

# Kill

# Biodiversity Action Plan 2021-25



The European  
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2020

LEADER is funded by the Irish Government through the Department of Rural and Community Development

Plan produced by:

Green Pine Consultants 



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## Acknowledgements & Contact Details

This action plan was produced as part of the Kildare Community Biodiversity Project (14LDRKLD110901) which received grant aid from Kildare LCDC through the LEADER programme. This programme is financed by the Government of Ireland under the Rural Development Programme 2014-2020 and by the European Agricultural Fund for Rural Development.

The project represented a collaboration between the Rural Development Team in County Kildare LEADER Partnership CLG and the Heritage Section in Kildare County Council. The project launched in February 2020 and culminated in February 2021.

County Kildare LEADER Partnership CLG and Kildare County Council would like to thank members of the community for their involvement and engagement with the process to develop this action plan. We would also like to thank Kill Tidy Towns for nominating Kill to take part in the project when expressions of interest were initially sought and for their role in encouraging others in the community to get involved.

Finally, we would like to thank Brian Gaynor from Green Pine Consultants and consultant ecologist and botanist, Dr. Fiona MacGowan, for their commitment and dedication to the project and for sharing their expertise generously with the community. They liaised directly with communities, delivered a dedicated programme of training sessions, produced a very helpful series of newsletters, and brought this plan together.

We hope that the Biodiversity Action Plan will be beneficial in guiding local actions to promote and protect biodiversity in the coming years.

### **Getting Involved:**

If you wish to get involved with any of the actions outlined in this Plan, please contact either:

Kill Tidy Towns email: [tidytownskill@gmail.com](mailto:tidytownskill@gmail.com)

or

Kildare County Council Heritage Officer:

Phone: 045 980791

Fax: 045 980835

Email: [heritageofficer@kildarecoco.ie](mailto:heritageofficer@kildarecoco.ie)

Website: <http://www.kildare.ie/county council/Heritage/index.html>

If you would like to apply for LEADER funding towards implementing some actions in the Plan, please email the LEADER team on [info@countykildarelp.ie](mailto:info@countykildarelp.ie) or call us on 045 895450. You can also check out our website: <https://www.countykildarelp.ie/>

**Photographs:** Photos used in this Plan are courtesy of members of Kill Tidy Towns, Dr Fiona MacGowan, Suzanne Behan and Brian Gaynor.

# Section 1:

## Introduction

Kill derives its name from the Gaelic for church, An Chill. It's a beautiful village on the outskirts of Naas and near the Dublin border. Kill, originally on the main road south, was bypassed in 1956. It features a very attractive main street with two historical churches, the old stone school house and two old hostelries. The Kill River bisects the main street and it's a key feature of the village.

Since the 1970's Kill has grown as a commuter village to the greater Dublin area. The growth has been gradual. The fourteen estates are well planned with open spaces and well maintained.

Kill's historical past is reflected in our bronze age Hill Fort on Kill Hill, our Norman Motte and St John's Church which stands on the site an early Christian church.

The Monument to the Fenian, John Devoy marks his birth place. The Old School House is where the uilleann piper Liam Óg O'Flynn was educated by his father.

Originally Kill was a farming, bloodstock, sand and gravel area. Roadstone /CRH began in Kill as the Castle Sand Company in 1945. Goffs Horse Sales opened 1975. Local trainer Ted Walsh trained the Grand National winner Papillon in 2001, ridden by his son Ruby.

Kill has participated in the Tidy Towns Competition for over 40 years winning the Co. Kildare section on 20 consecutive years. A winner of numerous silvers medals, Kill won gold in 2018. Representing Ireland, Kill were winners in the European Entente Floriale Competition 1987.

This Biodiversity Action Plan aims to guide the local community and stakeholders in their efforts to protect and restore some of this natural heritage and maximise the benefits that nature can provide for the people of Kill. The Plan is not intended to be a static document but rather to be regularly reviewed and updated over its life.



A healthy natural world is crucial to our way of life; it provides us with clean air & water, food, shelter, and much more!

# Process to Produce This Plan

At the end of 2019, Kill Tidy Towns submitted an Expression of Interest to be part of an upcoming initiative entitled the *Kildare Community Biodiversity Project*. The project was an initiative between County Kildare LEADER Partnership and the Heritage Officer in Kildare County Council. It was funded by the LEADER programme for 2014-2020. Green Pine Consultants and Dr. Fiona MacGowan were contracted to deliver the project. The team brought together qualifications in biology, ecology, botany, and landscape architecture, as well as skills in working with community groups.



The project kicked off in February 2020 with a launch night in Newbridge Town Hall. There were over 75 people in attendance from the ten communities that were selected to take part. The project involved recce visits to assess biodiversity in each community, as well as a series of free public training workshops, and the development of local Biodiversity Action Plans. Due to Covid 19 restrictions, the training sessions took place in September and October via Zoom Meetings. These were open to all stakeholders and members of the public with an interest in making their locality a better place for people and nature. During this process, the views of all participants were sought during the workshops and through a questionnaire. Several community groups attended the training sessions and their input was invaluable to the production of this Plan.

## What is Biodiversity?

Biodiversity refers to the variety and variability of all living things including plants, animals, microbes, fungi and people. It also includes the places where plants and animals live (known as habitats), the interactions among living things (the web of life) and their environment (ecology).

Biodiversity is all around us, everywhere and in our everyday life. It forms complex systems that sustain life on Earth. Each part of the system is important no matter how small or trivial it may seem to us. Think of it as a puzzle; having a biodiverse system allows us to see the full puzzle but when we start to remove different pieces, or species, the picture loses important parts.

We rely completely on biodiversity to provide us with the basic elements we need such as clean air and water, food, fuel, building products and medicines. We also rely on it for the many free 'services' such as nutrient recycling, pollination and water filtration etc. It is therefore vital that we make space for nature in our towns, villages and countryside for us to continue living full and healthy lives.

*“Biodiversity underpins the functioning of the ecosystems on which we depend for food and fresh water, health and recreation, and protection from natural disasters. Its loss also affects us culturally and spiritually. This may be more difficult to quantify, but is nonetheless integral to our wellbeing”*

*Ban Ki-moon, Secretary General of the United Nations*

# Section 2:

## Biodiversity in Our Area

Kill is a small village close to the large town of Naas. Kill Moat, a Norman construction lies directly southeast of the village and is a physical testimony to the history of the area. The village is located in the rich farmland of east Kildare famous for producing fine racehorses. The hedgerows bounding the fields here are very important corridors of biodiversity in the locality. The Kill River running through the village provides a lovely walkway giving Kill residents and visitors a chance to see nature close-up. Please note that further details on your local conservation site details can be found at: [www.npws.ie/protected-sites/](http://www.npws.ie/protected-sites/)

Kill is surrounded by farmland that contains mature hedgerows and trees some of which extend through the village, much like the Kill River.



# Main Biodiversity Sites

There are numerous places of important biodiversity value in Kill. The following are some of the main ones in and around the town.

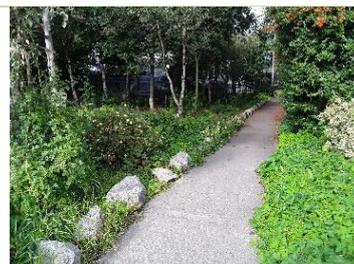
## Site of Biodiversity Interest

**Kill River:** This small river is part of the River Liffey catchment and flows through the centre of the village. It is an important focal point in the village centre around which the village has developed and forms the spine of the large green area in Glendara Estate. It has many fine examples of trees along its banks in the village which are important habitat for various species of birds.



**Kill Pollinator Friendly Flowerbeds:** The main street in Kill is dotted with flowerbeds and containers, which were once planted with summer bedding plants, but are now full of pollinator friendly wildflowers. This has culminated with the creation of 'Rowan Walk', a wildlife garden at the north eastern end of the street, which includes access so that people can enjoy the many native flowers and trees planted.

**Cherry Tree Walk & Dara Way:** The local community have maximised the green space along the motorway to create a wonderful community walk that is full of wildlife habitat. It includes native trees and woodland ground flora, ornamental pollinator friendly planting beds and an avenue of cherry trees on the south western side.



**Kill to the M7 Junction 8 at Johnstown Wildlife Corridor:** Thanks to the work of local volunteers, the roadside verges between Kill and the M7 Junction 8 at Johnstown have converted into important ecological corridors for many species of wildlife. Sections have been planted with native trees and others are now being managed as wildflower meadows.

**Red Bog (SAC 000397):** This small site is located about 5km southwest of Kill. It is of great interest for its collection of lake, bog and fen habitats which support a group of species that have fewer places to live as wetland habitats disappear.

**Kilteel Wood (pNHA 001394):** This small woodland lies about 3km east of Kill beside Kilteel village. It features a mix of tree species dominated by Oak and Downy birch with Scots pine, Ash and Sycamore.

**Grand Canal (pNHA 002104):** A jewel of a landscape feature to have on the village doorstep, really came into its own as a wonderful ecosystem service during the pandemic with lots of locals walking. It is protected as a Natural Heritage Area for its habitats and species. According to the NPWS site synopsis 'The Grand Canal is a man-made waterway linking the River Liffey at Dublin with the Shannon at Shannon Harbour and the Barrow at Athy. The Grand Canal proposed Natural Heritage Area (pNHA) comprises the canal channel and the banks on either side of it. The canal system is made up of a number of branches - the Main Line from Dublin to the Shannon, the Barrow Line from Lowtown to Athy, the Edenderry Branch, the Naas and Corbally Branch and the Milltown Feeder. The Kilbeggan Branch is dry at present, but it is hoped to restore it in the near future. Water is fed into the summit level of the canal at Lowtown from Pollardstown Fen, itself a pNHA. A number of different habitats are found within the canal boundaries - hedgerow, tall herbs, calcareous grassland, reed fringe, open water, scrub and woodland.'

# Recent Progress

A lot of work has been carried out in recent years already to enhance the village's biodiversity. The following are some examples of these:

- The Public Park / Native Tree Trail, an educational treasure trove for adults & children alike, has been developed by the local volunteers. 16 native trees are featured with interactive signage.
- 'Rowan Walk' was created by removing 39 leylandii trees & Sitka Spruce and replacing them with a native woodland walk featuring Rowan trees, a mixed native hedge and ground covering of ferns, crocuses, primroses and bluebells. A cornflower meadow edges it.
- Dara Way: A walkway, some 600 meters long has been developed through waste ground parallel to the N7. There has been extensive planting of native trees, shrubs, and bluebells to complement existing wildflowers.
- The embankment beyond the Wildlife Area opposite the John Devoy Monument has been planted with 200 trees & a wildflower meadow was sown.
- The roundabout at the church has been replanted with 180 winter and summer heathers.
- Replanting of the flower beds in the center of the village with flowers to attract bats, bees, butterflies and moths
- St John's Church: 8 New Bat boxes erected on south facing church wall. Completion of Biodiversity Audit of church grounds. We have designated the grounds as a rich biodiversity sanctuary that must be carefully managed.
- Kill River Study was carried out to address herbicidal damage to the river banks in Glendara. A rehabilitative tree planting programme has begun.
- Close to 1,000 native trees were planted in the village in the 2020-21 tree planting season as hedging and scattered park trees.
- In autumn 2020, members of the local community took part in the Kildare Community Biodiversity Project. It involved three biodiversity training sessions (all online) and led to the production of this Action Plan.

Pollinator friendly plants are now used throughout the village in containers and flowerbeds



Local volunteers planted nearly 1,000 native trees in the 2020-21 tree planting season

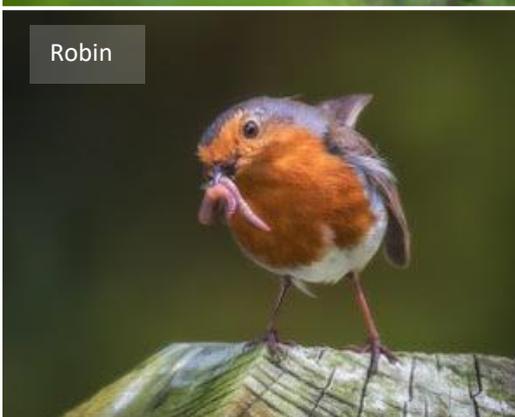


# Wildlife of Kildare

Badger



Robin



Red Squirrel



Great Spotted Woodpecker

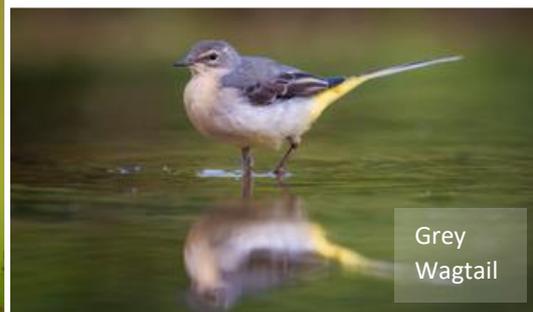


Rabbit



A collection of photos courtesy of  
Kildare wildlife photographer  
Suzanne Behan

Grey Wagtail



Red Fox



Mute Swan



Kingfisher



# Section 3: A Call to Action

This is a shared plan of action for the village to build on the recent progress made to improve areas for biodiversity and to start developing other opportunities to maximise the village's full biodiversity potential. In doing so this will hopefully engage new people and groups in managing their local green space with biodiversity in mind. The plan has four main objectives, each with several targets and actions:

1. **Objective 1:** Making Kill wildlife friendly
2. **Objective 2:** Raising awareness of local wildlife and how to protect it.
3. **Objective 3:** Collecting evidence to track change and measure success.
4. **Objective 4:** Build local capacity to manage and record biodiversity.



**Did you know:** Irish pollinators are estimated to contribute €59 million annually to the Irish economy!

# Objective 1: Making Kill biodiversity friendly

All types of land can be used to increase the levels of biodiversity in the village including built features and green spaces. Each landowner whether public or private can also play their part in enhancing their lands for biodiversity.

Target 1.1 Make the village's public spaces more biodiversity friendly			
No.	Action	Who	When
1.1.1	Carry out the following biodiversity habitat enhancement around the ESB substation opposite St Brigid's National School: <ol style="list-style-type: none"> <li>Plant native shrubs and small trees around the back and to the side. The mix could include some of the following species: Spindle, Guelder Rose, and Holly.</li> <li>Manage a strip of grassland to the front as a spring bulb meadow.</li> <li>Manage the earth bank as a solitary bee bank by keeping the vegetation clear on parts of it. This vegetation control should be carried out manually with no herbicide.</li> </ol>	Kill Tidy Towns Biodiversity Group (KTTBD Group)	2021
1.1.2	Suggestions for carrying out the following biodiversity habitat enhancement and landscape works on the Cherry Tree Walk and Dara Way: <ol style="list-style-type: none"> <li>Install signs at either end of the walk</li> <li>Install 2-4 interpretation posts along the walk highlighting some of the native planting along the walk.</li> <li>Infill planting in the flower bed at the entrance to the Dara walk use native woodland -shade tolerant plants</li> </ol>	KTTBD Group	Spring of 2021  Spring 2021
1.1.3	Continue to manage the pollinator friendly planting beds and containers along Main Street including the Rowan Walk.	KTTBD Group	Nov 2021
1.1.4	Increase the native woodland planting along the grass verge between Kill and N7 Junction 8 roundabout. Plant at wide spacings to create an open woodland structure. A wildflower meadow will be sown here with a seed mix following lifting of the perennial rye grass sod.	KTTBD Group	Oct 2020-2023
1.1.5	Explore the opportunities to enhance biodiversity on the road that leads down to The Stables and New housing development by: <ul style="list-style-type: none"> <li>Allow the southern side of this road to continue to regenerate naturally.</li> <li>Manage the verges along the footpath and roadside edges as short cut grass (one mower width).</li> <li>With the builder on the Newtown side of the road; explore the opportunity to plant with native shrubs &amp; trees.</li> </ul>	Newtown Residents gardening group & The Stables Residents	Spring of 2021

<b>Target 1.2 Make the village's private lands more biodiversity friendly</b>			
<b>No.</b>	<b>Action</b>	<b>Who</b>	<b>When</b>
<b>1.2.1</b>	Run a 'Free Garden Tree Giveaway(s)' on a Saturday morning in Feb/March through the various Residents Associations of Kill. Tree mix (whips only) to include: Rowan, Birch, Hazel and Wild Cherry.	KTTBD Group	2021-25 (Feb/March)
<b>1.2.2</b>	Consult with the Residents Association in Glendara Estate to assist them in their plans to improve biodiversity, by creating areas of wildflower meadows (both short cut and hay meadows) and pockets of native trees throughout the on the green park beside the Kill River.	Glendara Residents & KTTBD Group	2021-2025
<b>1.2.3</b>	Explore with Embassy Manor Residents about the opportunity to plant a native hedgerow along the entrance to the Embassy Manor estate on the eastern boundary. Where possible manage areas of unused grass space as short cut wildflower meadow.	Embassy Manor	Autumn 2021
<b>1.2.4</b>	Engage with the Gables Residents Association. They plan to plant Springs Bulbs ie: crocuses & snowdrops under the existing 23 trees on the green also to replant four exiting flowerbeds outside the fence on the main road with pollinator friendly flowers	Gables Residents	2022
<b>1.2.5</b>	Consult with The Stables Residents Association about the opportunity to plant a strip of native trees & native hedgerow along the boundary adjoining the proposed development near The Stables Estate. Edible fruit, nut tree species and native trees /shrubs to be sown.	The Stables Residents	Dec 2020 -21
<b>1.2.6</b>	Explore the opportunity to create wildflower rich grassy areas under and around the existing trees in the shared green areas in all the residential estates across Kill. These can include hardy wildflowers and bulbs such as Knapweed, Red clover, Yarrow, Bluebells, etc.	Each Residential Estate	2022
<b>1.2.7</b>	<p>Explore with Rochford Abbey Gardening Committee the opportunity to carry out the following biodiversity habitat enhancement and landscape works in Rochford Abbey with the support of the Rochford Abbey Apartments complex: -</p> <ul style="list-style-type: none"> <li>A. Create and manage a 2-5m wildflower meadow strip to the front of the hedgerow boundary with Earls court. Action:</li> <li>B. Manage the hedgerow on a 3-year cutting cycle to stop it encroaching too far. A rough survey has identified several oak trees of about 120 years old; about 25 elders and even two elms.</li> <li>C. Manage the orchid-rich grassland behind the apartments as a wildflower meadow. This will be cut and lifted once each year at the end of the season (Aug-Sep) taking care not to remove the thistle till the early new year after the birds have finished with them</li> <li>D. Explore the opportunity to plant fruit tree species and shrubs around the estate.</li> </ul>	Rochford Abbey Residents	2021-23

Target 1.2 Make the village's private lands more biodiversity friendly			
No.	Action	Who	When
1.2.8	<p>Explore the opportunity to implement more of the actions identified by local expert Paddy Madden in his biodiversity plan for the Scoil Bhride, the following actions are being considered:</p> <ul style="list-style-type: none"> <li>A. Plant a native hedgerow around the eastern and north eastern sides of the grounds (to the rear of the school grounds).</li> <li>B. Manage the wildflower meadow in front of the existing hedgerow on the southern boundary by cutting and lifting each year. Where space allows, manage a similar strip of wildflower meadow to the front of the proposed new hedgerow above.</li> <li>C. Plant the area of bark mulch to the front of the car park / ball courts with pollinator friendly planting beds. Include plant species with autumn (Sedum, Japanese anemones), winter (Snowdrops, Hellebores) &amp; spring (Bergenia, Crocuses, Alliums) interest.</li> <li>D. Plant the raised planting beds around the perimeter of the car park / ball courts with pollinator friendly planting beds. Include plant species with autumn, winter &amp; spring interest.</li> <li>E. Infill planting in the school wildlife / GYI garden area with more pollinator friendly plant species. Include plant species with autumn, winter &amp; spring interest.</li> <li>F. Plant herb species into the planter tubs in the front yard.</li> <li>G. Install a calling system to accompany the Swift boxes (see Action 1.4.1).</li> <li>H. Eliminate chemical herbicide use on the school grounds.</li> <li>I. Use signage to maximise outdoor learning (see Action 2.2.3).</li> </ul>	<p>Schools Green Committee &amp; KTTBD Group</p> <p>Birdwatch Ire</p>	Spring 2021-2025
1.2.9	<p>Engage / explore with the GAA the opportunity to improve the green infrastructure within Kill GAA grounds including:</p> <ul style="list-style-type: none"> <li>A. Plant hedgerows / shelterbelts around the perimeter of the grounds. Where the pitches are tight against the boundary use beech hedging. Where space allows use native tree species to create shelterbelts.</li> <li>B. Plant native Oak (3-5no.) into the front boundary on the Main Road as the Ash trees may succumb to Ash Dieback.</li> <li>C. Plant the bed of the car park with pollinator friendly planting.</li> <li>D. Plant a row of Birch (<i>Betula pendula</i>) trees on the bank between the middle pitch and the southernmost pitch. Plant at 8m centres using a minimum of 8-10cm girth standards.</li> <li>E. Install Swift boxes as part of the village's Swift conservation project (see Action 1.4.1).</li> </ul> <p>The new tree planting allows the opportunity to run a 'Sponsor a Tree' fundraising campaign for other grounds development projects.</p>	GAA & KTTBD Group	2022
1.2.10	<p>Manage the grasslands within St John's Church of Ireland grounds for biodiversity. This can include a short cut wildflower meadow to the front lawn and in selected areas to the rear.</p>	Church Of Ireland & KTTBD Group	2021 - 2025
1.2.11	<p>Explore the opportunity within the park in St Brigid's Catholic Church to further enhance it for biodiversity and for public use with St Bridget's Church:</p> <ul style="list-style-type: none"> <li>A. Manage the existing wildflower meadow strips by cutting and lifting each year at the end of the summer.</li> <li>B. There may be an opportunity to develop some herb beds in the park.</li> </ul>	KTTBD Group	2021-2025

Target 1.3 Make the village's surrounding lands more biodiversity friendly			
No.	Action	Who	When
1.3.1	Explore the opportunity to carry out a hedgerow resilience project by augmenting existing hedgerows in the surrounding landscape with new trees such as Oak, Wild Cherry, etc. This will future proof hedgerows against the potential impacts of Ash Dieback.	KTTBD Group	2021

Target 1.4 Deliver species-specific conservation projects			
No.	Action	Who	When
1.4.1	<p>Install more Swift boxes on suitable locations in the village including further boxes on St Brigid's National School. Caller systems should be installed on any new nest box sites.</p> <p>This could be delivered as part of local wildlife charities such as Wild Kildare's Swift box project work. Lobby for Swift bricks to be included in future developments.</p>	KTTBD Group & School & local wildlife charities e.g. Wild Kildare	2021- 2025
1.4.2	Monitor the Greater Carder bee species population found in St John's Church of Ireland and take any necessary steps to increase suitable habitat for the species e.g. plant a flower bed nearby with a mix of suitable food plants e.g. <i>Nepeta</i> . Raise awareness of this species with the local schools.	KTTBD Group	2021-2025
1.4.3	Carry out a Brimstone butterfly conservation project. This will involve; 1) planting native buckthorn in suitable locations including in new native woodland planting mixes proposed for Glendara Estate and the Stables. We will be raising awareness of this project through our web page & facebook page,	KTTBD Group; Each Estate	2021-2025

# Objective 2: Raising awareness of local biodiversity & how to protect it

It is important to raise awareness so that the public, community & residential groups, and businesses know how to help our wildlife.

Target 2.1 Increase the number of people within the community who are aware of their local biodiversity and who understand the need to conserve it			
No.	Action	Who	When
2.1.1	Install 2-4no. Interpretation posts at selected locations along Dara Walk. These can cover the following topics: woodland plants and animals, and local cultural and built heritage.	KTTBD Group	Spring 2021
2.1.2	Explore the opportunity to establish a series of connected looped waymarked walks around the village that incorporate sites of natural, cultural, built and archaeological importance. One such loop could include Dara Way, Rochford Park, Glendara Estate and the Main Street. Use interpretation posts and signage along the way to highlight the different sites of interest and the natural heritage of the area.	Residents Association & KTTBD Group	Autumn 2021
2.1.3	Explore the opportunity to run wildlife related events (e.g. walks, talks, workshops) each year. This should use the results of the questionnaire in the back of this Plan as a guide for topics of interest and how to deliver them during Covid 19. They could include: <ul style="list-style-type: none"> <li>• A half day practical workshop on the traditional uses of plants, e.g. Dandelions. This ties in with the idea of changing people’s attitudes to ‘weeds’ such as Dandelions and the need to control them using herbicide (see Action 2.3.1).</li> <li>• A wildflower walk around the village which should include the species rich grasslands at Rochford Abbey, River Kill and Glendara Estate, and Dara Walk.</li> <li>• Run a pollinator awareness evening for local residents to include advice on gardening for pollinators as well as awareness of wild areas in Kill that are valuable.</li> <li>• Run a bat walk and talk</li> </ul>	KTTBD Group	2022-25 (time of year is dependent on each specific event)
2.1.4	Explore the possibility of painting a wildlife interpretation mural on the bin at the Kill River beside the bridge (next to the Old House Bar).		2021-2022
2.1.5	Use local social media to raise awareness of local biodiversity and conservation issues.	Our Facebook page and KTT web-page	2021-2025
2.1.6	Install an interpretation board at a central location in the village. This should include information on local natural, cultural and built heritage, as well as act as an orientation map for different walking routes and sites of interest.	KTTBD Group	2022
2.1.7	Post the results of local biodiversity studies / surveys on local social media outlets.	Kill Facebook and web page and yearly newsletter	2022

Target 2.2 Support education opportunities in schools at all levels			
No.	Action	Who	When
2.2.1	Ensure the local schools have copies of the All-Ireland Pollinator Plan guides for schools and the Junior All-Ireland Pollinator Plan and are aware of all the resources available at <a href="http://www.pollinators.ie/resources">www.pollinators.ie/resources</a>	Green Schools Committee	Spring 2021 - 2025
2.2.2	Run 1 wildlife event each year with St Brigid's National School and Saplings School using the different areas of habitat on the campus. This can be a wildlife walk, talk, or workshop.	KTTBD Group	2021-25
2.2.3	Encourage the school to install signage to maximise outdoor learning about the different areas of biodiversity habitats on the school grounds. These can be created by the school pupils as part of art class activities.	KTTBD Group & Green School Committee	2022

Target 2.3 Provide clear information to different sectors within the community on how they can take actions to enhance their spaces for biodiversity			
No.	Action	Who	When
2.3.1	Run a half day weed control workshop to raise awareness of the harmful effects of herbicide use on human health and for biodiversity to different landowners around the town. This workshop should also cover alternative weed control solutions where weed control is necessary and encourage a change of mindset in other situations where 'weeds' could be allowed to grow.	KTTBD Group	Spring 2022
2.3.2	Engage with the local farming community on enhancing biodiversity in the landscape e.g. utilizing farm green infrastructure for the farm business, farm woodland grants,	KTTBD Group	2021-25
2.3.3	Engage with Kill GAA about completing the GAA Green Club Questionnaire: <a href="https://www.gaa.ie/news/green-club-toolkit-questionnaire/">https://www.gaa.ie/news/green-club-toolkit-questionnaire/</a>	GAA	2021 -2025
2.3.4	Ensure the different sectors within the community have copies of the relevant All-Ireland Pollinator Plan resource guides e.g. sporting organisations, faith communities, etc	KTTBD Group	2021
2.3.5	Post links to the All-Ireland Pollinator Plan guides on local social media each year. Available at: <a href="http://www.pollinators.ie/resources">www.pollinators.ie/resources</a>	Kill Facebook page	2021-25
2.3.6	Implement a policy of no Invasive plant species in new planting schemes in the village e.g. no Laurel ( <i>Prunus laurocerasus</i> )	KTTBD Group along with residents' groups	2021-2025

# Objective 3: Collecting evidence to track change & measure success

To ensure that our actions are making a difference we need to gather a baseline of data on our wildlife and then measure our success or lack thereof against this. This data can be gathered through regular surveys and Citizen Science efforts. This plan sets out the following targets to achieve this:

Target 3.1 Build a baseline of data on local biodiversity and track changes			
No.	Action	Who	When
3.1.1	Monitor the Swift population numbers in the village annually and the uptake of the Swift boxes.	Birdwatch Ireland & KTTBD Group	2021
3.1.2	Participate in Wild Kildare's 'Moth Atlas' for the county We have a member of WK living in our village	KTTBD Group with support from wildlife charities such as Wild Kildare	2021
3.1.3	Develop at least 1 bumblebee transect in the village and submit records to the NBDC	KTTBD Group with support from wildlife charities	
3.1.4	Develop at least 1 butterfly transect in the village and submit records to the NBDC	KTTBD Group with support from wildlife charities	2021-2025
3.1.5	Carry out a botanical survey of the Orchid-rich grass area at the back of the apartments in Rochford Abbey.	Rochford Abbey Residents Association	Summer 2021 - 2025
3.1.6	Continue to monitor and record Dipper numbers on the Kill River. Submit all records to the National Biodiversity Data Centre (via Wild Kildare).	KTTBD Group with support from wildlife charities	2021-2025
3.1.7	Carry out a repeat ecological survey of St John's Church of Ireland cemetery to track changes in biodiversity levels.	KTTBD Group with support from wildlife charities	2021-2025
3.1.8	Monitor the Swift population numbers in the village annually and the uptake of the Swift boxes.	Birdwatch Ireland & KTT	2021
3.1.9	Record and map all biodiversity actions delivered at: <a href="https://pollinators.biodiversityireland.ie/">https://pollinators.biodiversityireland.ie/</a>	KTTBD Group	2021-2025
3.1.10	Carry out a habitat map of the area including hedgerows, woodlands and trees of significance. This will highlight existing ecological corridors and where gaps exist.		2022
3.1.11	Monitor the bat boxes and local populations. Incorporate this with a bat walk and talk in Kill by the Kildare Bat Group (see Action 2.1.3).		2021

Target 3.2 Measure progress of this Plan on a regular basis			
No.	Action	Who	When
3.2.1	Kill Tidy Towns have set up a sub-committee that will be responsible for carrying out an annual review and steering the delivery of this BAP. There are representatives of different sectors within the community on this group.	KTTBD Group	Oct 2020
3.2.2	The sub-committee shall carry out an annual review of the Action Plan.	KTTBD Group	2021, 2022 & 2024
3.2.3	Carry out a more detailed mid-term review of the Action Plan.	KTTBD Group	2023
3.2.4	Carry out a full detailed review of the Action Plan in the final year.	KTTBD Group	Summer 2025

# Objective 4: Build local capacity to manage & record biodiversity

The following targets and actions aim to ensure that we have the resources and capacity to carry out the actions identified in Objectives 1-3.

## Target 4.1 Build the capacity within the community to manage and record biodiversity

No.	Action	Who	When
4.1.1	Identify all wildlife groups active in Kill then make contact and offer help / partner on local projects.	KTTBD Group	2021 -2025
4.1.2	Identify sources of native wildflowers (this should include Yellow Rattle) as places for community seed collections - this can include other donor sources in the county	KTTBD Group	2021 -2025
4.1.3	Maintain the email list of local volunteers who can be called upon for practical conservation volunteering events throughout the year such as management of wildflower meadows, invasive species removal, tree planting, etc.	KTTBD Group	2021
4.1.4	Hold an event to communicate this BAP to the local community.	KTTBD Group	2021
4.1.5	Participate in a meeting of all 10 Kildare 2020 BAP applicants to discuss opportunities for collaboration to deliver selected projects outlined in this Plan.	KTTBD Group	2021 -2025

## Target 4.2 Build up local resources of materials and equipment to manage and record biodiversity

No.	Action	Who	When
4.2.1	Explore the possibility of installing a community run polytunnel at a secure location in the village to grow all the town's flowers and plants for use in new community planting schemes. This will create the opportunity to raise funds by selling native plants and pollinator friendly plants.	KTTBD Group	2021
4.2.2	When purchasing /hire meadow maintenance equipment for community use. We will consider partnership with other neighbouring towns and village.	KTTBD Group	2021-2025



# Section 4: Resources

It is not necessary to re-invent the wheel in order to deliver this plan. There are numerous people, organisations, publications and online resources available to achieve the best possible outcomes. Some of these are outlined in this section, although this is not intended to be an exhaustive list. It will also be important that as new information becomes available that this should be considered and actions delivered or adjusted accordingly.

**Did you know:** Of the 62,000 townland names in Ireland, 13,000 have reference to trees and 1,600 have some derivation of 'dair' the Irish word for oak. For example, Cill Dara (Kildare) meaning 'Church of the Oak' Kildare.

A red leaf vacuum with a grey collection bag is lying on a grey tarp in a meadow. The meadow is filled with tall grass and wildflowers, including a prominent purple thistle in the foreground. In the background, there are rolling green hills under a cloudy sky. Two people can be seen in the distance, standing in the meadow.

This leaf vacuum can be used to harvest native wildflower seed from local meadows which can then be used to increase diversity in new community meadows.

# Links to useful online resources

The following is a list of useful links to guides on a range of common biodiversity subjects.

Subject	Link(s)
<b>Bats</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.batconservationireland.org/">https://www.batconservationireland.org/</a></li> <li>• <a href="https://kildarebatgroup.wordpress.com/">https://kildarebatgroup.wordpress.com/</a></li> </ul>
<b>Birdwatching</b>	<ul style="list-style-type: none"> <li>• <a href="http://www.birdwatchkildare.com/?page_id=23">http://www.birdwatchkildare.com/?page_id=23</a></li> <li>• <a href="https://birdwatchireland.ie/irelands-birds-birdwatch-ireland/">https://birdwatchireland.ie/irelands-birds-birdwatch-ireland/</a></li> <li>• <a href="http://www.irishbirding.com">www.irishbirding.com</a></li> </ul>
<b>Children's Biodiversity Activities</b>	<ul style="list-style-type: none"> <li>• <a href="https://birdwatchireland.ie/our-work/fun-learning/for-kids/">https://birdwatchireland.ie/our-work/fun-learning/for-kids/</a></li> <li>• <a href="https://www.woodlandtrust.org.uk/blog/2020/03/kids-nature-activities-self-isolation/">https://www.woodlandtrust.org.uk/blog/2020/03/kids-nature-activities-self-isolation/</a></li> <li>• <a href="https://www.rspb.org.uk/fun-and-learning/">https://www.rspb.org.uk/fun-and-learning/</a></li> </ul>
<b>General Biodiversity Issues</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.biodiversityireland.ie/">https://www.biodiversityireland.ie/</a></li> <li>• <a href="http://www.npws.ie">www.npws.ie</a></li> </ul>
<b>Habitat Boxes</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.biodiversityireland.ie/wordpress/wp-content/uploads/Pollinator-How-to-Guide-1-ALT_FINAL.pdf">https://www.biodiversityireland.ie/wordpress/wp-content/uploads/Pollinator-How-to-Guide-1-ALT_FINAL.pdf</a></li> <li>• <a href="https://birdwatchireland.ie/app/uploads/2019/09/Nestboxes-factsheet.pdf">https://birdwatchireland.ie/app/uploads/2019/09/Nestboxes-factsheet.pdf</a></li> <li>• <a href="https://www.batconservationireland.org/wp-content/uploads/2015/05/BCIrelandGuidelines_BatBoxes.pdf">https://www.batconservationireland.org/wp-content/uploads/2015/05/BCIrelandGuidelines_BatBoxes.pdf</a></li> </ul>
<b>Hedgerows</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.biodiversityireland.ie/wordpress/wp-content/uploads/Pollinator-How-to-Guide-3-FINAL-1.pdf">https://www.biodiversityireland.ie/wordpress/wp-content/uploads/Pollinator-How-to-Guide-3-FINAL-1.pdf</a></li> <li>• <a href="https://www.heritagecouncil.ie/content/files/conserving_hedgerows_2mb.pdf">https://www.heritagecouncil.ie/content/files/conserving_hedgerows_2mb.pdf</a></li> <li>• <a href="https://63273-649646-raikfcquaxqncofqfm.stackpathdns.com/wp-content/uploads/2019/04/Hedgerow-CasestudyASPaul21-Send-for-New-Website.pdf">https://63273-649646-raikfcquaxqncofqfm.stackpathdns.com/wp-content/uploads/2019/04/Hedgerow-CasestudyASPaul21-Send-for-New-Website.pdf</a></li> <li>• <a href="https://mosart.ie/wp-content/uploads/2016/02/Irish-Hedgerows-Networks-for-Nature.pdf">https://mosart.ie/wp-content/uploads/2016/02/Irish-Hedgerows-Networks-for-Nature.pdf</a></li> <li>• <a href="http://www.hedgelaying.ie">www.hedgelaying.ie</a></li> </ul>
<b>Interpretative Signage</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.nature.scot/sites/default/files/2019-11/Guidance%20-%20Natural%20heritage%20interpretation_1.pdf">https://www.nature.scot/sites/default/files/2019-11/Guidance%20-%20Natural%20heritage%20interpretation_1.pdf</a></li> <li>• <a href="https://www.heritagecouncil.ie/content/files/bored_of_boards_1mb.pdf">https://www.heritagecouncil.ie/content/files/bored_of_boards_1mb.pdf</a></li> <li>• <a href="https://pollinators.ie/resources/signage-templates/">https://pollinators.ie/resources/signage-templates/</a></li> </ul>
<b>Invasive Alien Species</b>	<ul style="list-style-type: none"> <li>• <a href="https://invasivespeciesireland.com/">https://invasivespeciesireland.com/</a></li> <li>• <a href="https://www.fisheriesireland.ie/Invasive-Species/invasive-species.html">https://www.fisheriesireland.ie/Invasive-Species/invasive-species.html</a></li> </ul>
<b>Local Biodiversity News</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.facebook.com/Wild-Kildare-1437313092971392/">https://www.facebook.com/Wild-Kildare-1437313092971392/</a></li> <li>• <a href="http://www.birdwatchkildare.com/">http://www.birdwatchkildare.com/</a></li> <li>• <a href="https://kildarebatgroup.wordpress.com/">https://kildarebatgroup.wordpress.com/</a></li> <li>• <a href="http://www.kildare.ie/CountyCouncil/Heritage/Biodiversity/">http://www.kildare.ie/CountyCouncil/Heritage/Biodiversity/</a></li> </ul>
<b>Nature Trails</b>	<ul style="list-style-type: none"> <li>• <a href="http://www.walkingroutes.ie/WalkingTrails/Kildare">http://www.walkingroutes.ie/WalkingTrails/Kildare</a></li> </ul>
<b>Orchards</b>	<ul style="list-style-type: none"> <li>• <a href="http://www.irishseedsavers.ie/blog/wp-content/uploads/2014/10/CreatingAnOrchard.pdf">http://www.irishseedsavers.ie/blog/wp-content/uploads/2014/10/CreatingAnOrchard.pdf</a></li> <li>• <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/11466/1973262.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/11466/1973262.pdf</a></li> <li>• <a href="http://www.wetlandsystems.ie/goephow.html">http://www.wetlandsystems.ie/goephow.html</a></li> <li>• <a href="https://www.theorchardproject.org.uk/">https://www.theorchardproject.org.uk/</a></li> </ul>
<b>Peatlands</b>	<ul style="list-style-type: none"> <li>• <a href="http://www.ipcc.ie">www.ipcc.ie</a></li> <li>• <a href="http://www.bordnamona.ie/transform/biodiversity">www.bordnamona.ie/transform/biodiversity</a></li> <li>• <a href="http://www.abbeyleixbog.ie">www.abbeyleixbog.ie</a></li> </ul>
<b>Pollinator Friendly Planting Schemes</b>	<ul style="list-style-type: none"> <li>• <a href="https://pollinators.ie/resources/">https://pollinators.ie/resources/</a></li> <li>• <a href="https://pollinators.ie/wordpress/wp-content/uploads/2018/04/Planting-Code-2018-WEB.pdf">https://pollinators.ie/wordpress/wp-content/uploads/2018/04/Planting-Code-2018-WEB.pdf</a></li> <li>• <a href="http://www.rhs.org.uk">www.rhs.org.uk</a></li> </ul>
<b>Pollinators</b>	<ul style="list-style-type: none"> <li>• <a href="https://pollinators.ie/">https://pollinators.ie/</a></li> </ul>
<b>Recording Biodiversity</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.biodiversityireland.ie/record-biodiversity/">https://www.biodiversityireland.ie/record-biodiversity/</a></li> </ul>
<b>Reducing Herbicide Use</b>	<ul style="list-style-type: none"> <li>• <a href="https://greensideup.ie/16-natural-alternatives-to-herbicide-why-you-should-use-them/">https://greensideup.ie/16-natural-alternatives-to-herbicide-why-you-should-use-them/</a></li> </ul>
<b>Schools &amp; Biodiversity</b>	<ul style="list-style-type: none"> <li>• <a href="https://greenschoolsireland.org/biodiversity/">https://greenschoolsireland.org/biodiversity/</a></li> <li>• <a href="https://pollinators.ie/schools/">https://pollinators.ie/schools/</a></li> <li>• <a href="http://www.heritageinschools.ie/teachers-resources/strand/living-things-science/p3?q=&amp;c=">http://www.heritageinschools.ie/teachers-resources/strand/living-things-science/p3?q=&amp;c=</a></li> </ul>

Subject	Link(s)
	<ul style="list-style-type: none"> <li>• <a href="https://www.eckilkenny.ie/images/Biodiversity_Plan_for_Schools.pdf">https://www.eckilkenny.ie/images/Biodiversity_Plan_for_Schools.pdf</a></li> <li>• <a href="http://www.heartoftheglens.org/cms/wp-content/uploads/2017/12/Teachers-Outdoor-Learning-Resource.pdf">http://www.heartoftheglens.org/cms/wp-content/uploads/2017/12/Teachers-Outdoor-Learning-Resource.pdf</a></li> <li>• <a href="http://www.ipcc.ie/discover-and-learn/resources/">http://www.ipcc.ie/discover-and-learn/resources/</a></li> </ul>
Swifts	<ul style="list-style-type: none"> <li>• <a href="https://birdwatchireland.ie/our-work/surveys-research/research-surveys/swift-surveys/">https://birdwatchireland.ie/our-work/surveys-research/research-surveys/swift-surveys/</a></li> <li>• <a href="http://www.swiftconservation.ie/">www.swiftconservation.ie/</a></li> </ul>
Tree Identification & Selection	<ul style="list-style-type: none"> <li>• <a href="https://www.treecouncil.ie/nativeirishtrees">https://www.treecouncil.ie/nativeirishtrees</a></li> <li>• <a href="https://drive.google.com/file/d/0B-qemRFHRDRSVnh3bmxGOEVaMHc/edit">https://drive.google.com/file/d/0B-qemRFHRDRSVnh3bmxGOEVaMHc/edit</a></li> <li>• <a href="http://www.clarecoco.ie/services/planning/publications/tree-design-guide-for-towns-and-villages-in-co-clare-2017-28115.pdf">http://www.clarecoco.ie/services/planning/publications/tree-design-guide-for-towns-and-villages-in-co-clare-2017-28115.pdf</a></li> </ul>
Wildflower Meadows	<ul style="list-style-type: none"> <li>• <a href="https://pollinators.ie/wordpress/wp-content/uploads/2018/04/How-to-guide-Wildflower-Meadows-2018-WEB.pdf">https://pollinators.ie/wordpress/wp-content/uploads/2018/04/How-to-guide-Wildflower-Meadows-2018-WEB.pdf</a></li> </ul>
Wildflowers	<ul style="list-style-type: none"> <li>• <a href="http://www.wildflowersofireland.net/index.php">http://www.wildflowersofireland.net/index.php</a></li> <li>• <a href="http://www.bsbi.org">www.bsbi.org</a></li> </ul>
Wildlife Ponds	<ul style="list-style-type: none"> <li>• <a href="https://www.wildlifetrusts.org/actions/how-build-pond">https://www.wildlifetrusts.org/actions/how-build-pond</a></li> <li>• <a href="https://invasivespeciesireland.com/wp-content/uploads/2017/10/AQUATICS_BOOK5.pdf">https://invasivespeciesireland.com/wp-content/uploads/2017/10/AQUATICS_BOOK5.pdf</a></li> </ul>
Woodland	<ul style="list-style-type: none"> <li>• <a href="http://www.woodlandsofireland.com/sites/default/files/Management%20Guidelines%20for%20Ireland%27s%20Native%20Woodlands%202017.pdf">http://www.woodlandsofireland.com/sites/default/files/Management%20Guidelines%20for%20Ireland%27s%20Native%20Woodlands%202017.pdf</a></li> <li>• <a href="https://www.forestryfocus.ie/social-environmental-aspects/biodiversity-and-nature-conservation/biodiversity-in-forests/conservation-and-restoration/">https://www.forestryfocus.ie/social-environmental-aspects/biodiversity-and-nature-conservation/biodiversity-in-forests/conservation-and-restoration/</a></li> <li>• <a href="http://www.woodlandsofireland.com/sites/default/files/Silvicultural%20Guidelines%20for%20Native%20Trees.pdf">http://www.woodlandsofireland.com/sites/default/files/Silvicultural%20Guidelines%20for%20Native%20Trees.pdf</a></li> <li>• <a href="https://www.wildlifetrusts.org/wildlife-advice/how-manage-woodland-wildlife">https://www.wildlifetrusts.org/wildlife-advice/how-manage-woodland-wildlife</a></li> </ul>

## Potential project funders

The following table outlines some of the potential sources of funding to help deliver the actions outlined in this Plan. It is also worth remembering other traditional forms of fundraising such as working with local businesses, bucket collections, table quizzes, etc.

Fund / Funding Body	Description
LEADER Programme, County Kildare LEADER Partnership CLG	To discuss potential project ideas and the availability of funding, contact the County Kildare LEADER Partnership offices at (045) 895 450 or email <a href="mailto:info@countykildarelp.ie">info@countykildarelp.ie</a> . Website: <a href="http://www.countykildarelp.ie/">www.countykildarelp.ie/</a>
Kildare County Council	For additional information in relation to funding for biodiversity and heritage projects, contact the Heritage Officer - Tel. 045 980791 or email <a href="mailto:heritageofficer@kildarecoco.ie">heritageofficer@kildarecoco.ie</a>
Community Environment Action Fund – Kildare County Council	Formerly known as LA21, this fund covers small community environmental projects.
Community Foundation for Ireland	The Community Foundation for Ireland has funded biodiversity surveys and action plans under their Environment and Nature programme. <a href="https://www.communityfoundation.ie/insights/news/environment-and-nature-fund-2019">https://www.communityfoundation.ie/insights/news/environment-and-nature-fund-2019</a>
Heritage Council	The Heritage Council supports a wide range of heritage projects throughout the country through our annual grants programme. <a href="https://www.heritagecouncil.ie/funding">https://www.heritagecouncil.ie/funding</a>
Waters & Communities	Their aim is to support communities and stakeholders in the delivery of local water quality projects and initiatives and have an annual grant package available. Contact your local officer to discuss potential projects by searching: <a href="http://watersandcommunities.ie/community-water-officers/">http://watersandcommunities.ie/community-water-officers/</a>
Trees on the Land	This charity aims to increase the amount of native Irish trees across Ireland. <a href="https://www.treesontheland.com/">https://www.treesontheland.com/</a>
NeighbourWood Scheme	This Forestry Service grant supports the creation and enhancement of new native community woodland schemes over 1ha in size (up to 12ha size) including the improvements to woodland facilities such as trail infrastructure. <a href="https://www.agriculture.gov.ie/media/migration/forestry/grantandpremiumschemes/2015/NeighbourWoodScheme240717.pdf">https://www.agriculture.gov.ie/media/migration/forestry/grantandpremiumschemes/2015/NeighbourWoodScheme240717.pdf</a>

# Useful contacts & sources

To help deliver the actions it will be important to work with a range of local and national stakeholder groups. The following outlines some of these. It is worth remembering that there may also be local individuals in your community who have particular interests and skillsets worth tapping into to deliver the actions. Remember that skills other than ecological skills can be an important asset when delivering certain actions.

Organisation / Group	Area of Expertise	Contact Details
<b>Kildare County Council</b>	The local Heritage Officer is available to discuss and provide information on biodiversity and heritage related matters and projects.	Tel. 045 980791 or email <a href="mailto:heritageofficer@kildarecoco.ie">heritageofficer@kildarecoco.ie</a>
<b>Kildare Public Participation Network</b>	Public Participation Networks (PPNs) act as an independent structure to facilitate public participation in policy and decision making with the local authorities.  Community and voluntary, social inclusion, and environmental groups are encouraged to join Kildare PPN.	Telephone: 045 980700 Email: <a href="mailto:admin@kildareppn.ie">admin@kildareppn.ie</a> Website: <a href="https://www.kildareppn.ie/">https://www.kildareppn.ie/</a>
<b>County Kildare LEADER Partnership CLG</b>	If your idea is eligible in principle for LEADER funding, a Project Development Officer will work with you to develop specifications of your project, help you with procurement, and assist in bring forward an application for funding. Funding is available in the following categories: capital, training, marketing, and analysis and development	Telephone: (045) 895 450. Email <a href="mailto:info@countykildarelp.ie">info@countykildarelp.ie</a> . Website: <a href="http://www.countykildarelp.ie/">www.countykildarelp.ie/</a>
<b>Wild Kildare</b>	Local volunteer environmental organisation.	<a href="https://www.facebook.com/Wild-Kildare-1437313092971392/">https://www.facebook.com/Wild-Kildare-1437313092971392/</a>
<b>Irish Wildlife Trust</b>	National environmental charity covering all aspects of biodiversity.	<a href="https://iwt.ie/">https://iwt.ie/</a>
<b>BirdWatch Ireland Kildare</b>	For information on Ireland's birds.	<a href="https://birdwatchireland.ie/">https://birdwatchireland.ie/</a>
<b>National Parks and Wildlife Service</b>	Responsible for managing the Irish State's nature conservation responsibilities.	<a href="https://www.npws.ie/">https://www.npws.ie/</a>
<b>All-Ireland Pollinator Plan</b>	National Plan with the aim of creating an Ireland where pollinators can survive & thrive.	<a href="https://pollinators.ie/">https://pollinators.ie/</a>
<b>National Biodiversity Data Centre</b>	National centre for the collection, collation, management, analysis and dissemination of data on Ireland's biological diversity.	<a href="https://www.biodiversityireland.ie/">https://www.biodiversityireland.ie/</a>
<b>Vincent Wildlife Trust</b>	National environmental charity with the aim of conserving and research into selected Irish mammals.	<a href="https://www.vincentwildlife.ie/">https://www.vincentwildlife.ie/</a>
<b>Botanical Society of Britain &amp; Ireland</b>	National organisation that promotes the study, understanding and enjoyment of British and Irish botany.	<a href="https://bsbi.org/ireland">https://bsbi.org/ireland</a>
<b>The Local Authority Waters Programme (Waters &amp; Communities)</b>	A shared service working with Local Authorities and State agencies to meet obligations under the EU Water Framework Directive for the development and implementation of River Basin Management Plans in Ireland.	<a href="http://watersandcommunities.ie/">http://watersandcommunities.ie/</a>
<b>Kill Tidy Towns</b>	Local Tidy Towns group.	<a href="https://www.facebook.com/killtidytowns/">https://www.facebook.com/killtidytowns/</a>

<b>Bat Conservation Ireland</b>	An all-Ireland charity that promotes the conservation of bats and their habitats.	<a href="https://www.batconservationireland.org/">https://www.batconservationireland.org/</a>
<b>Kildare Bat Group</b>	Members of Bat Conservation Ireland with a particular interest in Kildare bats.	<a href="https://kildarebatgroup.wordpress.com/">https://kildarebatgroup.wordpress.com/</a>
<b>Kildare Animal Foundation</b>	A local non-profit organisation dedicated to the welfare of cats, dogs and small animals.	<a href="https://animalfoundation.ie/">https://animalfoundation.ie/</a>
<b>Irish Peatland Conservation Council</b>	A national charitable organisation with the aim of conserving and protecting a representative sample of Irish bogs, and to campaign on bog-related issues.	<a href="http://www.ipcc.ie/">http://www.ipcc.ie/</a>
<b>Kildare Community 4 Climate Action</b>	This is a network of groups and individuals who are working together for climate action and community resilience in Kildare. The network originated as a result of the LEADER-funded "Communities 4 Climate Action" training programme that was held in 2019.	<a href="https://www.facebook.com/KildareC4CA/">https://www.facebook.com/KildareC4CA/</a>




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*The All-Ireland Pollinator Plan is one of the best sources of information on how to make our community spaces better for pollinators and wildlife in general. Check out the resources section of their website here:*

*<https://pollinators.ie/resources/>*

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# Habitat Management Guidelines

## Wildflower Meadows:

Before creating any new meadows, it is important to consider and plan for the maintenance requirements. If the proper planning is not done at the outset it may cause considerable hassle down the line. This is particularly important for the end of season cut of a hay meadow as the grass could be knee height. Remember meadows are managed landscapes! You will need to consider the following:

- Who is going to cut the meadow?
  - Is it volunteers, the local authority or a contractor?
  - Or for larger meadows can it be conservation grazed?
- How are they going to cut it?
  - Have they got the right equipment suitable for the site?
- How are you going to gather and remove the cuttings from the site?
- What are you going to do with the cuttings after they have been removed from the site?

There are a few different types of wildflower meadows that you may consider depending on your site and preferences. Each requires different management. We have listed two such types of meadows here:

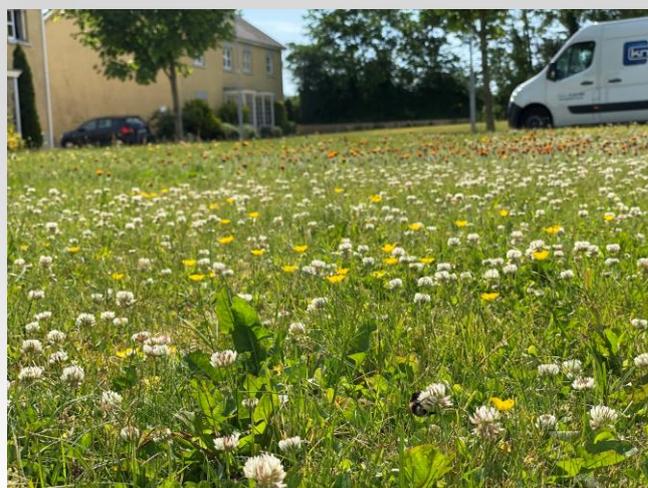
### Hay Meadows:

- Cut 1-2 times per year, once at the beginning of the season to remove any winter growth and a final cut in mid-August to September (if there are late flowering species then you may consider delaying the cut)
- Mow the fringes along paths, car parks and roadsides
- Mow paths through larger meadows to encourage people to use them
- Put up signs to let people know what you are doing
- Increase species diversity as needed by harvesting local seed and either over-seeding it on the grass after it has been cut or by growing the seed on as plug plants for planting out the following spring.
- Control listed noxious weeds.



### Short Cut Meadows:

- Cut approximately every 6 weeks from mid-April through to autumn
- Mow the fringes along paths, car parks and roadsides
- Mow paths through larger meadows to encourage people to use them
- Put up simple signs to let people know what you are doing
- Increase species diversity as needed by harvesting local seed and either over-seeding it on the grass after it has been cut or by growing the seed on as plug plants for planting out the following spring.



For more information visit the All-Ireland Pollinator Plan website and resources page:

<https://pollinators.ie/wordpress/wp-content/uploads/2018/04/How-to-guide-Wildflower-Meadows-2018-WEB.pdf>

## Designing and Planning for New Tree Planting in Community Spaces:

For the creation of new areas of community woodlands, copses, avenues or individual trees on community spaces the most important thing to remember is 'Right Tree Right Place'. Remember that for all larger woodland creation projects and works on existing woodlands, you should always seek expert advice before proceeding.

The following are some of the practical considerations that should help guide you in the design and planning for smaller tree planting projects:

<b>Local Site Considerations</b>	Soil - is it very wet or free draining?
	Is the site designated (as natural, built or archaeological) or adjoining a designated site or site of particular biodiversity interest? If so, check with relevant organisation for approval.
	For larger planting schemes, do you need to prepare the site for planting?
	Do you need to protect against rabbits / hares / deer?
	Check for overhead powerlines or underground services.
<b>Practical Design Considerations</b>	Consider safety and sightlines - set back from primary paths in public spaces or at road junctions
	Consider whether anti-social behaviour is a problem in the area and manage for it in advance
	Where possible, include other community amenities as part of larger planting schemes - paths, outdoor classrooms, natural play, picnic tables, etc.
	Consider neighbouring houses before planting.
	Where possible, plant small groups of trees in public spaces instead of lots of individual trees. This will be easier to maintain.
	When planting trees at larger sizes you'll need to stake and tie them. Remember to adjust tree ties each year and remove after 2-3 years.
<b>Community &amp; Stakeholder Consultation</b>	Consult with local community to gain support for the works. Be innovative with how you engage local families and children in the development of the woodland e.g. dedicate a tree to each family resident next to the project, carry out volunteer tree planting events, develop ancillary amenities such as benches and natural play, etc.
	Communicate the plans with the person or organisation responsible for maintaining the green spaces (i.e. local authority, contractor or local volunteer) to avoid accidental damage to the trees.
	Agree a plan for managing around the base of individual trees to avoid damage from lawnmowers and strimmers.

For more practical information, check out the Trees on the Land website: <https://www.treesontheland.com/planting-guide>

## Managing for Pollinators:

- Think about their essential needs – food, water, & shelter – and try to provide these where possible because just like us they cannot survive without them.
- Use pollinator friendly perennials (and small shrubs such as lavender) instead of annual bedding plants in flower beds and containers (see Appendix 2 for some options).
- For butterflies and moths, consider the larval foodplants of these species. For example, the nettle is the foodplant for the caterpillars of 5 species of butterfly.
- Minimise the use of herbicide for managing weeds. Where possible try to embrace these native wildflowers for their visual interest and biodiversity value.
- Check out the All-Ireland Pollinator Plan for lots of practical tips and ideas on managing for pollinators: <https://pollinators.ie/>



**Did you know:** 100 crops provide 90% of the world's food. Of these, 71 are pollinated by bees!



# Planting for Biodiversity

## Pollinator-friendly plant list recommended for community / garden flowerbeds

Herbaceous Perennials – tall for the back of beds	Herbaceous Perennials – short for the front of beds
<ul style="list-style-type: none"> <li>• <b>Japanese anemones</b> (<i>Anemone</i> x hybrid) – pink and white (autumn);</li> <li>• <b>Verbena bonariensis</b> (late summer);</li> <li>• <b>Foxgloves</b> (<i>Digitalis</i> spp) (early summer) – both pink and white varieties;</li> <li>• <b>Mullein</b> (<i>Verbascum</i> spp) (summer);</li> <li>• <b>Fennel</b> (<i>Foeniculum vulgare</i>);</li> <li>• <b>Teasel</b> (<i>Dipsacus</i> sp.) - Goldfinches love their seeds in winter.</li> <li>• Some <b>Rudbeckia daisies</b> will add bold colour too.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Sedum ‘Autumn Joy’</b> (autumn);</li> <li>• <b>Masterwort</b> (<i>Astrantia major</i>) (available in various shades of pink and white, long flowering from summer into autumn);</li> <li>• <b>Yarrow</b> (<i>Achillea</i> spp) (summer into autumn);</li> <li>• <b>Avens</b> (<i>Geum</i> sp.) – brightly coloured with long-lasting flowers;</li> <li>• <b>Columbine/Granny’s bonnet</b> (<i>Aquilegia</i> sp) (early summer)</li> <li>• <b>Macedonian scabious</b> (<i>Knautia macedonica</i>).</li> <li>• <b>Hardy Geraniums/Cranesbills</b> (<i>Geranium</i> spp) in a mix of colours, blue, pink and white. These plants (particularly blue varieties such as ‘Johnson’s blue’) partner well with Lady’s mantle (<i>Alchemilla mollis</i>) which are particularly lovely planted along the edges of beds.</li> <li>• <b>Lenten Hellebores</b> (<i>Helleborus orientalis</i>) will give winter and spring interest.</li> <li>• <b>Penstemons</b>: A semi-woody perennial with tubular flowers that last from early summer right through to late autumn.</li> <li>• <b>Lady’s mantle</b> (<i>Alchemilla mollis</i>): attractive green flowers and leaves that flop over bed edges.</li> </ul>
<p>Also consider:</p> <ul style="list-style-type: none"> <li>• Herb species are great for pollinators as well as providing food for ourselves: chives, thyme, rosemary, oregano / marjoram and sage.</li> <li>• Native wildflowers add great colour and biodiversity interest &amp; will be a great addition to flowerbeds. Some may be crucial for different species of native biodiversity as food plants.</li> </ul>	

## General list of shrub and tree species recommended for biodiversity enhancement:

### Native Hedgerow Mix Species to Select From

### Planting & Managing a Native Hedgerow for Biodiversity

The main hedging species is:

- Hawthorn / Whitethorn (*Crataegus monogyna*)

Smaller percentages of the following species:

- Elder (*Sambucus nigra*)
- Blackthorn (*Prunus spinosa*)
- Hazel (*Corylus avellana*)
- Holly (*Ilex aquifolium*)
- Privet (*Ligustrum vulgare*)
- Spindle (*Euonymus europaeus*)
- Guelder rose (*Viburnum opulus*)
- Dog rose (*Rosa canina*)

Trees such as Oak (*Quercus robur*), Crab apple (*Malus sylvestris*), etc. should be planted randomly along the length

- Plant @ 4-8 plants per metre
- Plant in a double staggered row where possible
- Allow 1.5-2m width for a mature hedge – the wider the better!
- Cut on a 3-year cycle so that the it can flower and fruit
- Cut outside the bird nesting season (1<sup>st</sup> March-31<sup>st</sup> August) unless for road safety reasons

## Pollinator-friendly trees and shrubs recommended for community / garden flowerbeds

Wildlife-friendly tree species	Wildlife-friendly shrub species
<ul style="list-style-type: none"> <li>• <b>Pedunculate oak</b> (<i>Quercus robur</i>) – prefers neutral/limestone soils</li> <li>• <b>Sessile oak</b> (<i>Quercus petraea</i>) – prefers slightly acid soils</li> <li>• <b>Willow</b> (<i>Salix</i> spp) – good for damp/waterside conditions</li> <li>• <b>Hazel</b> (<i>Corylus avellana</i>) – likes neutral to limey soils</li> <li>• <b>Alder</b> (<i>Alnus glutinosa</i>)– good for damp/waterside conditions</li> <li>• <b>Aspen</b> (<i>Populus tremula</i>)</li> <li>• <b>Silver birch</b> (<i>Betula pendula</i>)</li> <li>• <b>Downy birch</b> (<i>Betula pubescens</i>) - good for damp/ waterside conditions</li> <li>• <b>Yew</b> (<i>Taxus baccata</i>) – note that ‘fastigiata’ is the upright form (Irish Yew)</li> <li>• <b>Holly</b> (<i>Ilex aquifolium</i>)</li> <li>• <b>Rowan / Mountain ash</b> (<i>Sorbus aucuparia</i>) – flowers and fruit for spring and autumn interest</li> <li>• <b>Whitebeam</b> (<i>Sorbus aria</i>) – flowers and fruit for spring and autumn interest</li> <li>• <b>Crab apple</b> (<i>Malus sylvestris</i>) – flowers and fruit for spring and autumn interest</li> <li>• <b>Wild cherry</b> (<i>Prunus avium</i>) – flowers in spring and colourful fruit and leaves in autumn</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Fruit bushes</b> e.g. the native Raspberry (<i>Rubus idaeus</i>) and Blackberry (<i>Rubus fruticosus</i>). Also Currants and Gooseberries (<i>Ribes</i> spp.).</li> <li>• <b>Ling heather</b> (<i>Calluna vulgaris</i>) - prefers acid/peaty soil conditions</li> <li>• <b>Bell heather</b> (<i>Erica cinerea</i>) - prefers acid/peaty soil conditions</li> <li>• <b>Broom</b> (<i>Cytisus scoparius</i>) terrific colour, blooming through April &amp; May.</li> <li>• <b>Firethorn</b> (<i>Pyracantha</i>)* - a very thorny climber, good for wall cover with creamy blossoms in summer and colourful berries in autumn. Different species have different coloured berries ranging from yellow through orange to scarlet red.</li> <li>• <b>Honeysuckle/Woodbine</b> (<i>Lonicera periclymenum</i>) – a climber with beautifully scented flowers, particularly in the evening when they attract nectar-seeking moths.</li> <li>• <b>Dog rose</b> (<i>Rosa canina</i>) – a climber with beautiful flowers in June and red rosehips in autumn.</li> <li>• <b>Elder</b> (<i>Sambucus nigra</i>) – creamy flowers (most important ingredient in a very tasty cordial!) in June and black berries in autumn (only edible when cooked, great for jams and jellies)</li> <li>• <b>Spindle tree</b> (<i>Euonymus europaeus</i>) – strikingly beautiful orange seeds carried in bright pink capsules called ‘cardinals’ hats’</li> <li>• <b>Blackthorn</b> (<i>Prunus spinosa</i>) – featuring sloe berries in autumn</li> <li>• <b>Purging Buckthorn</b> (<i>Rhamnus catharticus</i>) – an uncommon shrub – the favourite food plant of the Brimstone butterfly</li> <li>• <b>Alder-buckthorn</b> (<i>Frangula alnus</i>) – a rare native also favoured by the Brimstone butterfly.</li> <li>• <b>Privet</b> (<i>Ligustrum vulgare</i>)</li> <li>• <b>Guelder rose</b> (<i>Viburnum opulus</i>) – beautiful flowers and berries.</li> <li>• <b>Gorse</b> (<i>Ulex europaeus</i>) – the heady, coconut aroma of its bright yellow flowers is the smell of an Irish summer’s day.</li> </ul>

\*indicates a species not native to Ireland but non-invasive and wildlife friendly.

## Selecting Plants

Point of Note	Reason
Use native plants including wildflowers where possible	<ul style="list-style-type: none"> <li>• Native wildlife has adapted alongside these species and so they will typically support more wildlife than exotic species</li> <li>• It conserves our local flora</li> </ul>
For native species; only use Irish provenance stock	<ul style="list-style-type: none"> <li>• They are better suited to the Irish climate</li> <li>• It helps conserve local genetics</li> <li>• Minimise the risk of importing new pests and diseases.</li> <li>• Supports local Irish growers</li> </ul>

# Invasive Alien Species

Invasive Alien Species (IAS) are plants or animals that were introduced and are causing problems for native biodiversity. It is important that we can recognise the main IAS and take appropriate steps to control them:

- Avoid using IAS in new planting schemes and where possible remove existing ones. Encourage other local groups, landowners and the local authority to do the same.
- Raise awareness of IAS by delivering talks and posting on social media about them and the problems they cause.
- Carry out IAS surveys and submit records to the National Biodiversity Data Centre and the local authority.

Species	Problem(s)
<b>Some of the Common Terrestrial Plant IAS</b>	
Himalayan Balsam ( <i>Impatiens glandulifera</i> )	<ul style="list-style-type: none"> <li>• Can dominate riverbanks and outcompete native flora</li> </ul>
Japanese knotweed ( <i>Fallopia japonica</i> )	<ul style="list-style-type: none"> <li>• Can dominate riverbanks and outcompete native flora</li> <li>• Can negatively impact built structures</li> </ul>
Giant Hogweed ( <i>Heracleum mantegazzianum</i> )	<ul style="list-style-type: none"> <li>• Can dominate riverbanks and outcompete native flora</li> <li>• Can cause serious skin burns to humans</li> </ul>
Giant Rhubarb ( <i>Gunnera tinctoria</i> )	<ul style="list-style-type: none"> <li>• Can dominate riverbanks and outcompete native flora</li> </ul>
Monbretia ( <i>Crocsmia</i> spp.)	<ul style="list-style-type: none"> <li>• Can dominate grassy areas and outcompete native ground flora</li> </ul>
Spanish Bluebell ( <i>Hyacinthoides hispanica</i> and hybrids)	<ul style="list-style-type: none"> <li>• They hybridize with native Bluebells</li> </ul>
Cherry laurel ( <i>Prunus laurocerasus</i> )	<ul style="list-style-type: none"> <li>• Can take over woodland and prevent native ground flora &amp; saplings from growing.</li> </ul>
<i>Rhododendron ponticum</i>	<ul style="list-style-type: none"> <li>• Can take over woodland and prevent native ground flora &amp; saplings from growing.</li> </ul>
Pheasant Berry ( <i>Leycesteria Formosa</i> )	<ul style="list-style-type: none"> <li>• Can take over native woodland and prevent native ground flora &amp; saplings from growing.</li> </ul>
<b>Some of the Common Aquatic Plant IAS</b>	
<b>Floating pennywort</b> ( <i>Hydrocotyle ranunculoides</i> )	<ul style="list-style-type: none"> <li>• Can grow up to 20cm per day and may quickly dominate a waterbody.</li> <li>• Forms thick mats which can look like land &amp; so be a danger to people &amp; livestock</li> <li>• Impedes water flow and chokes waterways which can make it difficult for boats and angling and can increase the risk of flooding.</li> <li>• Poses a threat to plants and fish by blocking out light and impeding access to fish feeding and resting spaces.</li> </ul>
<b>Curly Leaved Waterweed</b> ( <i>Lagarosiphon major</i> )	<ul style="list-style-type: none"> <li>• Capable of forming very dense infestations in suitable habitats &amp; occupying the full water column in waters up to 6m deep with significant impacts on native wildlife.</li> <li>• Serious threat to tourism, angling, boating &amp; other recreational pursuits as well as conservation goals.</li> </ul>
<b>Parrot's feather</b> ( <i>Myriophyllum aquaticum</i> , <i>Myriophyllum brasiliense</i> , <i>Myriophyllum proserpinacoides</i> )	<ul style="list-style-type: none"> <li>• Can produce a thick raft of vegetation.</li> <li>• A fragment as small as 5mm can re-grow.</li> <li>• Poses a threat to plants &amp; fish by blocking out light &amp; reducing oxygen levels.</li> <li>• Can choke waterways so increasing the risk of flooding.</li> </ul>
<b>New Zealand pigmyweed</b> ( <i>Crassula helmsii</i> )	<ul style="list-style-type: none"> <li>• Can regenerate from tiny fragments &amp; therefore easily takes over new areas.</li> <li>• Forms very dense mats which overgrow native plants and reduces light levels.</li> </ul>
<b>Water primrose</b> ( <i>Ludwigia grandiflora</i> )	<ul style="list-style-type: none"> <li>• Currently only recorded from one site in Ireland.</li> <li>• Grows into a thick carpet which can out-grow native species and clog waterways.</li> </ul>
<b>Water fern</b> ( <i>Azolla filiculoides</i> )	<ul style="list-style-type: none"> <li>• Produces a thick mat of floating vegetation.</li> <li>• Danger can lie when people and livestock attempt to walk on it.</li> <li>• The plants are so small, at no bigger than 2.5cm, that it can easily be transported on other plants as a contaminant.</li> <li>• Reduces oxygen levels in the water.</li> </ul>

# Equipment Checklist

The following is a list of some useful equipment to help manage your wild habitat and carry out Citizen Science work. Please make sure that any tools or machinery are only operated by suitably trained persons, that they are kept in good repair, all necessary health and safety precautions are followed, and that they are fully insured. The same applies to any contractors hired to undertake works on your behalf. Please note that due to Covid 19 it is worth considering any other special health measures and equipment that may need to be taken when carrying out community work.

Equipment	Description	Tick (✓)
<b>Wildflower Meadows</b>		
Polytunnel	It is useful to have at least one community polytunnel to grow wildflower plugs from locally harvested seed that can then be planted out into local public meadows. It is ideally located in a secure place where a dedicated person(s) responsible for managing the plugs can have access to it. Suitable venues include a community garden / allotment garden and in schools (where the pupils can grow some trays on as part of a school project). These can double up during the main growing season for fruit and vegetable growing.	
Meadow Cutting Tools / Machinery	For larger meadows: consider using a local contractor with the right equipment. Where it's not practical to get a contractor then some of the following machinery / tools may be considered: <ul style="list-style-type: none"> <li>• Power scythe with hay rake and mini-baler or a buck rake (this could be purchased in partnership with other local groups or by Kildare County Council)</li> <li>• Brush cutter</li> <li>• Hand held scythe, hay forks and rakes</li> </ul>	
Seed Harvesting	There are a few ways of harvesting your own wildflower seed. For most, it may be simply harvesting seed by hand, in which case you will need something to put it into e.g. a paper yogurt cup or cotton pillow sack are ideal. To collect certain seed such as Yellow Rattle seed on a larger scale it would be worth purchasing or hiring a leaf vacuum.	
Seed Storage	To dry the collected wildflower seed you can simply spread it out in cardboard box(es). If the seed is fully dry when collected it can also be stored in breathable pillow cases / sacks in a cool dry room. Do not store in plastic bags or containers as the seeds may sweat and spoil.	
<b>Everyday Habitat Management</b>		
Hand Tools	It is useful to have a stock of general tools available for carrying out community volunteer days such as tree planting, basic invasive species control of selected species, etc. You can always ask volunteers to bring their own but it is useful to have some spares. These will include: spades, loppers, saws, rakes, wheelbarrows, buckets, lump hammer, mattock, etc.	
Hand Held Power Tools	Similar to the hand tools above, having some hand-held power tools for the group may be useful. A cordless drill is probably the most important of these. Other power tools may be available either privately from members / volunteers or through rental hire as needed.	
Safety Equipment	It is very important that all volunteers have the necessary protective clothing for the jobs being carried out. Some of the basic equipment worth having a supply of include Hi-Viz vests, ear muffs, gloves, dust masks, visors and safety goggles.	
<b>Citizen Science &amp; Community Events</b>		
Identification resources	There are identification books for all the common species groups and habitats. The National Biodiversity Data Centre also has swatches available from their online shop.	
Bats	Consider having a few bat detectors (and torches!) for bat events, as most people may not have one. The Magneta Bat5 is a good starter model.	
River Sampling	River sampling events are great for families and children. For these you'll need some trays or buckets, charts and fishing nets.	
Butterfly and Bumblebee Events	Pollinator workshops and events are always popular to run during the summer. They are even better when there is a field element to it and it is useful to have a few butterfly nets and some potting jars to help identify specimens.	
Moth Identification	Another really great Citizen Science project is the identification of moths. It is useful for the community to have (or have access to) a few moth light traps with suitable batteries and chargers and the identification guide books (both for micro and macro moths).	
Bird Identification	For bird identification events it can be useful to have a few spare pairs of binoculars (although it is normal to ask people to bring their own).	

## Examples of Wildflower Meadow Maintenance Equipment



## Examples of Equipment for Citizen Science and Community Events



**Did you know:** The National Biodiversity Data Centre has taken in over 650,000 species sightings as of November 2020

# Mood Board

## Interpretation



A biodiversity sign, useful on sites with lots of natural interest.



Murals are a great option to brighten up a dull wall.



Biodiversity interpretation post, a relatively inexpensive option.

## Sculptures



A bespoke sculptural feature in Ennis Town Centre.



An artistic willow weave sculpture on the roundabout beside Kildare Shopping Centre.

# Wildflower Meadows



Encourage people to use them by mowing paths and installing seating and breakout points.



They are great for natural play and add interest to otherwise dull mown grasslands.



They can be used in a range of different settings to deliver multiple economic, social & environmental benefits.



They are a part of our cultural heritage and landscape and can be used to encourage tourism.

# Pollinator Beds



Use native wildflowers in mixes where possible as they have added benefits for wildlife and they are every bit as attractive as non-native species.



Perennial pollinator-friendly plants add visual interest, reduce annual work and costs, and are great for wildlife.

# Natural Play



Natural play uses natural features to create play opportunities.



They can be much more cost effective to install and maintain and are often much more interesting.



Natural features such as earth banks and planting make great play features and can be used in combination with slides, etc.



Natural habitats such as meadows and woodlands are great natural playgrounds.

# Edible Woodlands



Forest gardening is a way of managing woodlands for productive uses such as wild food and timber products. Each layer of the woodland is managed for this including the canopy, shrub and ground floor. They have been developed in a wide range of settings including private gardens, schools, public green spaces, residential spaces (such as above in Manchester, England), etc.



Edible hedges are a form of linear woodland which uses a wide range of berry and nut species to create a hedge.

# Greening the Grey



Bioswales can be used in urban areas to manage and treat rainwater runoff from roads, car parks and other hard surfaces. They allow the water to drain slowly into the ground. Vegetation helps treat the water and add biodiversity value & visual interest.



Green roofs, even on small canopies such as above, deliver a wide variety of environmental benefits such as clean air, retain and improve water quality, have air cooling effects add visual interest and are great for biodiversity.



This bioswale, in an urban park setting, is allowed to fill up during heavy rain water events and drain slowly after. It has become an amenity within the park and has significantly increased the amount of biodiversity within the park. Residential and public green spaces should be designed to deliver multiple benefits like this park achieves.



Green walls can soften grey urban spaces and deliver a wide range of other benefits such as sequester carbon, reduce the urban heat island effect, increase biodiversity, etc.



In a lot of cases green walls can simply be created by planting climbers such as native ivy (*Hedera helix*) on bare walls – they are particularly good to cover up dull block work walls (photo above shows a newly planted wall in Portlaoise).

Section 5:  
Results of  
Questionnaire



**Did you know:** 5 native butterfly species rely on the common nettle as their larval foodplant

The purpose of the questionnaire was to gather information from the ten communities on biodiversity-related issues relevant to them and their local area. It gathers information about the importance of biodiversity in their everyday lives, local sites or features of biodiversity value, preferences for events going forward, and their willingness to get involved in delivering actions such as those set out in this plan.

It was delivered as an online survey using Google Forms during the training period from September to November 2020. All participants were invited to complete the questionnaire as part of the training. Forty-five people responded to the questionnaire and the results are explained below.

**Question 1: How important is the natural environment to your everyday life?**

All 45 participants from across the ten communities answered this question. Options were provided on a scale of 1 to 5, with 5 being 'very important' and 1 being 'not important'.

There were thirty-five respondents who gave it a rating of 5, nine gave it a rating of 4 and one gave it a rating of 3.

**Conclusion:** Overall the natural environment is very important in the everyday lives of the people who responded to this questionnaire. This would suggest that it is important that we conserve biodiversity in local communities and there will be an appetite amongst them to see actions carried out that will do this.

**Question 2: List 3 ways that you think nature and biodiversity can deliver benefits for your community or site of interest (Kill Responses Only).**

The responses listed a range of different ecosystem services including the provision of clean air and water, and the role that natural habitats and features can play in alleviating floods.

**Question 3: List your top 3 biodiversity hot spots in your locality (Kill Responses Only).**

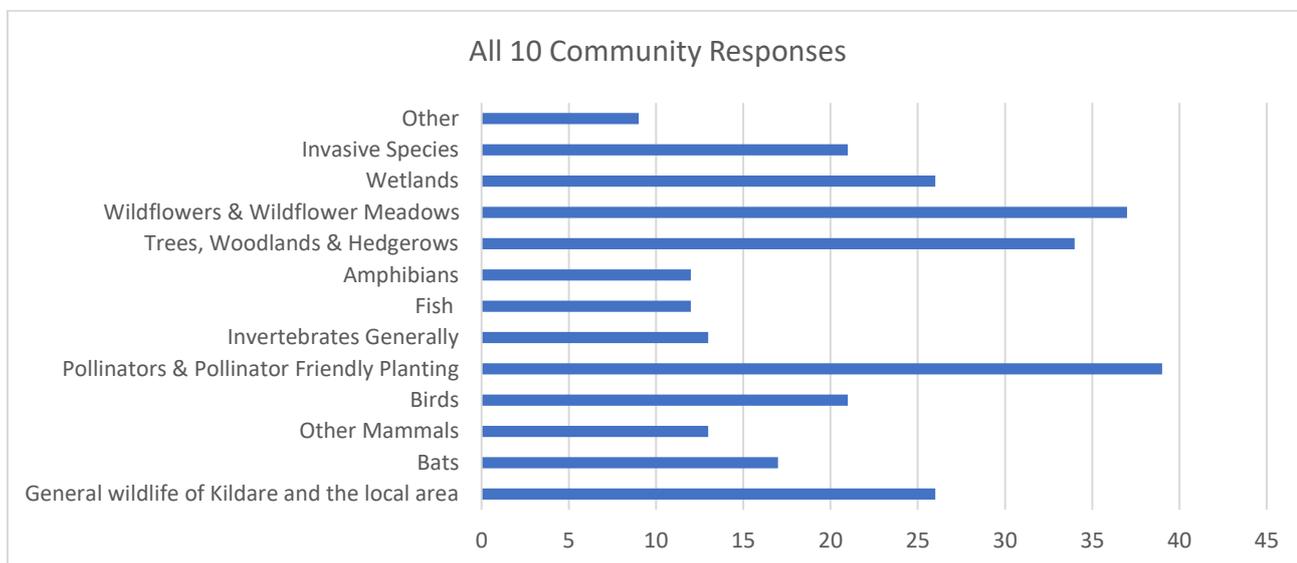
The responses highlight a range of sites both in the town and in the surrounding landscape that are seen as important for biodiversity. The biodiversity hotspots that were mentioned included the village and its different habitats, the residential green spaces, and the roadside verges between Kill and Johnstown / Naas.

**Question 4: Would you like to get involved in helping biodiversity in your local area? (Kill Responses Only).**

All respondents stated that they would be interested in getting involved in helping biodiversity in Allenwood. This included getting involved with helping to create new wildflower meadows and planting trees.

**Question 5: To raise awareness of local biodiversity, which of the following would you like to be covered through community training events such as evening talks, webinars, walks, etc. (responses for 10 groups)**

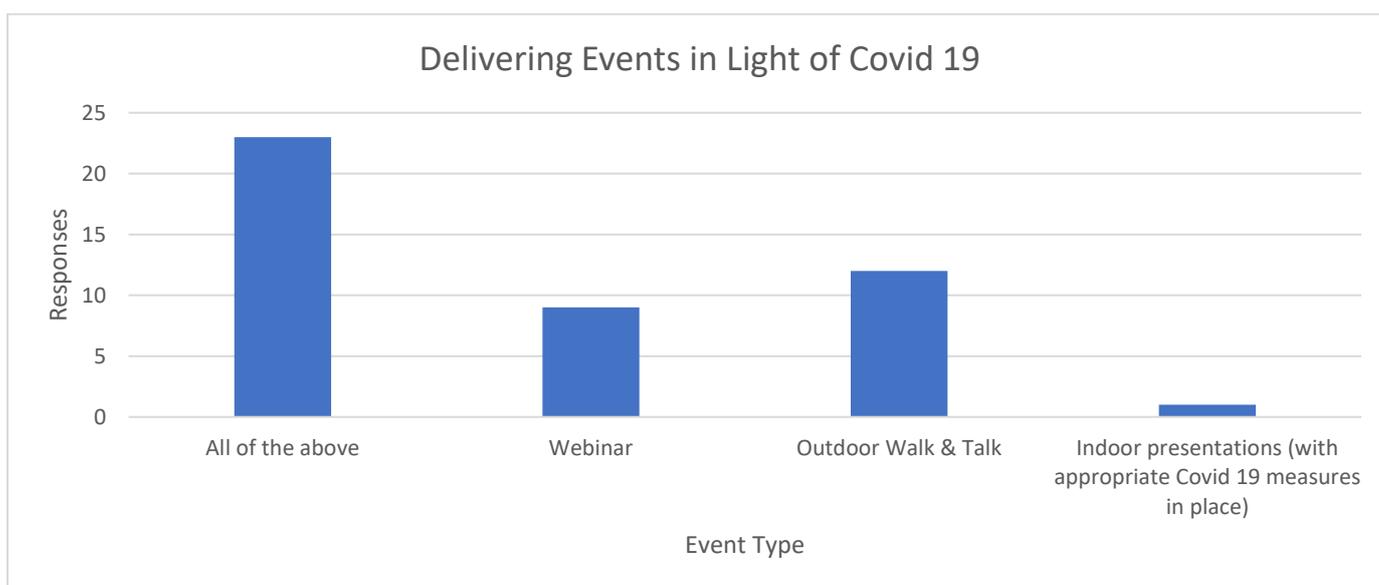
Events related to pollinators and pollinator-friendly planting, wildflowers and wildflower meadows, and trees, woodlands and hedgerows were the most popular responses with each of these receiving over 30 mentions each. Events about general wildlife of Kildare, invasive species, birds and wetlands were also popular with each receiving over 20 mentions each. The full list of responses is shown below.



There were no 'other' suggestions from the respondents from Kill.

**Question 6: Covid 19 has changed how talks / workshops / presentations are delivered, at least in the short term, with webinars becoming more widely used. Which of the following would be your preferred format for community biodiversity events during this period?**

The majority of the responses were for a mix of different event types, with each obviously taking appropriate measures in relation to Covid 19. Of the singular event types, outdoor walks and talks were the most favoured, followed by webinars.



Responses shown: All 10 communities

This Biodiversity Action Plan was produced as part of the Kildare Community Biodiversity Project. This project was jointly managed by County Kildare LEADER Partnership CLG and Kildare County Council.

The Kildare Community Biodiversity Project was funded under the LEADER Programme 2014-2020.



LEADER is funded by the Irish Government through the Department of Rural and Community Development

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