – agriculture & forestry

Action 2B6: DAFM, Local Authorities and other relevant stakeholders will implement existing and new measures to reduce chemical pesticide use, in line with the EU regulatory framework for pesticides

Action 2B11: DAFM will continue to promote and/or support native tree planting by Local Authorities and other State/semi-state bodies

Action 2B12: Local Authorities, Transport Infrastructure Ireland (TII), NPWS and OPW will encourage a more reliable supply and use native species, varieties, and landraces from appropriate native sources in their landscaping works, where possible

Action 2B13: NBDC with partners in Northern Ireland and other actors listed in the All-Ireland Pollinator Plan 2021-2025 will implement appropriate actions listed in the Plan and support farmland pollinator conservation activities post-2025

Outcome 2C: Biodiversity and ecosystem services in the wider countryside are conserved and restored – peatlands & climate action

Action 2C7: To support the National Climate Objective of achieving a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy, DECC, DAFM, DHLGH, Local Authorities, and Climate Action Regional Offices will promote terrestrial nature-based solutions in national, regional, and local rural and urban programmes

Outcome 2D: Biodiversity and ecosystem services in the marine and freshwater environment are conserved and restored

Action 2D1: Relevant bodies such as DHLGH, DAFM, Local Authorities and partners will deliver a RBMP to better protect, enhance and monitor the ecological status of water during the third cycle of the RBMP

Action 2D5: OPW will work with relevant authorities to ensure that Flood Risk Management planning and associated Strategic Environmental Assessment (SEA), EIA and Appropriate Assessment (AA), minimises loss of biodiversity and ecosystem services through policies to promote more catchment-wide and non-structural flood risk management measures

Action 2D21: DHLGH, Inland Fisheries Ireland, OPW and other relevant bodies will explore the restoration of 300 km or rivers to a free- flowing state

Outcome 2F: A National Restoration Plan is in place to contribute to the ambition of the EU Biodiversity Strategy 2030 and global restoration targets

Action 2F5: DHLGH and all stakeholders across Government, will put in place restoration measures as described in the National Restoration Plan, within the appropriate timeframes

Outcome 2H: Invasive alien species (IAS) are controlled and managed on an allisland basis to reduce the harmful impact they have on biodiversity and measures are undertaken to tackle the introduction and spread of new IAS to the environment

Action 2H2: NPWS, together with other relevant Departments and public bodies, will develop national plans to implement aspects of the EU IAS Regulation and relevant national legislation, as well as work on cooperative plans where there is an all-island or North-South aspect for IAS impacts

Objective 3: Secure Nature's Contribution to People

Outcome 3A: Ireland's natural heritage and biocultural diversity is recognised, valued, enhanced and promoted in policy and practice

Action 3A3: Local Authorities will work to identify and respond to opportunities for enhancing the biocultural value of GBUE through appropriate design strategies, the use of visual and performing arts, and enhancing equity of access and promoting use of GBUE by community groups, and integrating cultural services in local biodiversity action plans

Outcome 3C: Planning and development will facilitate and secure biodiversity's contributions to people

Action 3C1: All Public Authorities and private sector bodies move towards no net loss of biodiversity through strategies, planning, mitigation measures, appropriate offsetting and/or investment in Blue-Green infrastructure

Action 3C2: The Office of the Planning Regulator (OPR) will work to prepare and publish a Case Study Paper examining best practice in integrating green infrastructure, nature-based solutions and ecosystem services into the preparation of land use plans

Action 3C3: All Regional Spatial and Economic Strategies, City and County Development Plans, Local Area Plans and LBAP's shall be aligned with the objectives of the NBAP, where relevant

Objective 4: Enhance the Evidence Base for Action on Biodiversity

Outcome 4B: Data relevant to biodiversity and ecosystems, including conservation needs, is widely accessible and standardised

Action 4B7: NPWS and other relevant bodies will ensure that biodiversity and related data adheres to national open data policy

Objective 5: Strengthen Ireland's Contribution to International Biodiversity Initiatives

Outcome 5A: Science, policy and action on biodiversity conservation and restoration is effectively coordinated in an all-island approach

Action 5A5: Relevant bodies will continue to support and utilise the All-Ireland Pollinator Plan

Appendix 2 - Policy Context for the Biodiversity Action Plan*

United Nations Convention on Biological Diversity

The United Nations Convention on Biological Diversity (CBD), established in 1992, is a global treaty aimed at conserving biological diversity, promoting sustainable use of natural resources, and ensuring fair sharing of benefits from genetic materials. Signed by nearly every country, the CBD provides a framework for national and international efforts to protect ecosystems, species, and genetic diversity. It also addresses biotechnology through protocols like the Cartagena and Nagoya Protocols. The CBD encourages countries to develop biodiversity strategies and action plans, and its governing body, the Conference of the Parties (COP), meets regularly to assess progress and set future goals.¹¹

United Nations Sustainable Development Goals

The United Nations Sustainable Development Goals (SDGs) are a universal blueprint adopted in 2015 to end poverty, protect the planet, and ensure peace and prosperity for all by 2030. Comprising 17 interconnected goals, they address global challenges such as hunger, health, education, gender equality, clean water, climate action, and sustainable economic growth. The SDGs emphasize inclusivity, urging countries to prioritize those most in need and recognize the link between social, economic, and environmental progress. They call for global cooperation across governments, businesses, and civil society to mobilize resources and innovation for a more equitable and sustainable future. ¹²

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¹¹ https://www.cbd.int/convention/text

¹² https://sdgs.un.org/goals

EU Biodiversity Strategy to 2030

The EU Biodiversity Strategy to 2030 is a long-term plan launched in 2020 as part of the European Green Deal. Its goal is to reverse biodiversity loss and restore ecosystems across Europe by 2030. Key actions include expanding protected areas, implementing the EU's first Nature Restoration Law, and restoring degraded habitats to boost climate resilience and carbon storage. The strategy also promotes sustainable land use, combats illegal wildlife trade, and integrates biodiversity into public and business decision-making. It positions the EU as a global leader in biodiversity conservation.¹³

National Biodiversity Action Plan

Ireland's 4th National Biodiversity Action Plan (2023–2030) sets out a comprehensive strategy to halt and reverse biodiversity loss through a "whole of government, whole of society" approach. It outlines five strategic objectives, including urgent conservation and restoration, enhancing biodiversity knowledge, and strengthening Ireland's global contributions. The plan emphasizes public engagement, legislative reform, and cross-sector collaboration to protect ecosystems and species. It also introduces a new biodiversity duty for public bodies, ensuring biodiversity is considered in decision-making and operations.¹⁴

Water Action Plan

Ireland's Water Action Plan 2024 outlines a national strategy to restore and protect water quality across rivers, lakes, estuaries, and coastal waters. Developed under the EU Water Framework Directive, it focuses on reducing pollution, restoring natural ecosystems, and investing in water infrastructure. The plan introduces catchment-based and sectoral action work plans, supported by collaborative governance and clear accountability. It aims to achieve "good status" for all water bodies by 2027, safeguarding water for nature, agriculture, industry, and public health.¹⁵

National Planning Framework Ireland 2040

The National Planning Framework (NPF) is Ireland's long-term strategy for sustainable development to 2040. As part of Project Ireland 2040, it aims to guide population growth, housing, infrastructure, and environmental protection through a balanced regional approach. The NPF promotes compact urban growth, revitalization of rural areas, and improved connectivity between regions. It aligns with the National Development Plan to ensure coordinated investment and planning. With a projected population increase of one million, the framework sets out ten strategic outcomes to enhance quality of life, economic opportunity, and climate resilience across Ireland. ¹⁶

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¹³ https://environment.ec.europa.eu/strategy/biodiversity-strategy-2030_en

¹⁴ https://assets.gov.ie/static/documents/4th-national-biodiversity-action-plan.pdf

¹⁵ https://lawaters.ie/app/uploads/2024/09/Water-Action-Plan-2024_ENG_v5.pdf

¹⁶ https://www.npf.ie/

Ireland's Nature Restoration Plan (by the end of 2026),

Ireland's Nature Restoration Plan is being developed in response to the EU Nature Restoration Law, adopted in 2024, which mandates all Member States to restore degraded ecosystems and halt biodiversity loss. The plan will involve collaboration across sectors and communities to ensure inclusive and effective restoration efforts. An Independent Advisory Committee has been established to guide the plan's development and make recommendations to the Minister for Nature, Heritage and Biodiversity. The plan will set out targets for restoring habitats such as peatlands, rivers, forests, and marine areas, aiming to improve climate resilience, water quality, and biodiversity. It also seeks to support sustainable livelihoods for farmers, foresters, and fishers, while enhancing public health and wellbeing.¹⁷

Heritage Council Strategic Plan 2023-2028

The Heritage Council Strategic Plan 2023–2028, titled Our Place in Time, sets out a vision to protect, promote, and engage with Ireland's rich heritage. It focuses on six strategic pillars: leadership and stewardship, climate change and biodiversity loss, research, partnership, communities, and education. The plan emphasizes collaboration with stakeholders, support for private heritage owners, and the development of evidence-based policy through initiatives like Heritage Matters. It also prioritizes climate action by funding biodiversity officers in all local authorities.¹⁸

All-Ireland Pollinator Plan.

The All-Ireland Pollinator Plan (2021–2025) is a voluntary, island-wide initiative to reverse pollinator decline and protect biodiversity. It outlines 186 actions across six objectives, including making farmland, public, and private land pollinator-friendly; supporting honeybee health; conserving rare pollinator species; and coordinating research and awareness. The plan engages farmers, councils, communities, and businesses to create pollinator habitats and reduce pesticide use. Managed by the National Biodiversity Data Centre, it relies on partner organizations to fund and implement actions.¹⁹

¹⁷ https://www.restorenature.ie/

¹⁸ https://www.heritagecouncil.ie/content/files/Strategic-Plan-2023-2028.pdf

¹⁹ https://pollinators.ie/aipp-2021-2025/

Kildare County Development Plan

The Kildare County Development Plan 2023–2029 sets out a strategic framework to guide sustainable growth, land use, and infrastructure across the county. It includes 1,687 objectives and actions focused on housing, transport, climate resilience, heritage, and economic development. The plan aligns with national and regional policies, including Project Ireland 2040 and the Regional Spatial and Economic Strategy. It emphasizes environmental protection, circular economy principles, and stakeholder collaboration. Implementation is monitored through regular progress reports and a whole-of-council approach.²⁰

Kildare Climate Action Plan

The Kildare Climate Action Plan 2024–2029 outlines strategies to reduce greenhouse gas emissions by 51% and improve energy efficiency by 50%. It promotes climate resilience through local engagement, sustainable transport, energy upgrades, and biodiversity protection. The plan includes a Decarbonising Zone in Maynooth as a pilot for community-led climate solutions. Kildare County Council integrates climate goals across all council departments²¹

County Kildare Heritage Plan

The Kildare Heritage Plan 2026–2031 aims to identify, conserve, and promote the county's rich natural, built, and cultural heritage. Developed through public consultation, it supports sustainable development while supporting the protection and conservation of unique natural, archaeological, built and historical sites. The plan emphasizes community involvement, education, and partnership to enhance Kildare's "sense of place" and quality of life. It is coordinated by the County Kildare Heritage Forum with support from the Heritage Council.²²

Kildare County Council Corporate Plan 2025-2029

The Kildare County Council Corporate Plan 2025–2029 sets the strategic vision and priorities for the local authority. It outlines core values—customer focus, professionalism, innovation, respect, and transparency—and guides service delivery, performance, and decision-making. Developed through stakeholder consultation, the plan aligns with national policies and supports sustainable development, climate action, and community well-being. It informs annual service plans and is monitored through regular reports and performance reviews.²³

²⁰ https://kildarecoco.ie/AllServices/Planning/DevelopmentPlans/

²¹ https://kildarecoco.ie/AllServices/ClimateAction/KildareCountyCouncilClimateActionPlan2024-2029/

²² https://kildarecoco.ie/AllServices/Heritage/HeritageOfficeandHeritagePlan/CountyKildareHeritagePlan/

²³ https://kildarecoco.ie/YourCouncil/Publications/Corporate/CorporatePlan/

Appendix 3 - Legal Protection for Biodiversity in Ireland*

The Birds Directive

The EU Birds Directive (Directive 2009/147/EC) is a cornerstone of European biodiversity policy, aiming to protect all wild bird species naturally occurring in the EU. It requires Member States to conserve birds, their eggs, nests, and habitats by maintaining or restoring populations to ecologically sound levels. Special Protection Areas (SPAs) must be designated for threatened and migratory species, forming part of the Natura 2000 network. The Directive bans activities like capturing, killing, or trading wild birds and mandates habitat preservation both inside and outside protected zones. It promotes long-term recovery of bird populations and ensures that any development affecting SPAs undergoes strict environmental assessment²⁴

Requires designation of Special Protection Areas (SPAs) for

- Annex 1 Species
- Migratory Species
- Aggregations of 20,000 waterbirds & 10,000 pairs of seabirds
- Wetlands are a vital component

The Habitats Directive

The EU Habitats Directive (Directive 92/43/EEC) aims to conserve Europe's most threatened habitats and species. It requires Member States to designate Special Areas of Conservation (SACs), forming part of the Natura 2000 network alongside SPAs from the Birds Directive. The Directive protects over 1,000 species and 230 habitat types, ensuring their long-term survival through habitat management, monitoring, and sustainable development. It prohibits activities that could harm listed species or degrade protected sites, and mandates environmental assessments for plans affecting them. The Directive promotes biodiversity, ecological connectivity, and cross-border cooperation, making it central to EU nature conservation policy.²⁵

Requires designation of Special Areas of Conservation (SACs) for

- Annex I Habitats (60 habitats) -44 are water dependent
- Annex II species (25 species)- 21 are water-dependent

To maintain at, or restore, habitats and or species, to favourable conservation status.

²⁵ https://environment.ec.europa.eu/topics/nature-and-biodiversity/habitats-directive_en

²⁴ https://www.npws.ie/legislation/eu-directives/birds-directive

The Water Framework Directive

The EU Water Framework Directive (Directive 2000/60/EC) establishes a unified approach to water management across Europe, aiming to protect and enhance the quality of all water bodies—rivers, lakes, groundwater, and coastal waters. It requires Member States to achieve "good status" for waters through integrated river basin management, public participation, and sustainable use. The Directive promotes pollution control, habitat protection, and coordination across sectors and borders. It mandates regular monitoring, reporting, and the development of River Basin Management Plans every six years. By focusing on ecological health and long-term sustainability, it is central to EU environmental policy.²⁶

The Nature Restoration Law.

The EU Nature Restoration Law (Regulation 2024/1991) is a landmark policy requiring Member States to restore at least 20% of the EU's land and sea areas by 2030, and all degraded ecosystems by 2050. It sets binding targets for forests, wetlands, rivers, urban green spaces, pollinator populations, and agricultural land, including rewetting drained peatlands. Member States must submit national restoration plans, monitor progress, and prevent further deterioration of restored areas. The law supports biodiversity, climate resilience, and aligns with the EU Green Deal and Biodiversity Strategy.²⁷

The Wildlife Act

The Wildlife Act 1976 (as amended) is Ireland's primary legislation for the protection of wild flora and fauna. It prohibits the wilful killing, injury, or disturbance of protected species and regulates hunting, trapping, and trade. The Act enables the designation of Natural Heritage Areas (NHAs) to conserve important habitats and species. Amendments in 2000 and 2010 strengthened protections for birds, habitats, and biodiversity, aligning with EU directives. It also supports conservation through licensing, enforcement, and public awareness. The Act is administered by the National Parks and Wildlife Service.²⁸

Flora Protection Order, 2015

The Flora (Protection) Order 2015 is Irish legislation that safeguards rare and threatened plant species by prohibiting their wilful damage, uprooting, or sale. It lists over 70 protected species, including orchids, ferns, and aquatic plants, found in vulnerable habitats like bogs, fens, and coastal areas. The Order supports biodiversity conservation under the Wildlife Act and aligns with EU directives. Activities affecting these species require special permission from the National Parks and Wildlife Service e.g. in County Kildare Basil Thyme and Hairy St. John's-wort are protected under the Flora Protection Order. This means that any works in areas where these

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²⁶ https://environment.ec.europa.eu/topics/water/water-framework-directive_en

²⁷ https://eur-lex.europa.eu/EN/legal-content/summary/nature-restoration.html

²⁸ https://www.npws.ie/legislation

plants occur can only be carried out under **licence** from the NPWS. Such plants are strictly protected, and their habitats cannot be disturbed or destroyed.²⁹

Strategic Environmental Assessment (SEA)

Strategic Environmental Assessment is a formal process that evaluates the environmental impacts of plans and programmes before they are adopted. Required under EU Directive 2001/42/EC, SEA ensures that environmental considerations are integrated into decision-making for sectors like transport, energy, agriculture, and land use. It involves public consultation, assessment of alternatives, and monitoring of effects. SEA helps prevent environmental harm, supports sustainability, and improves transparency in planning. It complements project-level Environmental Impact Assessment (EIA) by addressing broader, long-term impacts.³⁰

Environmental Impact Assessment (EIA) Directive

The Environmental Impact Assessment (EIA) Directive (Directive 2011/92/EU, amended by 2014/52/EU) ensures that environmental effects of public and private projects are assessed before approval. It applies to developments like infrastructure, energy, and waste facilities. The EIA process includes screening, scoping, public consultation, and decision-making, aiming to prevent or mitigate harm to nature, health, and cultural heritage. It promotes transparency, sustainability, and informed planning across the EU.³¹

European Union (Invasive Alien Species) Regulations 2024

The European Union (Invasive Alien Species) Regulations 2024 (S.I. No. 374 of 2024) strengthen Ireland's implementation of EU rules to prevent and manage invasive alien species. They designate species of Union and National Concern, restrict activities that may spread them, and regulate vector materials. The regulations empower authorities to issue permits, conduct inspections, and enforce compliance. Public participation and appeals processes are included, and transitional provisions apply to existing licence holders. These rules aim to protect biodiversity and ecosystems from harmful non-native species.³²

*Appendices 2 & 3 have been compiled with assistance from Microsoft Co-Pilot

²⁹ https://www.npws.ie/legislation/irish-law/flora-protection-order-1999

³⁰ https://www.epa.ie/our-services/monitoring--assessment/assessment/strategic-environmental-assessment/epas-role-in-sea/

³¹ https://www.epa.ie/our-services/monitoring--assessment/assessment/environmental-impact-assessment/

³² https://www.irishstatutebook.ie/eli/2024/si/374/made/en/print

Note on the Artist Kathrine Geoghegan

Artist's Statement

I am a visual artist living and working in Straffan, County Kildare. In my practice as an artist, I work in the media of painting, mixed media, textile and photography. With an interest in the conservation of habitats, I aim to highlight the importance of these wild places for biodiversity and the mitigation of climate change. My current project follows the river Liffey from its source to where it meets



the sea in Dublin Bay. Its 130 kilometres or so snakes through various habitats, irrigating and nurturing them as it goes. The embryonic river bubbles up at its source in the blanket bog of the Wicklow mountains. It passes through fenland, woodland and grassland. It meanders through meadows, farmland, and cultivated parklands. Finally becoming tidal and passing through our city quays, it flows out to Dublin Bay. Each of these habitats has its own botanical signature. Following the river from its source, taking points along its path, I describe what I see and sense. The river runs through my own village of Straffan and is a constant in village life. From the Liffey Descent canoe race that starts at the weir in Straffan, the anglers who come from far and wide to catch trout, and especially the wealth of wildlife the river supports, we are fortunate that we enjoy its benefits daily. The river provides much of the drinking water to Dublin and the wider hinterland. By describing the river's path & the habitats it flows through, I hope to raise awareness of the value and importance of the Liffey, and its surrounds.

Selecting locations starting from the Liffey source, I have walked these places, taking visual notes, photographs and video, recording what I see and hear. From listening to skylarks in the Wicklow Mountains to the foghorns of boats at the river's mouth at Dublin Bay, a variety of sounds and images have inspired these works.

Kathrine Geoghegan, 2025

Artworks featured: Plan Cover - **High Summer Pollardstown Fen**

Chapter 1 Title, page 1 - Winter Solstice

Chapter 2 Title, page 13 - Shepherd's Warning

Chapter 3 Title, page 29 – **Butterfly Nursery**

Chapter 4 Title, page 40 – Daybreak, Pollardstown Fen

Chapter 5 Title, page 51 – The morning steals upon the night

Chapter 6 Title, page 62 - Sanctuary

Image here, page 75 – Winter, Pollardstown Fen

The Kildare County Council Biodiversity Office wishes to thank Kathrine Geoghegan for the inclusion of her work in this Plan.

