

# All-Ireland Pollinator Plan 2021-2025

[www.pollinators.ie](http://www.pollinators.ie)

## YEAR 2 REVIEW

DECEMBER 2022



An Roinn Tithíochta,  
Rialtais Áitiúil agus Oidhreachta  
Department of Housing,  
Local Government and Heritage



An Roinn Talmhaíochta,  
Bia agus Mara  
Department of Agriculture,  
Food and the Marine



An initiative by  
**BORD BIA**  
IRISH FOOD BOARD

Suggested citation: All-Ireland Pollinator Plan (2022): *Annual Review*. National Biodiversity Data Centre, Waterford.

This is a report to the National Biodiversity Data Centre on progress with delivery of the actions under the All-Ireland Pollinator Plan 2021-25. Report compiled by Úna FitzPatrick.

## Background

One third of our wild bee species are threatened with extinction from the island of Ireland. We know it is because we have drastically reduced the areas where they can nest and the amount of food our landscape provides for them. In publishing the first All-Ireland Pollinator Plan (AIPP) in 2015, Ireland became one of the first countries in Europe to address pollinator declines, and the Plan has since gained international acclaim. The first AIPP was developed from the grass roots up, to ensure we have an island that's better for biodiversity; better for pollinators; better for us; and better for future generations. It is a *shared* action plan. Together, we can collectively take steps to restore our pollinator populations to healthy levels.

A 15-member all-island steering group provide oversight of the All-Ireland Pollinator Plan. The Plan is managed by the National Biodiversity Data Centre. The National Biodiversity Data Centre is funded by *The Heritage Council* and the *Department of Housing, Local Government and Heritage*. It is a programme of *The Heritage Council*.

The 81 actions in the first AIPP for 2015-2020 were delivered. In the first phase we wanted to ensure that everyone understood what pollinators need, and what simple, evidence-based actions they can take to help. Extensive guidelines were developed for everyone from farmers to councils, communities, businesses, schools, sports clubs and gardens. These are all freely available at [www.pollinators.ie](http://www.pollinators.ie)

- [Final review of the AIPP 2015-2020](#)
- [Working together for biodiversity – Tales from the All-Ireland Pollinator Plan 2015-2020](#)

## All-Ireland Pollinator Plan 2021-2025

A new version of the [AIPP for 2021-2025](#) was published in March 2021. It is more ambitious than the first version – with more partners coming together to deliver more actions. Pollinators are better off than they were in 2015, but we still need to do more. The new plan has more than doubled our goals – with 186 actions to help biodiversity. Within the second phase, we need to engage more, monitor more, and manage more land for biodiversity.

The AIPP 2021-2025 identifies specific actions across six objectives. Within each objective, targets have been set and actions have been identified to help achieve that target.

- Objective 1: Making farmland pollinator friendly
- Objective 2: Making public land pollinator friendly
- Objective 3: Making private land pollinator friendly
- Objective 4: All-Ireland Honey bee Strategy
- Objective 5: Conserving rare pollinators
- Objective 6: Strategic coordination of the Plan

## AIPP partners

Partner organisations are those who have committed to delivering the 186 actions in the All-Ireland Pollinator Plan 2021-2025. They also include those Councils who have formally signed up to the AIPP and agreed to take actions to support pollinators on the public land they manage.

<https://pollinators.ie/partners/>

## Funding partners



National Parks &  
Wildlife Service



An Roinn Talmhaíochta,  
Bia agus Mara  
Department of Agriculture,  
Food and the Marine



An initiative by  
**BORD BIA**  
IRISH FOOD BOARD

Implementation of the All-Ireland Pollinator Plan 2021-2025 is project managed by the National Biodiversity Data Centre, which is a programme of the Heritage Council. Dr Úna FitzPatrick, Senior Ecologist within the Centre, oversees the initiative. In 2022, it was supported by an additional three project officer positions within the National Biodiversity Data Centre:

- ✓ Kate Chandler - Communities and Engagement Pollinator Officer. This position was funded by the National Parks and Wildlife Service.
- ✓ Ruth Wilson – Farmland Pollinator Officer. This position was funded by the Department of Agriculture, Food & the Marine.
- ✓ Sarah Kelly – Agri-business Pollinator Officer. This position was part funded by Bord Bia (60%) and part funded by Business for Biodiversity Ireland (40%).

## Tracking progress

Tracking progress is a critical component of the All-Ireland Pollinator Plan. It is addressed in a number of ways:

- ✓ Each year, an annual review document is made publicly available to indicate progress against each of the 186 actions in the Plan, completed by those organisations who have accepted responsibility for that action. This is the second review document for the second phase of the Plan (December 2022).
- ✓ Two other annual reviews are also published each December. These can be found at <https://pollinators.ie/aipp-2021-2025/annual-reviews/>:
  - **Council partners: 2022 annual review.** This outlines the key actions taken by each Council partner in support of the AIPP
  - **Business supporters: 2022 annual review.** This outlines the key actions taken by each company who has signed up as a business supporter of the AIPP
- ✓ A publicly available online mapping system (Actions for Pollinators) allows all those who take pollinator-friendly actions to log their location and the action(s) taken. This tracks progress through the build-up of food, shelter and safety for pollinators in the landscape. The

biodiversity actions mapping system was developed by the National Biodiversity Data Centre and was released in spring 2017: <https://pollinators.biodiversityireland.ie/>

- ✓ Most importantly, changes in the pollinators themselves will be monitored. This occurs through two citizen science monitoring schemes managed by the National Biodiversity Data Centre – All-Ireland Bumblebee Monitoring Scheme (established 2012) and Flower Insect Timed Counts (established 2019). The need for an additional national monitoring scheme, with randomly stratified sites across habitats, to underpin the AIPP has consistently been flagged. In 2021, DAFM and NPWS granted initial funding for this work in RoI. The project began in September 2021 and was rolled out as a National Pollinator Monitoring Scheme pilot in 2022. It is managed by the National Biodiversity Data Centre. The aim is to annually monitor a fixed network of 50 sites encompassing farmland, semi-natural sites, and urban parks. In 2020, Northern Ireland joined the UK Pollinator Monitoring Scheme. Both schemes are fully compatible, allowing island-wide analyses in future years.

## **AIPP 2022 review**

This document briefly outlines key progress in 2022. This is followed by a 2022 update against each of the 186 actions in the Plan, completed by the organisation who accepted responsibility for that action.

An accompanying one-page infographic has also been prepared to summarise key progress in 2022.

For each action, the respective partner was contacted and requested to provide a short update against their action for 2022. They were contacted twice by email. This was not policed. Where a 2022 update was not provided, this is stated. We thank the partners for their incredibly positive engagement with this process.

The National Biodiversity Data Centre oversees implementation of the AIPP. The Centre is a programme of the Heritage Council.

## **Key Progress in 2022 (until end November)**

- ✓ While only at the end of year two of the second five-year Plan, we are already seeing very positive engagement and real commitment from all our partners. As outlined below, **87%** of the 186 actions in the Plan have been completed for this year or are currently in train.
- ✓ Forty of the 42 Councils across the island (95%) have now formally partnered with the AIPP and have committed to taking actions on the public lands they manage. The remaining two are in train. Local Authorities have embraced the AIPP and are taking significant actions for pollinators and biodiversity, as evidenced in their 2022 annual review: All-Ireland Pollinator Plan (2022): *Council Partners - Annual Review*. Accessible at: <https://pollinators.ie/aipp-2021-2025/annual-reviews/>
- ✓ Good progress continues to be made with the farming sector. Already in this new phase, we have been able to engage much more widely with farming stakeholders. A series of new resources for farmers are in development. The National Biodiversity Data Centre instigated an annual May 'Festival of Farmland Biodiversity' which launched in 2021 and is supported by

the Farmland Pollinator Officer. The EIP research project, 'Protecting Farmland Pollinators' managed by the Data Centre, continues to generate evidence-based information on the best actions to make Irish farms pollinator-friendly, underpinning the AIPP.

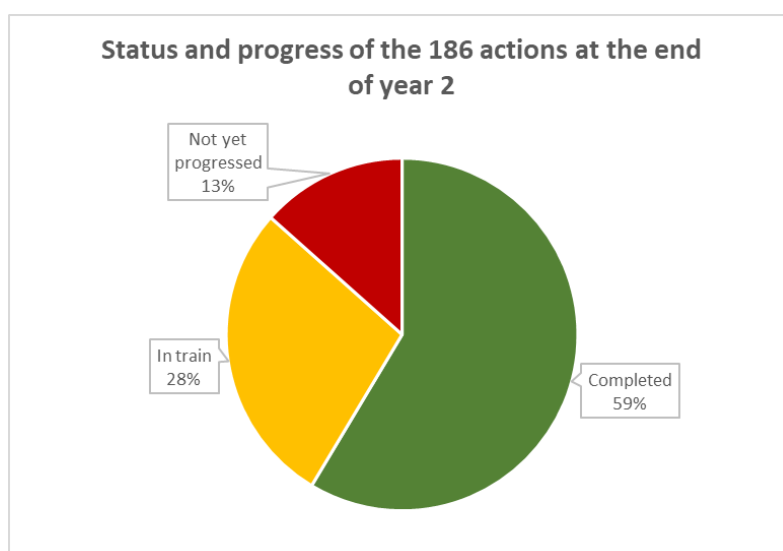
- ✓ Funded by DAFM and NPWS, a National Pollinator Monitoring Scheme was piloted in ROI in 2022. This scheme is managed by the National Biodiversity Data Centre. In 2022, 36 sites were monitored across farmland, semi-natural sites, and urban parks. Each site was monitored five times for pollinating insects. The aim is to annually monitor a fixed network of 50 sites. Twelve sites were monitored in Northern Ireland in 2022 as part of the UK Pollinator Monitoring Scheme. These schemes will provide important baseline data. Combined with existing citizen science initiatives (All-Ireland Bumblebee Monitoring Scheme and Flower-Insect Timed Counts), it will allow the impact of the AIPP to be fully assessed into the future.
- ✓ Local Communities continue to carry out inspiring work in support of the All-Ireland Pollinator Plan. The Local Authority Pollinator Award aims to encourage Tidy Towns groups in ROI to implement pollinator-friendly actions in their towns and villages as part of the Tidy Towns competition. It is coordinated and sponsored by the Heritage Offices and Biodiversity Offices of Local Authorities across Ireland, in partnership with the National Biodiversity Data Centre. To date more than 200 communities have become pollinator friendly through the award. Congratulations to the overall 2022 winner, Cobh Tidy Towns in Co Cork.
- ✓ The Business supporters network continues to grow. Ninety-three new companies have joined in the past 12-months. In joining, companies commit to taking evidence-based actions for pollinators and reporting on their activities. This brought the total number of business supporters to well over 400. However, as of 2021, annual reporting for Businesses is now mandatory. To maintain the integrity of the network, those who did not submit an update of their activities in support of the Plan have been removed from the list/website (they can reengage at any point). The adjustment is reflected in the overall figure for November 2022, which now stands at **340 business supporters**. These companies are all taking genuine actions for biodiversity.
- ✓ The first phase of the AIPP for 2015-2020 saw many resources published and made freely available online: 11 evidence-based guideline documents for different sectors and an additional 7 how-to-guides, as well as numerous flyers. In 2022, we published two new rare species guides (below). We also published a solitary bee poster. Four new flyers have been produced (pollinator friendly trees, community orchards, farmland meadows, and making business carparks pollinator friendly), as well as a short resource for Residents Associations. We have also produced new how-to-guides on top pollinator friendly plants, and on how to create and restore meadows in local communities and gardens. Most of these newly produced resources are being held back for release in early 2023.
- ✓ Work on rare species has significantly advanced in 2022 (Objective 5: Conserving rare pollinators), with two evidence-based guidelines published to identify actions to protect a rare solitary bee (Northern Colletes) and a rare bumblebee (Large Carder Bee).

- ✓ 2022 has seen wide-scale promotion of the AIPP both nationally and internationally. We thank all those partners and initiatives who have helped raise the profile of the Plan this year. Particular thanks to Super Valu, who worked with the AIPP to develop resources that were distributed to all primary schools in ROI as part of their 'Save the Bees' campaign.

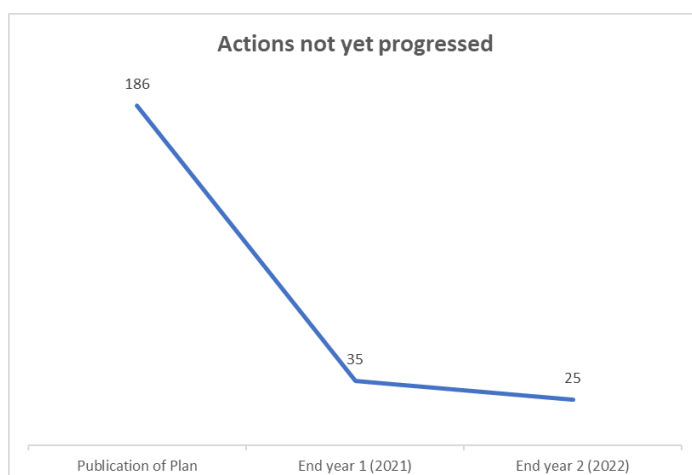
## Actions completed end Year 2 (2022)

The second phase of the AIPP for 2021-2025 launched at the end of March 2021. Of the **186** actions in the Plan; 109 have been completed this year as agreed (59%), 52 are in train (28%) and 25 have not yet been progressed (13%). Some actions are discrete (once-off) while many are annually rolling actions.

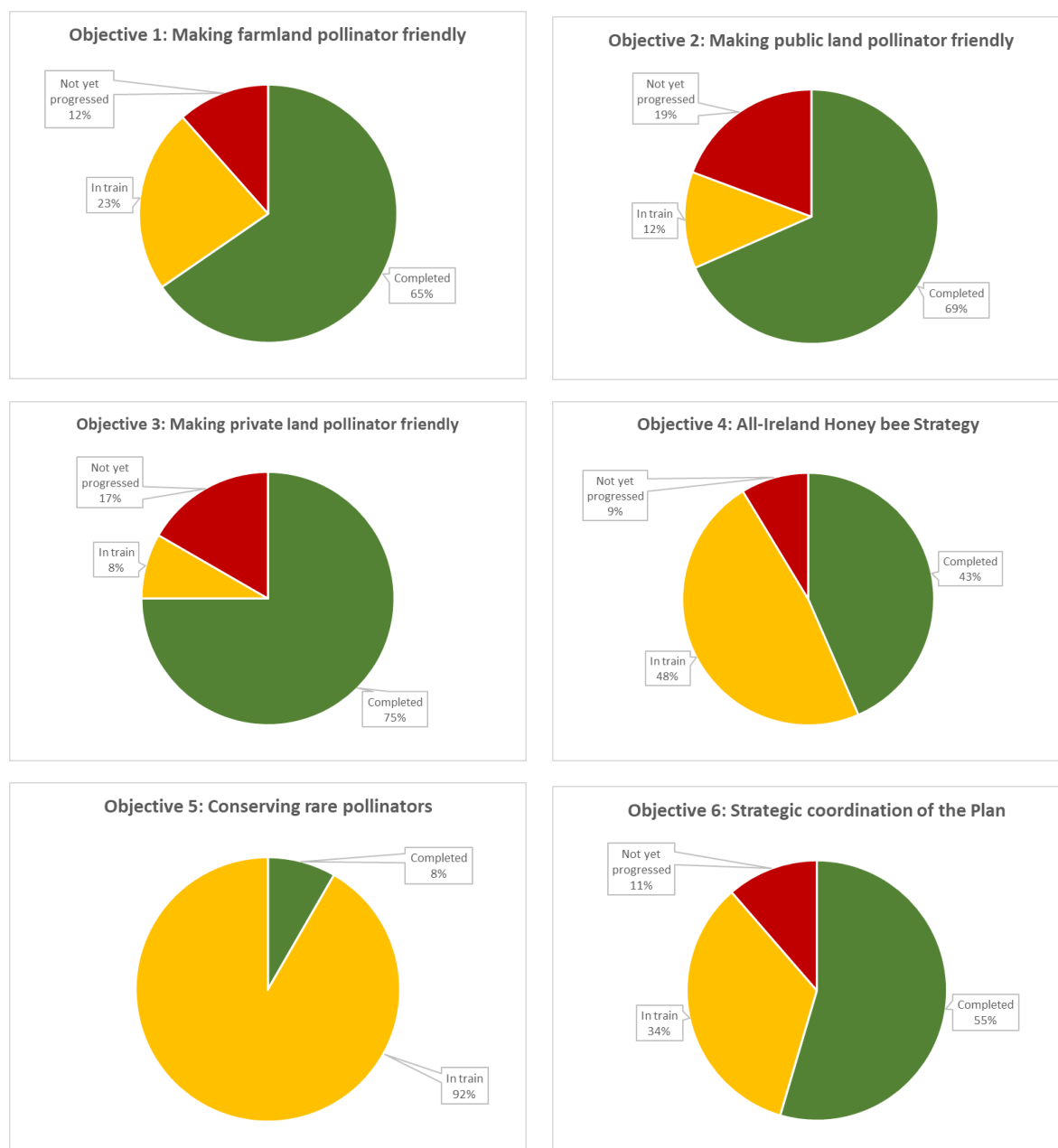
	Agreed action has taken place in 2022
	Action has been started and is in train
	Action not yet progressed



Progress towards delivery of all 186 actions in the AIPP 2021-2025:



Progress within each Objective at the of Year 2 is outlined below:



Objective 6 includes 18 research actions, many of which will be funding dependent

## Acknowledgements

The All-Ireland Pollinator Plan is a *shared plan of action*. It is about all of us coming together to try to create an island where pollinators can survive and thrive. On behalf of the Steering Group, we extend our thanks to all the partners involved in the Plan. Progress to date is entirely due to their support, goodwill, and enthusiasm. We also extend our enormous thanks to all those members of the public – whether in their garden, farm, park, school, local community, faith community or business property – who have expressed their support and engaged with the Plan in its first seven years.

## ALL-IRELAND POLLINATOR PLAN 2021-2025: 186 ACTIONS TO HELP POLLINATORS REVIEW OF PROGRESS YEAR 2 (2022)

Updates under each of the 186 actions have been provided by the organisations responsible. Partners were contacted twice by email with a request to provide a short update on progress. This was not policed. The traffic light system to quickly show progress under each action has been added by the Steering Group. Some actions are discrete (once-off) but the majority are annually rolling actions. Where they have been completed for 2022 these are coded green.

	Agreed action has taken place in 2022
	Action has been started and is in train
	Action not yet progressed

### OBJECTIVE 1: MAKING FARMLAND POLLINATOR FRIENDLY

#### Target 1.1 Increase the amount of farmland that is managed in a pollinator-friendly way

	Action	Progress measure	Responsibility	Progress by November 2022	
1	Incorporate relevant evidence-based pollinator-friendly actions and prescriptions into agricultural and agri-environment schemes in Republic of Ireland (RoI).	<ul style="list-style-type: none"> <li>Incorporation of pollinator conservation actions into agri-environment schemes</li> <li>Uptake by farmers</li> </ul>	Department of Agriculture, Food and the Marine (DAFM)	<p>GLAS (Green Low-Carbon Agri-Environmental Scheme) under the Rural Development Programme was rolled over for the CAP Transitional Period (2021-2022). GLAS has several specific pollinator measures but also a range of biodiversity measures which provide benefits to pollinators. The GLAS uptake was approx. 50,000 farmers and approx. 48,200 participants extended their contracts.</p> <p>As part of the EIP funding stream under the Rural Development Programme, DAFM awarded €1,194,697 to the Protecting Farmland Pollinators EIP (2019-</p>	



				<p>2023). The Pilot Project has 40 farmers signed up to a results-based payment scheme.</p> <p>Under EIP call 5 the Farmer Moth Monitoring Project and the Great Yellow Bumblebee project commenced in 2021.</p> <p>DAFM launched REAP in 2021 Under the Transition CAP Period. REAP will pilot the use of results-based scorecards for grasslands and field margins. REAP will focus on improving existing farm features rather than the creation of new features and habitats and should result in benefits for pollinators through improvement of biodiversity and habitats. The farmer participation is approximately 3,750.</p> <p>ACRES (Agri-Climate Rural Environment Scheme) is Ireland's new agri-environment climate scheme under Ireland's CAP Strategic Plan. This new €1.5 billion agri-environment scheme is a farmer-friendly scheme to help address biodiversity decline while delivering an income support for up to 50,000 farm families in Ireland. Tranche 1 of ACRES opened for applications on 17 October 2022. The ACRES General scheme has a wide range of targeted and general biodiversity actions which will benefit pollinators both directly and indirectly. The ACRES Co-operation approach is a results-based payment design which will reward farmers for appropriate management of high priority geographical areas. Co-operation project teams will be</p>
--	--	--	--	---

				responsible for the design of bespoke farm and landscape actions.	
2	Incorporate relevant evidence-based pollinator-friendly actions and prescriptions into existing agricultural and agri-environment schemes in Northern Ireland (NI).	<ul style="list-style-type: none"> <li>• Incorporation of pollinator conservation actions into existing agri-environment schemes</li> <li>• Uptake by farmers</li> </ul>	Department of Agriculture, Environment and Rural Affairs (DAERA)	<p>The Environment Farming Scheme (EFS) first opened for applications in 2017. After five tranches, 44 agreements contain the 'Creation of Pollinator Margins – Annual Wildflower' option and 3 agreements contain the 'Creation of Pollinator Margins – Pollen and Nectar' option.</p> <p>Both options aim to support pollinators.</p> <p>Tranche 6 of EFS opened in 2022. Once Tranche 6 applications have been validated by DAERA, agreements are planned to commence in January 2023.</p>	
3	Encourage more organic farming (which has been shown to support more pollinators).	<ul style="list-style-type: none"> <li>• Participation in the Organic Farming Scheme</li> </ul>	DAFM	In 2022 there are approximately 2006 individual herdowners in the Organic Farming Scheme. As part of the Agri Food Strategy targets DAFM has committed to at least 7.5% of utilisable agricultural area is targeted to be farmed organically by 2030.	
4	Establish a network of stakeholders, including agri-businesses who agree to manage their own farms or test sites in a pollinator-friendly way, e.g., DAFM, AFBI,	<ul style="list-style-type: none"> <li>• Networks of sites identified</li> <li>• Progress reported annually</li> <li>• Sites used to develop case studies which are shared within the network</li> </ul>	AIPP Farmland Officer	This network is still in the early stages of development and will be further progressed in 2023. In the future, it will be linked to the tools being developed within the National Biodiversity Data Centre's EIP project (2019-2023) on 'Protecting Farmland Pollinators'. This project is developing a simple system to establish a whole-farm pollinator score, based on the habitats	

	individual agri-businesses.			<p>present. This is linked to simple management actions to improve the score.</p> <p>Many agri-businesses are currently being supported through the AIPP business supporter's framework (Action 89). These include companies like ABP, Boortmalt, Country Crest, Dawn Meats, Irish Country Meats, Kepak, Lakeland Dairies. More than 80 agri-food companies are currently business supporters of the AIPP.</p>	
--	-----------------------------	--	--	--	--

**Target 1.2 Encourage the sustainable use of agricultural pesticides (insecticides, fungicides, herbicides)**

	Action	Progress measure	Responsibility	Progress by November 2022	
5	Encourage the responsible and sustainable use of pesticides (insecticides, herbicides and fungicides) in RoI.	<ul style="list-style-type: none"> <li>Through the National Action Plan for the Sustainable Use of Pesticides, encourage farmers to minimise the impact of pesticides on pollinators</li> </ul>	DAFM	DAFM have produced guidance notes on Integrated Pest Management (IPM) which provides farmers with a tool to assist them make the most appropriate and environmentally suitable crop protection decisions. In addition, DAFM have finalised a decision support document to support responsible pesticide use in public, amenity and garden areas. DAFM has also corresponded with all Local Authorities, Distributors, Sports associations and Leisure, Recreational and Amenity Facilities to help support them on the requirements for the use of PPP's. A template for carrying out a risk assessment for areas of non-agriculture for specific areas is also available on DAFM's website for quantifying the use of PPP's where their use is necessary. This document helps the user decide on whether intervention is necessary or not and if intervention is deemed necessary, it presents the	

				options to solve the pest problem. The Office of Public Works (OPW) has produced a guidance document on using Plant Protection Products (PPP's) which is endorsed by DAFM. This guidance document will ensure responsible use of PPP's by government actors. Additional users, advisers, distributors, and inspectors continue to be trained which all assists in the responsible and safe use of pesticides.
6	Encourage the responsible and sustainable use of pesticides (insecticides, herbicides and fungicides) in NI.	<ul style="list-style-type: none"> <li>Through the UK National Action Plan for the Sustainable Use of Pesticides (Plant Protection Products) and DAERA Integrated Pest Management Guidance, encourage farmers to minimise the impact of pesticides on pollinators</li> <li>Support the UK-wide Voluntary Initiative on Promoting Responsible Pesticide Use</li> </ul>	<p>DAERA/Agri-Food and Biosciences Institute (AFBI)</p> <p>Ulster Farmers' Union (UFU)</p>	<p><b>AFBI:</b> Ongoing work. AFBI projects emphasise integrated pest management for pest species with current projects on leatherjackets and aphids. For example, use of a suction trap provides an alert for cereal growers as to aphid migration with the intent of avoiding prophylactic insecticide applications  <a href="https://eservices.afbini.gov.uk/aphidmonitoring/cereal-aphid.html">https://eservices.afbini.gov.uk/aphidmonitoring/cereal-aphid.html</a></p> <p>The <b>UFU</b> continue to support the UK-wide Voluntary Initiative on responsible pesticide use.</p>
7	Summarise and publish annual trends in agricultural pesticide use across the island.	<ul style="list-style-type: none"> <li>Summarised trends published for ROI</li> <li>Summarised trends published for NI</li> </ul>	DAFM and AFBI	<p><b>DAFM</b> continues to conduct, with technical support from AFBI, pesticide usage surveys in ROI. The most recent reports can be found on DAFM's website at: <a href="https://www.pcs.agriculture.gov.ie/sud/pesticidestatistics/">https://www.pcs.agriculture.gov.ie/sud/pesticidestatistics/</a> Additionally, DAFM publishes the annual pesticide sales data which can be viewed using the same link above.</p> <p><b>AFBI:</b> Pesticide usage reports are available at:</p>

				<a href="https://www.afbini.gov.uk/articles/pesticide-usage-monitoring-surveys">https://www.afbini.gov.uk/articles/pesticide-usage-monitoring-surveys</a>	
--	--	--	--	---	--

### Target 1.3 Provide clear information and training on pollinators to the farming community

	Action	Progress measure	Responsibility	Progress by November 2022	
8	Establish an All-Ireland farming subgroup to advise and steer on pollinator actions for farmland from the farmers' perspective.	<ul style="list-style-type: none"> <li>Establish the subgroup</li> <li>Group meeting at least annually, either in person or remotely</li> </ul>	AIPP Project Manager, supported by Farmland Officer	This small subgroup was established in 2021. It currently has 10 members from across farm types and includes members from both the Republic of Ireland and Northern Ireland. It has been agreed that the group will advise on one specific pollinator issue every 6 months (where necessary).	
9	Provide comprehensive and freely available online resources for the farming sector at	<ul style="list-style-type: none"> <li>Up-to-date resources provided on the website</li> <li>To include: evidence-based guideline documents, flyers, videos, blogs, webinars, presentations, case studies, animations</li> <li>All 2015–2020 resources to be updated where necessary</li> </ul>	AIPP Farmland Officer	<p>This website is maintained at <a href="https://pollinators.ie/farmland/">https://pollinators.ie/farmland/</a></p> <p>Infographics/posters showing pollinator friendly actions on the farm for each of the four seasons were developed and launched in early 2022. An A5 flyer on species-rich grassland meadows has been developed and will be released early in 2023.</p> <p>The following farmland specific blogs have been published by the AIPP farmland officer in 2022  <a href="https://pollinators.ie/blog/">https://pollinators.ie/blog/</a>:</p> <ul style="list-style-type: none"> <li>✓ Plan for pollinators and biodiversity on your farm.</li> <li>✓ Planning for nesting pollinators on your farm.</li> <li>✓ Why native flowers are good for pollinators on your farm.</li> </ul>	

				<ul style="list-style-type: none"> <li>✓ Hedgerows – let's celebrate our native hedgerows'</li> <li>✓ A Farm Biodiversity Walk' by Alan Poole.</li> <li>✓ Hoverflies, the 'Farmers friend'.</li> <li>✓ Are you thinking of creating a traditional orchard on your farm?</li> <li>✓ Where do pollinators go in the winter?</li> </ul>	
10	Establish a knowledge exchange programme for farmers on protecting pollinators.	<ul style="list-style-type: none"> <li>• Knowledge exchange programme developed and rolled out</li> <li>• Farmer participation</li> </ul>	DAFM, Teagasc, College of Agriculture, Food and Rural Enterprise (CAFRE)	<p><b>DAFM:</b> As part of the CAP transition period funding DAFM has a budget of 1 million for Advisor CPD. This training will include a module on Biodiversity Conservation with material on pollinators and their habitats. Advisors will also receive additional training through the Agri Environment Training Scheme (AETS) which presentations focusing on biodiversity and the importance of wildlife habitats.</p> <p><b>Teagasc:</b></p> <ul style="list-style-type: none"> <li>• 40,000 farmer clients through Teagasc client publications (Newsletter and Todays Farm)</li> <li>• 7,000 farmers undertook a one-day Biodiversity training course (AETS) delivered by Teagasc advisors</li> <li>• 4,500 farmers undertook a Biodiversity module in Nitrates Derogation Course delivered by Teagasc advisors</li> <li>• Focus on pollinators and biodiversity at Teagasc National Events in 2022: Beef (Grange); Sheep (Athenry); Sustainability (Johnstown Castle); Organic (Tipperary)</li> </ul>	

				<ul style="list-style-type: none"> <li>• Focus on pollinators and biodiversity at non Teagasc National events in 2022 including National Ploughing Championships; Bloom; Iverk Show.</li> <li>• Teagasc Hedgerow Week was held in September 2022 with a focus on Best Practice Hedge cutting</li> <li>• Biodiversity knowledge exchange to all 140,000 farmers, private advisors and the agri-environment industry through national and regional print media, tv, radio, podcasts and webinars</li> <li>• Pollinators and Biodiversity featured in ten of the weekly Signpost webinars with 300-400 participants from the Agri Environment industry</li> <li>• Teagasc developed Biodiversity modules including pollinators (5 x half hour), one of the 5 Environmental Modules for DAFM FAS CPD which will be undertaken by 800 FAS (Farm Advisory Service) agricultural advisors.</li> </ul> <p><b>CAFRE:</b> Farm management for pollinators is part of the CAFRE delivery to 400 farmers in the Environmental Business Development Groups. Hedgerow management to assist pollinators is part of an ongoing CAFRE information campaign.</p>	
11	Agricultural colleges to support training and awareness-raising in RoI.	<ul style="list-style-type: none"> <li>• Adoption of pollinator-friendly management within college sites as a teaching and awareness-raising tool</li> </ul>	Teagasc	Biodiversity Plans have been developed for Teagasc agricultural colleges with habitats identified and targets agreed to increase habits and improve biodiversity management practices as a resource for	

		<ul style="list-style-type: none"> <li>Incorporation of material on the identification and conservation of pollinators within relevant teaching programmes</li> </ul>		<p>training and awareness-raising of biodiversity, including protecting pollinators. To be reviewed and amended annually.</p> <p>Hedge planting demonstrations were held in Spring 2022 on Teagasc college farms and research farms with advisors involved in the 120 farms involved in the Teagasc Signpost Programme.</p>	
12	Agricultural colleges to support training and awareness-raising in NI.	<ul style="list-style-type: none"> <li>Adoption of pollinator-friendly management within college sites as a teaching and awareness-raising tool</li> <li>Incorporation of material on the identification and conservation of pollinators within relevant teaching programmes</li> </ul>	CAFRE	<p>CAFRE farm hedgerow management protocol is now in the 5th winter of a mixed hedge cutting &amp; hedge sapling strategy designed to provide floral opportunity within each field or land block annually. 5 types of arable &amp; grassland margins of use to pollinators are maintained with an ongoing volunteer butterfly monitoring transect to monitor the impact of the margins. Farm management for pollinators is part of the CAFRE Level 3 course.</p>	
13	Farming organisations and agricultural networks to promote pollinator-friendly actions to their members.	<ul style="list-style-type: none"> <li>Partner organisations to promote pollinator-friendly actions</li> <li>Those listed under responsibility agreed to this action at time of publication</li> </ul>	Ulster Farmers Union, Irish Organic Association, Organic Trust, others to agree	<p><b>Ulster Farmers Union:</b></p> <p>UFU has continued to promote farmland pollinator actions to members. Information and the Pollinator Farmland Guidance has been shared with members through the agricultural press, social media posts and the UFU e-bulletin. The UFU ran a social media campaign on with a particular focus on pollinators and their importance to agriculture on World Bee Day (20<sup>th</sup> May). Any new information or guidance that is produced by the All-Ireland Pollinator Plan project and is relevant to farmers/farming families is automatically shared with our members on social media and through the UFU e-bulletin.</p>	



				<p><b>Irish Organic Association:</b></p> <p>Here at the Irish Organic Association, we continue to promote the All-Ireland Pollinator Plan and its achievements. We do this primarily through our magazine Organic Matters which is published twice a year. We also promote the work of the All-Ireland Pollinator Plan, via our monthly e-newsletter which goes to all Irish Organic Association members who have subscribed to it. Many of our members within the Association are practicing farming methods on their own farms which enhance and encourage biodiversity, but they are also involved at a community level in a variety of projects to protect our natural heritage. Our support for the All-Ireland Pollinator Plan continues annually and we are delighted to work together to restore and enhance our natural capital.</p> <p><b>Organic Trust:</b></p> <p>Organic Trust CLG remains committed to making the island of Ireland more pollinator-friendly and the objective of making farmland more pollinator friendly remains at the heart of the farming endeavours which we certify. We aim to ensure crop pollination, wild plant pollination and to continue to nurture the diversity of pollinators on our island as study after study confirms that maintaining pollinator diversity keeps agricultural systems and natural ecosystems resilient – co-dependant from a singularly positive perspective. In this respect the Organic Trust continues to promote pollinator-friendly actions to</p>
--	--	--	--	--

				<p>our members; stresses the importance of the Pollinator Plan 2021-2025 on our website and promotes the Plan to our members within our organic journal Clover and within our monthly E-Newsletter Organic Trust News. Mutually beneficial endeavours are still being identified so that the pollinator-friendly actions we promote gain as wide an audience as possible so that the results of our efforts are both robust and effective. This promotion is in the early stages of the 2021-2025 All-Ireland Pollinator Plan and our intention is that this will gain further traction over the life of the Plan. Going forward, we intend to continue our support of the AIPP through the numerous platforms available to us and to strongly encourage our members to actively engage with the proposals contained within the 186 actions of the 2021-2015 Pollinator Plan.</p>	
14	Publish a guideline document outlining evidence-based pollinator actions for forestry.	<ul style="list-style-type: none"> <li>• Publication of guidelines for forestry</li> <li>• Dissemination to all relevant bodies</li> </ul>	AIPP Farmland Officer and relevant partners	This guideline is in train. A first draft has been produced and we are currently engaging with others in the sector to get their input	
15	Publish a guideline document that links pollinator/biodiversity actions to their carbon/climate benefits on farmland.	<ul style="list-style-type: none"> <li>• Collation of all relevant research necessary for this document</li> <li>• Publication when a sufficient evidence base is in place</li> </ul>	AIPP Farmland Officer and relevant partners	This has not progressed yet. It is an active research area, and it has been decided to wait until a more complete evidence base is in place.	

16	Publish other new evidence-based pollinator guideline documents for the farming sector as necessary.	<ul style="list-style-type: none"> <li>Investigate which guideline documents are required and prioritise a programme for their development. May include, but not limited to: <ul style="list-style-type: none"> <li>- Pollinator-friendly management of stud farms (equine industry)</li> <li>- Integration of pollinator-friendly guidelines into the Agricultural Catchments Programme</li> </ul> </li> <li>- Development of pollinator-friendly guidelines for archaeological sites on farmland</li> </ul>	AIPP Farmland Officer and relevant partners	<p>This action is being progressed.</p> <ul style="list-style-type: none"> <li>- Investigations are underway on how best to support the equine industry in taking actions to help pollinators.</li> <li>- A simple how-to-guide on farmland orchards is in development.</li> </ul> <p>As part of the 2019-2023 'Protecting Farmland Pollinators' EIP project, managed by the National Biodiversity Data Centre, a series of evidence-based actions sheets on how best to support pollinators on farmland will be made available before the end of 2023. Ultimately, they will be used to update the core AIPP resource: Farmland – actions to help pollinators (published 2017).</p> <p>In 2022, an action sheet on <a href="#">How to create solitary bee nest site on your farm</a> was published. This was based on evidence collected within the EIP project - farmers created over 300 nest sites for mining solitary bees and 130 sites for cavity nesting solitary bees.</p>	
17	Promote best practice in the use of imported bumblebee colonies.	<ul style="list-style-type: none"> <li>Relevant organisations to disseminate the evidence-based guideline document: <i>Guidelines for users of imported bumblebee colonies</i> (AIPP, 2020)</li> </ul>	Teagasc, DAERA	The guidelines are promoted where relevant	
18	Promote the AIPP at key agricultural events.	<ul style="list-style-type: none"> <li>Attendance at the National Ploughing Championship, ROI</li> </ul>	AIPP Farmland Officer	The following key events were attended by the Farmland Officer in 2022:	

		<ul style="list-style-type: none"> <li>• Attendance at the Balmoral Show, NI</li> <li>• Attendance at other relevant agricultural events</li> </ul>		<ul style="list-style-type: none"> <li>✓ Beef 2022 Open Day. Supporting Sustainable Beef Farming. Teagasc Grange, Dunsany, Co Meath (5<sup>th</sup> August)</li> <li>✓ Virginia Agriculture Show, Water and Biodiversity Centre (8 August)</li> <li>✓ Farming for a Better Future - Teagasc. Environment village, Johnstown Castle, Co Wexford (30 August)</li> <li>✓ National Ploughing Championships, Ratheniska, Co Laois (20, 21 and 22 September)</li> <li>✓ Organic Beef 2022. National Organic Beef Open Day. Teagasc/DAFM/Bord Bia. John Purcell's farm, Golden, Co Tipperary</li> </ul> <p>Also included, were the following knowledge exchange events to raise awareness of pollinators and the AIPP:</p> <ul style="list-style-type: none"> <li>✓ Teagasc 'Biodiversity Farm Walk', display and talk on the value of hedgerows for pollinators, at the farm of Alan and Cheryl Poole, Gorey, Co Wexford.</li> <li>✓ Farmland and biodiversity training at Granard mart, Longford for the Agri-environment Training Scheme (ATS) to 200 farmers.</li> <li>✓ Pollinator guidance to - Teagasc farmer discussion group with KE Wild Atlantic Nature, east Doona, Mayo.</li> <li>✓ Bord Bia staff training on pollinator actions on farmland, at UCD Lyons farm (4 days).</li> </ul>	
--	--	---	--	---	--

#### Target 1.4 Raise awareness and celebrate pollinator diversity on Irish farmland

	Action	Progress measure	Responsibility	Progress by November 2022	
19	Investigate the potential for an All-Ireland farmland meadow competition.	<ul style="list-style-type: none"> <li>• Scoping study on a potential meadow competition to celebrate the diversity and importance of natural farmland meadows for pollinators/biodiversity</li> <li>• Should link to future agri-environment initiatives where appropriate</li> <li>• Should build on learning from the Save our Magnificent Meadows project in NI (2014–2017)</li> <li>• To include an investigation of the potential for a green hay exchange</li> <li>• To include an investigation into creating a future donor site map for wildflower seed collection for local restoration projects</li> <li>• If funding is sourced, this should be rolled out on a gradual scale as the first building block in creating a network of flower-rich meadows across farmland</li> </ul>	<p>Coordinated by AIPP Farmland Officer</p> <p>Needs a funding body/sponsor</p>	<p>Work around this action has spring boarded ahead. In 2022, the NPWS launched a new project to celebrate Irish semi-natural grasslands called '<b>Great Irish Grasslands</b>' <a href="https://greatirishgrasslands.ie/">https://greatirishgrasslands.ie/</a> This has been supported by the National Biodiversity Data Centre and addresses many of the progress measures identified under this action. It also creates a foundation to specifically celebrate farmland meadows in the future.</p> <p>The AIPP Farmland Officer has established a database to collate information on the location of good quality farmland meadow sites. They have also begun collating information from existing green hay exchange or brush harvesting projects that are happening across the island. This information will be used for future knowledge exchange.</p>	

20	Investigate the potential for an annual May Hedgerow Festival.	<ul style="list-style-type: none"> <li>• Scoping study on a potential Hedgerow Festival to celebrate the uniqueness and value of native hedgerows (Run in May when native hedgerows are in full flower)</li> <li>• Should include biodiversity as well as cultural components and bring in the wider community to celebrate and appreciate farmers as protectors of this vital habitat</li> <li>• Should stress the importance of hedgerows as networks for nature and for carbon capture</li> <li>• Should link with the Teagasc Hedgerow Week in September which promotes good hedgerow management</li> <li>• If funding is sourced, this should be rolled out on a gradual scale</li> </ul>	<p>Coordinated by AIPP Farmland Officer</p> <p>Needs a funding body/sponsor</p>	<p>Upon discussion, this action was changed into a wider initiative within the National Biodiversity Data Centre. The <i>Festival of Farmland Biodiversity</i> began in 2021 and will take place across May each year <a href="https://biodiversityireland.ie/farmlandbiodiversity/">https://biodiversityireland.ie/farmlandbiodiversity/</a></p> <p>The hedgerow component of the wider Festival will continue to be enhanced over the coming years, in collaboration with key partners such as Teagasc.</p>
21	Run a campaign to raise awareness and celebrate pollinator diversity on farmland.	<ul style="list-style-type: none"> <li>• Awareness-raising campaign rolled out. This to be largely social media based, but may also include newsletters, blogs, videos, etc.</li> <li>• This to be run in collaboration with an existing National Biodiversity Data Centre project: Protecting Farmland Pollinators EIP 2019-2023 (funded by DAFM through the</li> </ul>	National Biodiversity Data Centre	<p>This is now largely done through the Festival of Farmland Biodiversity (above).</p> <p>Farmland pollinators and pollinator-friendly actions were promoted on social media across 2022. The AIPP farmland officer continues to provide DAFM with regular farmland pollinator pieces for their social media channels.</p>

		European Innovation Partnership)		<p>Farmland specific blogs and new resources have been published and promoted by the AIPP farmland officer in 2022 (Action 9)</p> <p>Other awareness raising by the farmland pollinator officer in 2022 include:</p> <ul style="list-style-type: none"> <li>✓ Teagasc podcast: 'The Environment Edge'. <i>How to help pollinators and the wider biodiversity on farmland.</i></li> <li>✓ National Rural Network webinars. 2 x Seasonal actions for farmland pollinators webinars 'Summer and Autumn' and 'Winter and Spring'.</li> </ul>	
--	--	----------------------------------	--	--	--

#### Target 1.5 Track changes in pollinators on farmland

	Action	Progress measure	Responsibility	Progress by November 2022	
22	Publish an annual review of farmland actions.	<ul style="list-style-type: none"> <li>Development of an annual review outlining progress within actions under this objective</li> <li>Publication on AIPP website each December</li> </ul>	Coordinated by AIPP Farmland Officer	This document provides a review of the farmland actions in 2022.	
23	Track progress within the farmland sector.	<ul style="list-style-type: none"> <li>Open up the online mapping system <i>Actions for Pollinators</i> to the farmland sector <a href="https://pollinators.biodiversityireland.ie/">https://pollinators.biodiversityireland.ie/</a></li> <li>Number of farms logging their pollinator-friendly actions</li> </ul>	AIPP Farmland Officer	This has not yet taken place. Considerations are still being given on how best to open up the mapping system to farmers and how best to integrate with the 'Protecting Farmland Pollinators' EIP project being run by the National Biodiversity Data Centre (2019-2023). An online tool is currently in development within the EIP project, due for release in 2023. It will enable	

				farmers to generate a score indicating how pollinator friendly their farm is.	
24	Monitor pollinators across a network of farmland sites.	<ul style="list-style-type: none"> <li>Investigate the framework necessary for a national pollinator monitoring scheme to include sites across farmland, public and protected land. This should be in line with the European Pollinator Monitoring Scheme recommendations (2020)</li> <li>Source funding and roll out this scheme to monitor pollinators across a network of farmland sites</li> </ul>	National Pollinator Monitoring Scheme requires funding	In 2021, DAFM and NPWS granted initial funding for this scheme which is being managed by the National Biodiversity Data Centre. The project began in September 2021 and was rolled out as a National Pollinator Monitoring Scheme pilot in 2022. A total of 36 sites were monitored across farmland, semi-natural sites, and urban parks. Of these, 17 sites were on farmland, 15 are semi-natural sites and 4 are urban parks.	
25	Publish annual farmland pollinator index.	<ul style="list-style-type: none"> <li>Based on the annual data from a National Pollinator Monitoring Scheme, publish annual trends as a farmland pollinator index</li> </ul>	National Pollinator Monitoring Scheme	This index cannot be developed until data begins annually feeding through from the National Pollinator Monitoring Scheme (Action 24 above).	
26	Develop a Citizen Science recording scheme for farmland.	<ul style="list-style-type: none"> <li>Investigate the possibility of creating a simple, tailored Citizen Science scheme for farmers to enable them to track changes in common pollinators on their land</li> <li>Pending funding, roll out this scheme nationally</li> </ul>	AIPP Farmland Officer & National Biodiversity Data Centre, Centre for Environmental Data and Recording NI (CEDaR)	<p>Discussions are ongoing on the most appropriate schemes to develop for farmers. It is hoped it will be rolled out in future years. Data from the 'Protecting Farmland Pollinators' EIP project and from the farmland sites within the National Pollinator Monitoring Scheme will be used to inform any future schemes.</p> <p>In 2022, the National Biodiversity Data Centre piloted a farmer moth monitoring EIP project. Twenty farmers from Kildare and neighboring counties were able to</p>	



				<p>independently operate moth traps and successfully monitor moths on their farms. This project has shown the general interest and willingness of farmers to engage in and contribute to citizen science. It paves the way for a nationwide and longer-term monitoring scheme whereby the distributions and populational trends of moths on Irish farmland can be accurately monitored. Moths are important nocturnal pollinators.</p>	
--	--	--	--	--	--

## OBJECTIVE 2: MAKING PUBLIC LAND POLLINATOR FRIENDLY

### Target 2.1 Increase the area of Council land that is managed in a pollinator-friendly way

	Action	Progress measure	Responsibility	Progress by November 2022	
27	Increase the number of Councils who formally agree to partner with the Plan and take actions.	<ul style="list-style-type: none"> <li>✓ There are 31 Local Authorities in RoI and 11 in NI. Target of 90% of all Councils formally signed up as partners of the Plan by 2025.</li> </ul>	AIPP Communities Officer	<p>As of the end of November 2022, 40 Councils (95%) have formally partnered with the Plan.</p> <p>The number of Council supporters has increased by 3 in 2022.</p>	
28	Support relevant sections of Councils to engage with and implement the AIPP. Ensure the AIPP is integrated within relevant Local Authority policy instruments.	<ul style="list-style-type: none"> <li>✓ Plan promoted to relevant sections within Councils, e.g. Environment, Local Enterprise Offices, Parks Dept, Engineers, Strategic Policy Committees (SPC), Public Participation Networks (PPNs), etc.</li> <li>✓ Integration of the Plan within relevant policy instruments, e.g. County Heritage Plans, County Biodiversity Plans, County Development Plans, Local Economic and Community Plans, Climate Adaptation Plans, etc.</li> </ul>	Coordinated by Heritage and Biodiversity Officer network; Environment Departments	Heritage and Biodiversity Officer network continue to support Councils in engaging with the AIPP and in integrating pollinator actions within the relevant policy frameworks.	
29	Provide comprehensive and freely available online resources for the Council sector at <a href="http://www.pollinators.ie/councils">www.pollinators.ie/councils</a>	<ul style="list-style-type: none"> <li>✓ Up-to-date resources provided on the website. To include: evidence-based guideline documents, flyers, videos, blogs, webinars, presentations, case studies, animations</li> </ul>	AIPP Communities Officer	<p>This website is continually updated as new resources are developed: <a href="https://pollinators.ie/councils/">https://pollinators.ie/councils/</a></p> <p>An update of the evidence-based guidelines for Councils is planned for 2023. A guide on management of meadows, specifically for Councils, is also in preparation.</p>	

		<ul style="list-style-type: none"> <li>✓ All 2015–2020 resources to be updated where necessary in consultation with Councils</li> <li>✓ Council toolkit to be continually expanded to meet needs under the advice of the Heritage and Biodiversity Officer networks. May include, but not limited to: technical guidelines on meadow management, grass disposal, advice on pesticide alternatives, advice on new emerging technologies.</li> <li>✓ Promote new and innovative ways for Councils to engage with the AIPP, e.g. Promotion of the successful <i>Midleton Pollinator Plan 2020</i> (Cork CoCo)</li> </ul>		<p>Each Council partner is asked to provide a short update of activities to feed into the Council partner's annual review document. It is published in parallel to this main AIPP Annual Review. The Council partners annual review is used to highlight the positive actions taking place across Local Authorities, but also to assist with knowledge exchange. <i>Council Partners: Annual Review 2022</i> <a href="https://pollinators.ie/aipp-2021-2025/">https://pollinators.ie/aipp-2021-2025/</a></p>	
30	Provide an ongoing knowledge exchange programme for Council staff.	<ul style="list-style-type: none"> <li>✓ Organise annual knowledge exchange event for Council partners</li> <li>✓ Continue to develop blogs, case studies and newsletters</li> <li>✓ Training provided to Council staff</li> </ul>	AIPP Communities Officer	<p>In 2022, this took the form of a wider event, organised by Limerick City and County Council and the National Biodiversity Data Centre: <i>How Local Authorities can address the biodiversity emergency</i> <a href="https://www.limerick.ie/council/newsroom/news/how-local-authorities-can-address-biodiversity-emergency">https://www.limerick.ie/council/newsroom/news/how-local-authorities-can-address-biodiversity-emergency</a> Pollinators were included within the wider programme. The intention is to return to the pollinator specific knowledge exchange event for Council partners in 2023</p>	

				We have continued to share blogs across 2022 to encourage knowledge exchange e.g., <a href="https://pollinators.ie/south-dublin-county-councils-pollinator-plan/">https://pollinators.ie/south-dublin-county-councils-pollinator-plan/</a>	
31	Increase the number of Regional Assemblies who agree to partner with the Plan and support implementation within local government, where appropriate.	<ul style="list-style-type: none"> <li>• There are three Regional Assemblies in RoI. Each to be approached on supporting the objectives of the AIPP 2021-2025.</li> <li>• Each has a 12 year Spatial and Economic Strategy (RSES) (made in 2019/2020) containing Regional Planning Objectives (RPOs). These to support implementation of the AIPP 2021-2025 (and vice versa), where appropriate.</li> <li>• Each participates in EU projects which involve sectoral, local, regional and international engagement activities. Where thematically relevant, these to promote the All-Ireland Pollinator Plan (e.g. the Interreg Europe PROGRESS project on which the Eastern and Midland Regional Assembly is a partner)</li> </ul>	The Eastern and Midland Regional Assembly, others to agree	<p>The Regional Spatial and Economic Strategies (RSES) for the three Regional Assemblies promote the aims of the AIPP. The RSES for the North Western Region includes an overarching Environmental Regional Policy Objective for the AIPP as follows: No 2: The Assembly supports the implementation of the All-Ireland Pollinator Plan.</p> <p>For the Southern Region the strategy includes the following Regional Policy Objective: RPO 128: It is an objective to support the implementation of the All-Ireland Pollinator Plan 2015-20. Local authorities should incorporate the actions of this Plan when managing their parks, open spaces, roadside verges and all vegetation in a way that provides more opportunities for biodiversity, while being cognisant of the threat of the spread of invasive species.</p> <p>More engagement with the Regional Assemblies is planned for 2023. To date, the most direct engagement has been with EMRA, who have provided an update on their support below.</p> <p><b>EMRA:</b> EMRA has continued to engage with the AIPP team and actively promote the AIPP across regional</p>	

				<p>and international networks. On the 11<sup>th</sup> of March Úna Fitzpatrick and Dr Owen Douglas (EMRA) jointly participated in a Webinar on ‘Societal impact of research in Natural Sciences’ organised by the University of Barcelona. On the 14<sup>th</sup> of March, by invitation from EMRA and Interreg Europe, Dr Saorla Kavanagh presented the EIP-Agri ‘Protecting Farmland Pollinators’ (PFP) project at the Interreg Europe (IE) thematic Workshop ‘Preserving and restoring eco-systems and biodiversity’ on ‘Environment and Resource Efficiency Day’ of IE Policy Learning Week 2022. The PFP project was subsequently included in the associated IE policy brief: <a href="https://www.interregeurope.eu/find-policy-solutions/policy-briefs/preserving-and-restoring-biodiversity">https://www.interregeurope.eu/find-policy-solutions/policy-briefs/preserving-and-restoring-biodiversity</a>. The Interreg Europe funded video to promote the AIPP as a Good Practice across Europe <a href="https://youtu.be/cMesAH23dDQ">https://youtu.be/cMesAH23dDQ</a> was shown live at the 4th International Training Workshop of the IE PROGRESS project in Florence on the 30<sup>th</sup> of March and was referenced in an article on the event included in the Spring issue of <i>Council Review</i>. In June, as one of the most successful good practices from across the PROGRESS partnership, the AIPP formed the basis of a field study with PROGRESS partners to Fernhill Park &amp; Gardens led by EMRA and Anne Murray, Biodiversity Officer DLR: <a href="https://projects2014-2020.interregeurope.eu/progress/news/news-article/14913/final-1st-phase-meeting-dun-laoghaire-dublin/">https://projects2014-2020.interregeurope.eu/progress/news/news-article/14913/final-1st-phase-meeting-dun-laoghaire-dublin/</a>. Building on AIPP engagements, EMRA delivered a presentation titled ‘Opportunities for</p>	
--	--	--	--	---	--

				Biodiversity Management through the Regional Assemblies' on behalf of the 3 Regional Assemblies at 'How Local Authorities can address the Biodiversity Emergency - A National Conference' co-hosted by NBDC on September 21st and 22nd.	
32	Develop an All-Ireland 'Pollinator Trail' across public land, composed of a network of sites demonstrating high quality pollinator/biodiversity-friendly management.	<ul style="list-style-type: none"> <li>• AIPP to develop criteria for the initiative</li> <li>• Local Authorities to identify suitable publicly owned sites to form part of a trail.</li> <li>• Begin process of developing an All-Ireland network of high-quality sites across different pollinator-friendly actions (meadows, hedgerows, orchards, perennial planting, etc.) that are branded and promoted as a Pollinator Trail and used for knowledge transfer</li> <li>• Begin with Council sites, but develop a roadmap to expand this to other sectors, e.g. local community examples</li> <li>• Discuss with relevant bodies how this network can be fully promoted to maximise the positive potential for human health and wellbeing and as a tourism initiative</li> </ul>	Coordinated by Heritage and Biodiversity Officer network and AIPP Communities Officer  Requires resources for branding	<p>Plans for the possible development of a 'Wild Bee Way' are still being discussed.</p> <p>Collaboration with NPWS in 2022, has led to a new project to celebrate Irish semi-natural grasslands called 'Great Irish Grasslands' <a href="https://greatirishgrasslands.ie/">https://greatirishgrasslands.ie/</a> This initiative includes a 'Grassland Trail' to identify and promote excellent examples of semi-natural grassland meadows. As meadow sites would also form the bedrock of a 'Wild Bee Way', discussions are still ongoing as to whether this should be developed and what form it might take to ensure it complements the new grassland initiative.</p>	

		<ul style="list-style-type: none"> <li>• Increase in the number of sites within the Trail</li> </ul>			
33	Encourage the development of 'Pollinator-friendly Parks' on public land, i.e. parks that demonstrate a wide range of pollinator-friendly actions.	<ul style="list-style-type: none"> <li>• AIPP to provide 'Pollinator-friendly Parks' criteria, including a template of features and minimum standards, e.g. small natural meadow, pollinator-friendly planting, nesting habitats, no pesticide use, mini orchard</li> <li>• Local Authorities to identify suitable areas to be managed/developed as 'Pollinator-friendly Parks'</li> <li>• Webpage and branding developed by AIPP to promote the location of these parks</li> <li>• AIPP to provide standardised signage templates for various park features and on pollinating insects</li> <li>• AIPP to develop associated materials and make freely available online: lesson plans and activities for school nature talks; health and wellbeing resources etc.</li> <li>• Where new areas are being developed, Councils to be encouraged to consider locating them within easy reach of schools in socio-</li> </ul>	Coordinated by Heritage and Biodiversity Officer network, other relevant sections of Councils & AIPP Communities Officer	This has not yet been progressed.	

		economically disadvantaged areas.			
34	Promote pollinator awards for Council-owned/managed land.	<ul style="list-style-type: none"> <li>Continue to promote and support the pollinator award in the An Taisce Green Flag for Parks initiative in RoI</li> <li>Investigate the possibility of an equivalent award in the Green Flags for Parks initiative in NI</li> <li>Investigate existing award structures and the potential to have an annual award to recognize the most pollinator-friendly Council. (RoI and NI)</li> </ul>	An Taisce, AIPP Communities Officer, other partners as relevant	<p><b>Republic of Ireland:</b></p> <p>The An Taisce Green Flag for Parks initiative in RoI again included a special pollinator award in 2022. Thanks to Young Nurseries who sponsor the award. Ten parks entered in 2022, with the standard being extremely high across the board. The three category winners were:</p> <p><i>Country Park:</i> Malahide Demesne and Talbot Botanical Gardens (Fingal County Council).  <i>Town Park:</i> Tymon Park (South Dublin County Council)  <i>Community Garden:</i> Julianstown Community Garden</p> <p>The overall winner in the 2022 competition was <b>Malahide Demesne and Talbot Botanical Gardens</b>, operated by Fingal County Council.  <a href="https://pollinators.ie/an-taisce-announces-green-flag-pollinator-awards/">https://pollinators.ie/an-taisce-announces-green-flag-pollinator-awards/</a></p> <p>Castletown House and Parkland, Oldbridge Estate, and Tralee Bay Wetlands were all highly commended for their work.</p> <p><b>Northern Ireland</b></p> <p>An equivalent pollinator award in the Green Flags for Parks initiative in NI was launched in 2022. This was run by Keep Northern Ireland Beautiful and supported by the AIPP.</p>	



				<p>Two winners of the inaugural Pollinator Award were: <b>Clotworthy Courtyard at Antrim Castle Gardens</b> in the community category, and the <b>Castle Park and Walled Garden in Bangor</b> in the organisation category.</p> <p>Billy Neill MBE Country Park was highly commended for its work for pollinators, and commendations were given to Queen's University Belfast and Grange Park in Omagh.</p> <p><a href="https://pollinators.ie/new-award-for-northern-irelands-pollinator-friendly-parks/">https://pollinators.ie/new-award-for-northern-irelands-pollinator-friendly-parks/</a></p>	
--	--	--	--	--	--

#### Target 2.2 Make transport corridors more pollinator friendly

	Action	Progress measure	Responsibility	Progress by November 2022	
35	Provide comprehensive and freely available online resources for Transport Authorities	<ul style="list-style-type: none"> <li>Up-to-date resources provided on AIPP website To include: evidence-based guideline documents, flyers, videos, blogs, webinars, presentations, case studies, animations</li> <li>✓ All 2015-2020 resources to be updated where necessary</li> <li>✓ Toolkit to be expanded to meet needs, under the advice of Transport Authority partners.</li> </ul>	AIPP Communities Officer	<p>This webpage is kept up to date <a href="https://pollinators.ie/transportcorridors/">https://pollinators.ie/transportcorridors/</a></p> <p>New resources have not been added in 2022</p>	

36	TII to promote pollinator-friendly management of the national road network in RoI.	<ul style="list-style-type: none"> <li>• Improvement of grassland management and pollinator-friendly planting across all existing motorway service areas</li> <li>• Grass-cutting frequency to move from condition-based maintenance to a specified programme, i.e. reduced number of cuts per year</li> <li>• All new roadside planting to have a significant proportion of pollinator-friendly plants</li> <li>• Areas of pollinator-friendly management mapped on GIS</li> <li>• Reduction in the use of pesticides on the network</li> <li>• Control and manage the spread of invasive plant species.</li> </ul>	Transport Infrastructure Ireland (TII)	<ul style="list-style-type: none"> <li>✓ The areas of motorway networks under TII's direct responsibility continue to delay the first cut to mid-April and reduce mowing to a 6-week regime. After 2 years of this new regime there have been recordings of orchids near some motorway junctions for the first time.</li> <li>✓ The AIPP guide for Transport Corridors is a required reference for all TII landscape schemes. For example, it is a key concept in the planting strategy developed for the Metrolink (now submitted to an Bord Pleanála for Rail Order) and the emerging landscape design of the Luas Finglas projects.</li> <li>✓ Mapping of Pollinator areas is linked to a general landscape mapping strategy which is still being progressed by TII and its motorway contractors. Ongoing</li> <li>✓ the Luas Light Rail Operators, Transdev, are trailing pollinator planted areas on selected landscape areas along the Green Luas Line and at tram depots.</li> <li>✓ TII are continuing with its programme of invasive plant control.</li> <li>✓ Applegreen continue to manage their motorway services areas in line with the AIPP.</li> </ul>	
37	Department for Infrastructure NI to promote pollinator-friendly management of the national road network in NI.	<ul style="list-style-type: none"> <li>• Review DfI Roads' environmental policies to promote pollinator-friendly practices and to encourage their inclusion on road schemes, where practicable</li> </ul>	Department for Infrastructure NI	DfI has recently undertaken a review of our policy on grass cutting and verge management, placing a greater emphasis on environmental protection and enhancement. The revised policy involves cutting less grass where safe to do so, to increase the environmental value of road verges through promoting rewilding and hence optimising the	

		<ul style="list-style-type: none"> <li>• Review the outputs from the 'Don't mow, let it grow' pilot project to determine if grass-cutting policy could be changed to help improve the available biodiversity resource</li> <li>• Design of roadside planting on Strategic Road Projects to incorporate pollinator-friendly plants</li> <li>• Areas of pollinator-friendly management to be identified and recorded</li> <li>• Consider alternatives to the use of pesticides on the network</li> <li>• Continue to control and manage the spread of invasive plant species</li> </ul>		<p>available biodiversity resource. The revised policy endeavours to further increase the number of 'Don't Mow Let it Grow' sites and biodiversity enhancement projects on the NI road network and to promote pollinator friendly management of our soft estate. It is intended that the revised policy will come into effect prior to the start of the 2023 grass cutting season. The policy review was publicised through a ministerial announcement which was covered by local media and can be viewed on the links below:</p> <p><a href="https://www.infrastructure-ni.gov.uk/news/odowd-announces-new-approach-road-verge-management-protect-environment">https://www.infrastructure-ni.gov.uk/news/odowd-announces-new-approach-road-verge-management-protect-environment</a></p> <p><a href="https://www.belfastlive.co.uk/news/northern-ireland/minister-john-odowd-announces-major-25158027">https://www.belfastlive.co.uk/news/northern-ireland/minister-john-odowd-announces-major-25158027</a></p>	
38	Iarnród Éireann to promote pollinator-friendly management of the national rail network in RoI.	<ul style="list-style-type: none"> <li>• Improvement of grassland management and pollinator-friendly planting across all stations</li> <li>• Grass-cutting frequency to move from condition-based maintenance to a specified programme, i.e. reduced number of cuts per year</li> <li>• All new landscaping planting specifications to incorporate</li> </ul>	Iarnród Éireann	<ul style="list-style-type: none"> <li>• IÉ is committed to continuing pollinator planting across all stations of the network with this number increasing year on year with over 40 stations to be planted by the end of 2022. A database of stations has been created to track progress and to identify stations that had been previously planted to allow these to be replaced with more pollinator friendly plants.</li> <li>• There have been verbal agreements with external contracted landscapers to reduce the</li> </ul>	

		<p>AIPP pollinator-friendly planting code</p> <ul style="list-style-type: none"> <li>• Areas of pollinator-friendly management mapped on GIS</li> <li>• Reduction in the use of pesticides on the network. Commit to trialing alternatives to glyphosate in station carparks and platforms</li> <li>• Control and manage the spread of invasive plant species</li> <li>• Creation of pollinator-friendly habitat on non-operational lands</li> </ul>		<p>frequency of grass cutting across stations and depots but there is further follow-up required to ensure this is stipulated within contracts and rolled out throughout the entire network.</p> <ul style="list-style-type: none"> <li>• The IÉ environmental team is frequently contacted in regard to new landscaping projects to advise on incorporating the AIPP pollinator-friendly planting code and while these are being incorporated, there are plans to create a technical standard relative to the railway and stations to streamline this process and ensure this guide can be referenced by various departments.</li> <li>• There is ongoing work to update IÉ's internal GIS mapping system to highlight pollinator friendly planting stations and on other areas with further collaboration needed with the team responsible for updating this mapping system.</li> <li>• IÉ is currently investigating methods to ensure the reduction of pesticides along the network and during the summer successfully trialled an alternative to glyphosate-based weed control. The system trialled used boiling hot steam and foam without the use of chemicals to coat and suppress weed growth and this system is further being investigated for use in stations and platforms.</li> </ul>	
--	--	--	--	--	--

				<ul style="list-style-type: none"> <li>• IÉ continues to monitor and treat invasive species identified along the rail network with technical standards in place to ensure best practice guidelines are followed. With all infestations tracked and mapped on our internal GIS System.</li> <li>• There is ongoing work towards creating Pollinator-friendly habitat on non-operational lands with an embankment in Greystones. There are plans for further planting of embankments in both Inchicore and Carrick-on-Suir.</li> </ul>	
39	Translink to promote pollinator-friendly management of the national public transport network in NI.	<ul style="list-style-type: none"> <li>• Promote the message of the All-Ireland Pollinator Plan 2021-2025, and associated guidelines across Translink, stakeholders and contractors</li> <li>• Ensure increasing pollinators is a key facet within the proposed new Translink Biodiversity Strategy – including the improvement of grassland management and pollinator-friendly planting across the Translink estate</li> <li>• Develop a suite of Translink Biodiversity Information sheets focused on pollinators</li> </ul>	Translink	Translink is about to develop a biodiversity strategy that will lead to improvements in the biodiversity of its railway corridor and separate landholdings which amount to approx. 350 acres. An initial project is the planting of approx. 20 acres in the Lisburn area to augment an existing woodland of 15 acres in association with Lisburn Scout Association. The planting scheme will include Alder, Oak, Pine, Birch and mixed shrubs with open areas to encourage additional pollinators	

		<ul style="list-style-type: none"> <li>• All new landscaping planting specifications to incorporate AIPP pollinator-friendly planting code</li> <li>• Areas of pollinator-friendly management mapped on GIS</li> <li>• Continue to work in partnership with employees, contractors, local communities, and environmental NGOs to promote pollinator-friendly planting.</li> </ul>			
40	Waterways Ireland to promote pollinator-friendly management of the national waterway towpath network.	<ul style="list-style-type: none"> <li>• Promote the message of the All-Ireland Pollinator Plan 2021-2025 within Waterways Ireland and with stakeholders.</li> <li>• Continued rollout of biodiversity-rich grassland management as standalone and through community partnerships.</li> <li>• Grass-cutting frequency to favour pollinators, i.e. reduced number of cuts per year.</li> <li>• Areas of pollinator-friendly management mapped on the AIPP GIS.</li> <li>• Control and manage the spread of invasive plant species.</li> </ul>	Waterways Ireland	<ul style="list-style-type: none"> <li>✓ Waterways Ireland, as partners to the All-Ireland Pollinator Plan, place significant focus and resources in the promotion of pollinators through augmented management practices. In 2022 alone we undertook the following: - Continued to manage a number of sites inc Daingean, Clonony, Pollagh, Ticknevin, Dolphins Barn, Meelick, Victoria Lock, Ballinasloe and at our Western Regional offices in Scarriff and our HQ in Enniskillen.</li> <li>✓ Pollinator friendly management is applied throughout the majority of our towpaths and trackways outside the immediate path edge which ensures integrity of path surface with biodiversity management outside this zone.</li> <li>✓ Waterways Ireland was excited to purchase 11 battery operated eWeedhex units in 2022 at a cost of €30,000. This was following a</li> </ul>	

		<ul style="list-style-type: none"> <li>• Continue to ensure biodiversity and pollinator actions are core elements of the new Waterways Ireland Heritage Plan 2030.</li> <li>• Support grant applications that support biodiversity.</li> </ul>		<p>successful trial in 2021. This approach is advantageous as it is herbicide-free and removes the weed, earth and seed content. Being herbicide free means it is not entering our waterways, impacting non-target plants and impacting wildlife, especially pollinators. Also, as battery operated units, they have zero GHG emissions.</p> <ul style="list-style-type: none"> <li>✓ We continue to cosponsor and adjudicate this Tidy Towns Special Award which recognises and rewards the invaluable contribution of the voluntary sector.</li> <li>✓ Waterways Ireland continues to promote the All-Ireland Pollinator Plan on its social media.</li> <li>✓ We continued our Service Level Agreement with Kildare County Council and other local authorities to jointly fund research into herbicide free methods of weed control, which will help support pollinators.</li> <li>✓ Monitoring and management of invasive species (both terrestrial and aquatic) is a core aspect of our work in Waterways Ireland, to ensure the continued ecological health of our waterways. We also sit on the National Invasive Species Action Group being coordinated by the National Biodiversity Data Centre.</li> <li>✓ In 2022 the Heritage Plan Grant Scheme continued to support a wide range of heritage initiatives, including projects focused solely on</li> </ul>	
--	--	--	--	---	--

				the protection and/or promotion of biodiversity.	
41	Promote pollinator-friendly management of future transport routes, e.g. future greenway cycle routes.	<ul style="list-style-type: none"> <li>Guideline document (<i>Pollinator-friendly management of Transport Corridors</i> 2019) to be applied to new projects as relevant, e.g., MetroLink and all future light rail projects</li> <li>Continue to reach out to new partners and to promote the adoption of the guideline document for new transport routes.</li> <li>Develop additional resources around pollinator-friendly management of greenways and new cycle routes</li> </ul>	AIPP Communities Officer and relevant partners	Not yet progressed, but it has been agreed that the Transport guidelines will be updated in 2023, to include a new section on Greenways.	

### Target 2.3 Make schools and educational properties more pollinator friendly

	Action	Progress measure	Responsibility	Progress by November 2022	
42	Provide comprehensive and freely available online resources for Schools	<ul style="list-style-type: none"> <li>Up-to-date resources provided on the website. To include: evidence-based guideline documents, flyers, videos, blogs, webinars, presentations, case studies, animations, etc.</li> </ul>	AIPP Communities Officer	<p>This webpage is kept up to date and is comprehensive <a href="https://pollinators.ie/schools/">https://pollinators.ie/schools/</a></p> <p>New resources have not been added in 2022</p>	



		✓ All 2015–2020 resources to be updated where necessary.			
43	Green-Schools to encourage pollinator-friendly management of schools in RoI.	<ul style="list-style-type: none"> <li>• Pollinators to continue to be promoted within the Green-Schools Initiative</li> <li>• Increase in the numbers of students, teachers, principals and caretakers exposed to pollinator information</li> <li>• Investigate the possibility of schools being awarded a pollinator award upon production and implementation of a School Pollinator Plan.</li> </ul>	Green-Schools	<p>The Green-Schools ‘biodiversity team’ have continued to make support materials and new resources for schools, with specific links to pollinators. These have all contained information on the AIPP and links to <a href="http://www.pollinators.ie">www.pollinators.ie</a></p> <p>In the Summer of 2022, the Green-Schools Teachers’ Summer Course dedicated one of the days to Biodiversity, with the afternoon session dedicated to pollinators and citizen science (including an introduction to the FIT counts and the FIT Count App) – this was attended by 10 teachers.</p> <p>Green-Schools’ annual Autumn Seminars for the themes of ‘Biodiversity’ and ‘Food and Biodiversity’ included information on pollinators, and links and resources for creating a school ‘Pollinator Action Plan’. 198 teachers, each representing their respective school, attended this training in October 2022.</p>	
44	Eco-Schools to encourage pollinator-friendly management of schools in NI.	<ul style="list-style-type: none"> <li>• Pollinators to continue to be promoted within the Eco-Schools Initiative</li> <li>• Increase in the numbers of students, teachers, principals and caretakers exposed to pollinator information</li> <li>• Investigate the possibility of schools being awarded a pollinator award upon</li> </ul>	Eco-Schools	<ul style="list-style-type: none"> <li>✓ Mini orchard/Outdoor learning fruit garden/Biodiversity gardens installed in a further 41 primary schools across Northern Ireland with apple, pear, plum, blackberry, blackcurrant, raspberry, strawberry, blueberry bushes and trees.</li> <li>✓ Danske Bank Productive Biodiversity Garden for Outdoor Learning – 12 schools</li> </ul>	

		production and implementation of a School Pollinator Plan.		<ul style="list-style-type: none"> <li>✓ Radius Housing Biodiversity Project – 23 schools</li> <li>✓ Apex Housing Biodiversity project – 6 schools <u>70 now completed in total.</u></li> <li>✓ Supported by workshops on Biodiversity, site selection, organic gardening practices, composting, healthy eating, harvesting, pruning, taking cuttings, etc</li> <li>✓ Online webinars offered with a biodiversity theme and the importance of conservation: was offered to all schools across NI. (attendance 68 schools and approx. 2000 pupils in attendance)</li> <li>✓ Workshops also include suggestions for signage with “No Mow” and “No spray” messaging.</li> <li>✓ First schools Biodiversity champions award. One in each council area sponsored by Radius Housing: Schools are:               <ol style="list-style-type: none"> <li>1. Antrim and Newtownabbey Borough Council: Glengormley High School</li> <li>2. Ards and North Down Borough council: Londonderry Primary School</li> <li>3. Armagh city, Banbridge and Craigavon Borough Council: St John the Baptist’s Council</li> <li>4. Belfast City Council: Dundela Infants School</li> <li>5. Causeway Coast and Glens Borough Council: Ballysally Primary School</li> </ol> </li> </ul>	
--	--	--	--	--	--

				6. Derry City and Strabane District council: Trench Road Nursery School 7. Fermanagh and Omagh District Council: Omagh Integrated Primary School 8. Lisburn and Castlereagh City Council: Lisburn Central Primary School 9. Mid and East Antrim Borough Council 10. Mid Ulster District Council: Howard Primary School 11. Newry, Mourne and Down District Council: Sacred Heart Grammar School  ✓ Pilot scheme – ‘Hedges For Habitats’ delivered at Integrated College, Dungannon - funded by Moy Park. ✓ Schools Pollinator Award scale and ambition – discussions ongoing – important for case studies considering the pollinator grant schemes.	
45	Run a ‘Pitches for pollinators’ summer campaign to leave school pitches unmown during the summer holidays to provide food for pollinators.	<ul style="list-style-type: none"> <li>• Campaign to leave unused school pitches unmown from the end of June until mid-August to allow clovers to flower and provide food for pollinators.</li> <li>• Where used, encourage pitch edges to be left unmown for pollinators</li> </ul>	AIPP Communities Officer	<p>The Pitches for Pollinators campaign ran in the school summer holidays of 2022. Two new graphics were produced and shared on social media channels, receiving high levels of engagement. (On Twitter a Pitches for Pollinators tweet was the most successful post in June, receiving over 11,000 impressions).</p> <p>This content was supported by a new blog which was included in the Pollinator Plan newsletter:</p>	

		<ul style="list-style-type: none"> <li>Promote this campaign to schools, to include full details on what is being proposed</li> <li>Increase in the number of schools taking part.</li> </ul>		<a href="https://pollinators.ie/pitches-for-pollinators-how-schools-can-help-bees-over-the-summer/">https://pollinators.ie/pitches-for-pollinators-how-schools-can-help-bees-over-the-summer/</a> <p>Schools on the supporter network were contacted directly about the campaign &amp; responded positively.</p> <p>An Taisce Green Schools were also contacted directly, with the full campaign details &amp; a copy of the graphics for consistent marketing. They shared the campaign through their own networks of schools and education organisations</p>	
46	Green-Campus to encourage pollinator-friendly management of third level campuses across the island.	<ul style="list-style-type: none"> <li>Increase number of third level campuses who have signed up as supporters of the AIPP and agreed to take actions</li> <li>Explore the possibility of a 'most pollinator-friendly campus' annual award.</li> </ul>	Green-Campus	The Green-Campus programme has highlighted the new All-Ireland Pollinator via its guidance documents, website, events and blog. We have continued to encourage campuses to sign up to and engage with the plan during our assessment visits and feedback.	

#### Target 2.4 Organisations with site networks on public land to manage these in a pollinator-friendly way

	Action	Progress measure	Responsibility	Progress by November 2022	
47	Maintain a network of partner organisations who agree to manage their public site networks in a pollinator-friendly way.	<ul style="list-style-type: none"> <li>✓ Each organisation to provide a short annual update on activities as part of annual reporting in December</li> <li>✓ Facilitate knowledge exchange between groups as appropriate.</li> </ul>	AIPP Communities Officer	A network has been established (annual reports below). The intention is that we will better facilitate knowledge exchange in future years.	

		<ul style="list-style-type: none"> <li>✓ Expand the network to bring in new partners where possible</li> </ul>			
48	BirdWatch Ireland to adopt pollinator-friendly management within their reserves, where appropriate.	<ul style="list-style-type: none"> <li>• Undertake monitoring through the Bumblebee Monitoring Scheme at key reserves</li> <li>• Maintain habitats for nesting bees</li> <li>• Incorporate pollinators into reserve management plans (where appropriate and when reviewed)</li> <li>✓ Support pollinator policy and advocacy work where appropriate through developing and strengthening integrated biodiversity policies and actions.</li> </ul>	BirdWatch Ireland	<p>Monitoring, through the Bumblebee Monitoring Scheme, has been carried out on some of our reserves in 2022. At our Annagh &amp; Termoncarragh Meadows reserves, Co Mayo, nine different true bumblebee species were recorded, including Great Yellow, Red Shanked Carder and Large Carder along with their active nests. During the August transect, a maximum of 383 individual bees were recorded (an increase on 2021), that included 75 individual Great Yellow Bumblebees. Habitats for pollinators are maintained on our lands through a variety of management including applying autumn mowing regimes, reducing soil fertility to increase flowering plant diversity, maintaining open structure grass swards, maintaining earthen wall boundaries and retaining areas of 'tussock' grass overwinter.</p> <p>As representatives on Ireland's CAP Consultative Committee, BirdWatch Ireland advocated for safeguards for habitats for pollinators in the process developing Ireland's CAP Strategic Plan including in relation to GAEC 9 protecting Environmentally Sensitive Permanent Grasslands, removal of hedgerows under GAEC 8 and more attached. BirdWatch Ireland also advocated for safeguards for semi-natural grasslands as part of our work on Project Woodland.</p>	

49	Bord na Móna to adopt pollinator-friendly management across site network, where appropriate.	<ul style="list-style-type: none"> <li>• Identification of potential pollinator-friendly habitats on cutaway bogs</li> <li>• Maintain pollinator actions within BnM Biodiversity Action Plans.</li> <li>• Number of participating sites</li> </ul>	Bord na Móna (BnM)	<p>Pollinator friendly habitats (e.g. pioneer species-rich grassland) continue to be mapped as part of ongoing baseline and monitoring surveys.</p> <p>New Marsh Fritillary sites were recorded or documented at Noggusboy, Boora, Littleton and Garryhinch Bogs. A new Grayling colony was discovered at Blackwater bog, with at least 10 adults flying on a single date in July of 2022. This location also held Wall butterfly. Dingy Skipper was recorded for the first time at Garryduff. Small heath was recorded for the first time at Derryfadda Bog. Dark Green Fritillary was recorded at Derrycashel Bog. Both Marsh Fritillary and Narrow-bordered Bee Hawkmoth were recorded at Drinagh Bog.</p> <p>Surveys continue to identify sites of high pollinator value, an example would be one section of the old rail line network at Blackwater Bog which held high numbers of insect species such as Green-veined White &amp; Small White along with Common Blue, Peacock, Meadow Brown, Small Copper, Small Tortoiseshell and a single Painted Lady when visited in August of 2022.</p> <p>Several sites with re-surveyed habitats in 2022 as part of PCAS baseline (e.g. Noggusboy). Insects (butterflies) were monitored on at least 10 sites (vis bespoke transects) as part of the wider PCAS monitoring programme.</p>
----	--	--	--------------------	--

				<p>Bog restoration and rehabilitation measures have now been implemented across &gt;30 BnM PCAS sites in 2021/2 to encourage re-wetting and development of wet peatland habitats. &gt; 6000 ha completed at present. Re-vegetating these areas will be positive for some pollinating insects by providing new habitat over the longer term.</p> <p>Monitoring of Bog restoration at Kellysgrove Bog (PCAS site) in 2022 recorded good numbers of Large Heath. A minimum of 23 flying adults were present on June 26. Raised bog restoration measures, will continue to support pollinators such as this species.</p> <p>Pollinator actions continuing to be included in proposed BnM renewable energy developments. e.g. The proposed Derrinlough Windfarm has MF habitat compensatory measures.</p> <p>Awareness of All-Ireland Pollinator Plan promoted at various BnM Ecology events in 2022. Pollinator-friendly management (e.g. natural grassy meadows) is still being encouraged at BnM offices. This management is continuing.</p>	
50	Coillte to adopt pollinator-friendly management across site network, where appropriate.	<ul style="list-style-type: none"> <li>Number of participating sites</li> </ul>	Coillte	<p>New native woodland afforestation scheme called Nature Trust launched in November 2021. Pollinator-friendly management across all Nature Trust sites. €7m raised so far to plant 600 hectares with native woodlands. Approximately 220ha of bare land</p>	

				acquired and approximately 100,000 native tree saplings planted.	
51	Environmental Protection Agency to adopt pollinator-friendly management across site network, where appropriate.	<ul style="list-style-type: none"> <li>Number of participating sites</li> </ul>	Environmental Protection Agency (EPA)	The EPA continues to maintain its grounds at HQ to promote biodiversity and pollinators. This includes reduced mowing regimes, maintenance of a wildflower meadow and planting of native hedgerow and trees. Biodiversity and pollinator awareness is also promoted across the organisation among its employees and contractors through an internal "Green Team" structure with initiatives such as training events and "pollinator walks" organized on a regular basis.	
52	Electricity Supply Board to adopt pollinator-friendly management across site network, where appropriate.	<ul style="list-style-type: none"> <li>Number of participating sites</li> <li>Delivery of pollinator awareness workshops to ESB staff</li> </ul>	Electricity Supply Board (ESB)	Significant progress has been made at the ESB Networks Training Centre in Portlaoise, where several areas of the 14 hectare site (which would historically been subject to regular mowing) have been subject to both short-flowering and long-flowering meadow regimes. This has proven to be immediately successful, with a diverse wildflower sward becoming apparent in the first growing season, including 2 species of orchid. Practicalities of the mowing regimes have been discussed with the ESB Networks staff with responsibility for grass cutting and landscaping, with lessons learnt to be collated and utilized to inform broader rollout at other ESB sites. Informative signage sourced from the Pollinator Plan website has been erected throughout the site, while a summer student placement trialled the usage of QR codes for future signage to direct readers to relevant online resources. Pollinator-friendly mowing regimes will be continued	



				<p>through 2023 and beyond, with further actions such as bulb and tree planting being considered.</p> <p>Through 2022, ESB has continued its review of biodiversity at all relevant landholdings such as substations, generating stations, wind farms, offices and depots; the review process includes the identification of appropriate sites where pollinator actions may be undertaken in the future. In addition, specific pollinator actions have been included in a Biodiversity Action Plan for the West Offaly Power site, as part of a planning application for the redevelopment of the site to support increased renewable energy on the grid. Advocacy of the Pollinator Plan has been ongoing through 2022, forming part of biodiversity advocacy presentations delivered by the ESB Ecology Team to ESB colleagues.</p>	
53	Gas Networks Ireland to adopt pollinator-friendly management across site network, where appropriate.	<ul style="list-style-type: none"> <li>• Maintain habitat for nesting bees</li> <li>• Incorporate pollinators into biodiversity strategy and guidance documents</li> <li>• Supporting community engagement initiatives promoting biodiversity awareness</li> <li>• Delivery of biodiversity &amp; pollinator awareness training for staff &amp; kids</li> <li>• Adoption of pollinator-friendly management practices in</li> </ul>	Gas Networks Ireland	<p>Asset Management</p> <ul style="list-style-type: none"> <li>✓ Reduced mowing areas expanded at all 3 offices in Cork city, Finglas and City West. Bee Orchid appeared in Finglas office in May 2022 as a result of reduced mowing. &gt;5,000 pollinator friendly Spring bulbs planted at City West office.</li> <li>✓ Pesticide use ceased at 3no. offices.</li> <li>✓ Following a grass-cutting trial, pollinator-friendly meadow management regime adopted at all Above Ground Installations (AGIs) with large grass areas in RoI.</li> </ul>	

		biodiversity guideline procedures		<ul style="list-style-type: none"> <li>✓ 8,000 pollinator friendly spring bulbs being planted at AGIs in RoI.</li> <li>✓ Biodiversity Metric Method developed for AGIs. 14 AGIs have been baselined and biodiversity potential (high/low) identified.</li> <li>✓ Biodiversity Net Gain project at 1 large AGI in Galway and 1 in Dublin.</li> <li>✓ Biodiversity Action Plan being developed for 10 Scottish sites.</li> </ul> <p>Strategy &amp; Procedures</p> <ul style="list-style-type: none"> <li>✓ Protecting pollinators is one of the six key actions of Gas Networks Ireland's Biodiversity Action Plan. The BAP is a key deliverable under the company's Sustainability Strategy.</li> <li>✓ 2no. contractors and 2no. landscaping subcontractors signed up to AIPP and contractors required to report monthly on biodiversity actions. Engagement with 3rd key contractor who has committed to signing AIPP.</li> <li>✓ Produced Landscaping for Biodiversity Guidelines for Gas Networks Ireland Sites to apply to the assets in Ireland &amp; UK and offices, where practicable.</li> <li>✓ Biodiversity presentation on-site at Cork AGI biodiversity project to NSAI Audit.</li> <li>✓ Developed new GNI Tree-cutting &amp; Hedge Trimming Permit for projects.</li> </ul>	
--	--	-----------------------------------	--	---	--

				<ul style="list-style-type: none"> <li>✓ Biodiversity added to GNI Training Competency Framework</li> </ul> <p>Community</p> <ul style="list-style-type: none"> <li>✓ Continued our anchor sponsorship of the Irish Examiner biodiversity month special in May by promoting a “Gardening for Biodiversity” booklet by Juanita Browne.</li> <li>✓ Sponsorship of 2no. school biodiversity murals.</li> <li>✓ Presented GNI Biodiversity Action Plan at National Biodiversity Conference.</li> </ul> <p>Support Staff</p> <ul style="list-style-type: none"> <li>✓ Delivered training to staff and contractors in Cork and Dublin on the Landscaping for Biodiversity Guidelines for Gas Networks Ireland Sites and Invasive Alien Species.</li> <li>✓ Presented on Biodiversity to Regional Operations Team.</li> <li>✓ 2no. staff group awareness-raising trips to an AGI biodiversity project in Dublin.</li> <li>✓ 4no. Leave No Trace biodiversity staff/community events in Marlogue Woods, Cork and Turvey Nature</li> </ul>	
54	Irish Water to adopt pollinator-friendly management across	<ul style="list-style-type: none"> <li>• Number of participating sites</li> </ul>	Irish Water	To date in 2022, Irish Water have applied 262 specific pollinator friendly measures across 292 of our sites, nationally. This work is in line with the Irish Water	

	site network, where appropriate.			<p>Biodiversity Action plan, where we aim to enhance and protect biodiversity across all sites.</p> <p>Species specific biodiversity enhancement measures have been carried out for the endangered Great Yellow Bumblebee at our sites in Belmullet, in conjunction with the Greater Yellow Bumblebee EIP and Belmullet Tidy Towns Group.</p>	
55	National Trust to adopt pollinator-friendly management across network of sites and properties, where appropriate.	<ul style="list-style-type: none"> <li>• Undertake monitoring through the Bumblebee Monitoring Scheme at key NT properties</li> <li>• Maintain habitats for nesting bees</li> <li>• Incorporate pollinators into property/land use management plans (where appropriate and when reviewed)</li> <li>• Promote Flower-Insect Timed Counts (Citizen Science monitoring scheme)</li> </ul>	National Trust	<ul style="list-style-type: none"> <li>✓ Started 3 new Bumblebee Monitoring transects at Slieve Donard (covering impacted and non-impacted by 2021 fire), Orlock Farm and Orlock Coastal Path. Continued transects at Castle Ward, Crom, White Park Bay and Giant's Causeway.</li> <li>✓ Removed scrub to enable growth of umbellifers and nectaring plants for Northern Colletes solitary mining bee at White Park Bay (in line with recommendations from Buglife's report). Launch of (DAERA funded) AIPP Northern Colletes rare pollinator guide.</li> <li>✓ AIPP actions are now incorporated into site Management Plans. Our countryside teams continue to work together and with our tenant farmers to manage habitats and grasslands for pollinators. Key actions in 2022:</li> </ul> <p>Wildflower seed gathered utilising a brush harvester and sowed (equipment gained through DAERA's Environment Fund) to establish more meadows at: Downhill, White Park Bay car park and multiple fields/locations within Belfast sites</p>	

				<p>including Portmuck and Lisnabreeny. Engagement with the charity Buglife and its volunteers, sowing 2kg of yellow rattle in fields at Minnowburn.</p> <p>Spread green hay from species-rich meadow at Gibb's Island (Strangford Lough) to species-poor grassland at The Commons, Kearney village. Introduced wildflower seed from Gibb's Island meadow to the orchards at Orlock and Ballyquintin. At Springhill, wildflower seed was collected from species rich meadow by hand and sowed in other areas on the estate. We began work to restore meadow at Dundrum Coastal path (0.3 ha) by clearing scrub and cutting rank grasses.</p> <p>Continuing our transition of former lawns / mown grassland to wildflower meadows through late cut and lift at: Crom (35 ha), Castle Coole (25ha), Florencecourt (3.5 ha), Castle Ward, Derrymore and Rowallane (0.5 ha). New areas to adopt this regime in 2022: Glenmona House (Cushendun), Mount Stewart (0.4 ha) and grassy areas and car parks at Murlough.</p> <p>On many of our Belfast sites meadow management is by traditional scything methods along riverbanks and meadows, including the removal of cut material.</p> <p>At Mount Stewart c.1 ha of Pollinator/Bird cover strips were incorporated into 2022 arable cycle. Continuing to work with tenant farmers on herbal ley grazing systems, to benefit both pollinators</p>	
--	--	--	--	---	--

				<p>and soil health. Exciting new project at Orlock Farm with our new tenant: establishment of 21 ha of herbal leys (our tenant also has two hives of Irish black bees, set up in Sept 22). 3.6 ha of herbal leys were also established at Ballyquintin Farm. At Mount Stewart an additional 6.9 ha of herbal leys was established, with additional 2.8 ha at Giant's Causeway. This brings the total area of herbal leys to 66.7 ha.</p> <p>At our allotments in Derrymore, the Men's Shed obtained a £10,000 Pollinator Grant (Live Here, Love Here) to make the allotments pollinator friendly, so a mixed native hedge was planted, a herb garden was created, and pollinator friendly plants were planted up. All the allotment holders have agreed not to use herbicides or pesticides. We have created an 'Area of Reflection' at Derrymore; planted flowering shrubs and trees e.g. Guelder Rose and Wild Cherry as well as spring flowering bulbs i.e. native bluebells and crocuses.</p> <ul style="list-style-type: none"> <li>✓ In 2022 we ran 2 Bumblebee Identification courses and 2 FIT Count courses for rangers and volunteers. Rangers have conducted FIT counts and submit casual pollinator records to CEDaR. Some properties use FIT counts to engage with visitors through guided walks and will continue to do so in 2023.</li> </ul>	
--	--	--	--	--	--

56	Northern Ireland Water to adopt pollinator-friendly management across site network, where appropriate.	<ul style="list-style-type: none"> <li>Number of participating sites</li> </ul>	Northern Ireland Water	<p>NI Water launched an internal volunteering initiative to help map AIPP sites across our wastewater asset base. Colleagues from across the business volunteered their time to conduct site visits to a list of over 100 wastewater treatment sites ranging from small pumping stations to very large treatment plant depots. These visits included an AIPP site assessment, and volunteers also were able to conduct an optional FIT Count using the CEH Fit Count app which was downloaded onto their work phones.</p> <p>26 sites across the whole of NI were mapped between July and October 2022 totalling nearly 138,150m<sup>2</sup>. Most sites were a mixture of managed mixed or species rich grassland, most of which had mature hawthorn hedging totalling over 2600m, over 380m<sup>2</sup> earth or sandbanks, some with dry stone walls and many with flowering trees within the boundary.</p> <p>We hope to relaunch this volunteering mapping initiative every year from March-Oct to coincide with the FIT Count app data collection. Volunteer feedback was very positive – it allows people to get out and about to see NI Water sites and do collect useful data.</p>	
57	Encouragement and, where appropriate, adoption of pollinator-friendly management on NPWS property, including Statutory Nature Reserves and National Parks.	<ul style="list-style-type: none"> <li>✓ Number of participating sites</li> </ul>	National Parks and Wildlife Service (NPWS)	<p>Statutory Nature Reserves (NR) and National Parks (NP) managed for pollinators:</p> <ul style="list-style-type: none"> <li>✓ Glengarriff NR Co Cork</li> <li>✓ Burren NP Co Clare</li> <li>✓ Dromore Woods NR Co Clare</li> <li>✓ Ballyteigue NR Co Clare</li> <li>✓ Ballykeeffe Wood NR Co Kilkenny</li> </ul>	

				<ul style="list-style-type: none"> <li>✓ Kyledohir Wood NR Co Killkenny</li> <li>✓ Garryricken Wood NR Co Killkenny</li> <li>✓ Grantstown Lake NR Co Laois</li> <li>✓ Coolacurragh Wood NR Co Laois</li> <li>✓ Timahoe Esker NR Co Laois</li> <li>✓ Ballyteige Burrow NR Co Wexford</li> </ul> <p>Management practices include: Scrub control, mowing, strimming, low intensity grazing, no fertilizer or herbicide usage, log piles left in situ and some sites are specifically managed for marsh fritillary.</p> <p>Monitoring projects include: Pollinator monitoring project by NBDC with NPWS support at Ballyteige NR Co Wexford.</p>	
58	Office of Public Works to adopt pollinator-friendly management across site network, where appropriate.	<ul style="list-style-type: none"> <li>✓ Incorporate Pollinators into Conservation Management Plans at key sites as appropriate</li> <li>✓ Support the roll out of short- and long-flowering meadows at appropriate locations throughout the country</li> <li>✓ Maintain and expand on the provision of nesting habitats for solitary bees</li> <li>✓ Engage with staff and the public in participating in Citizen Science Projects</li> </ul>	Office of Public Works (OPW)	<ul style="list-style-type: none"> <li>✓ The measure is ongoing with biodiversity and pollinator actions being incorporated as plans are being developed and updated across key sites. In addition, 10 site specific biodiversity appraisals have been commissioned for sites countrywide. These will lead to pollinator-friendly management plans.</li> <li>✓ Significant progress has been achieved with the rollout of this measure. Also, an in-house conference and workshop was organised for all OPW staff promoting best practice in the</li> </ul>	



				<p>management of our habitats and flowering meadows.</p> <ul style="list-style-type: none"> <li>✓ Solitary bee habitats have been introduced at locations countrywide</li> <li>✓ Competent staff engage with the public on a regular basis in the promotion of CSP such as butterfly monitoring etc</li> </ul>	
59	The Royal Society for the Protection of Birds (NI) to adopt pollinator-friendly management within their reserves, where appropriate.	<ul style="list-style-type: none"> <li>• Undertake monitoring through the Bumblebee Monitoring Scheme at key reserves</li> <li>• Maintain habitats for nesting bees</li> <li>• Incorporate pollinators into reserve management plans (where appropriate and when reviewed)</li> </ul>	The Royal Society for the Protection of Birds (RSPB NI)	A 2022 update was not provided.	
60	The Courts Service of Ireland to adopt pollinator-friendly management across site network, where appropriate.	<ul style="list-style-type: none"> <li>• Number of participating sites</li> </ul>	The Courts Service of Ireland	Expanding on the rewilding pilots introduced in 2021 in 4 courthouse venues (Carrick-on-Shannon, Nenagh, Cork, and Roscommon), the Courts Service carried out a review of rewilding opportunities throughout our extensive estate. In 2022 rewilding of green spaces in our estate rolled out to courthouse venues at Carlow, Wexford, Waterford, Tullamore, Tralee & Mullingar. We have also collaborated with Co. Co's at Limerick Mulgrave Street & Cavan courthouse on rewilding opportunities at those venues.	

### Target 2.5 Make local communities more pollinator friendly

	Action	Progress measure	Responsibility	Progress by November 2022	
61	Provide comprehensive and freely available online resources for Local Communities	<ul style="list-style-type: none"> <li>Up-to-date resources provided on AIPP website. To include: evidence-based guideline documents, flyers, videos, blogs, webinars, presentations, case studies, animations</li> <li>All 2015–2020 resources to be updated where necessary</li> </ul>	AIPP Communities Officer	<p>This website is continually updated as new resources are developed <a href="https://pollinators.ie/communities/">https://pollinators.ie/communities/</a></p> <p>The Local Community guidelines (published 2016) are being fully updated and will hopefully be relaunched in spring 2023. We have also developed a new voluntary scoring system for Local Communities which will be included in the updated guide. It can be difficult for communities to measure their progress or to benchmark themselves. The new scoring weights various evidence-based actions and provides a total score out of 100. It's intended as a self-assessment tool to help communities see how important one action is compared to another, prioritise actions, annually track progress and have a threshold to aim for when managing their public spaces. If successful, the approach will be rolled out across other sectors in coming years – Councils and Businesses.</p>	
62	Promote pollinator-friendly actions within the Tidy Towns network.	<ul style="list-style-type: none"> <li>Continue to promote pollinator-friendly actions within the national Tidy Towns competition as appropriate</li> <li>Facilitate a special pollinator award (below)</li> </ul>	Tidy Towns Unit	The Tidy Towns Unit have again facilitated the special pollinator award in 2022 (Action 63 below). They have also regularly promoted pollinator-friendly actions to the Tidy Towns network.	
63	Support Tidy Towns groups to be pollinator friendly through the Local	<ul style="list-style-type: none"> <li>Continue to annually fund and administer the special pollinator award in the</li> </ul>	Heritage and Biodiversity Officer network, with support from AIPP	The Local Authority Pollinator Award was successfully run in the Tidy Towns competition in 2022. Every year, the standard of entries is growing and the committee behind the award continue to be inspired by what is being achieved.	

	<p>Authority Pollinator Award in the National Tidy Towns competition.</p>	<p>national Tidy Towns competition</p> <ul style="list-style-type: none"> <li>• Continue to provide support and advice to Tidy Towns groups in helping pollinators</li> <li>• Monitor the engagement with and standard of entries to the award</li> <li>• Publication and dissemination of an annual newsletter celebrating the work of Tidy Towns groups to support pollinators</li> </ul>	<p>Communities Officer</p>	<p>In addition to the overall winner, this award identifies large and small-town winners within each of the four Tidy Towns regions. Since 2021, we have also introduced an award for the best newcomer.</p> <p>Congratulations to <b>Cobh</b> in Co Cork who won the overall award in 2022.</p> <p>All winners were as follows:</p> <p>National winner: Cobh Tidy Towns Best newcomer: Cratloe Tidy Towns</p> <p>Large town winners: Midlands &amp; East – Skerries Tidy Towns South &amp; Mid West – Cobh Tidy Towns South East – Clonmel Tidy Towns North West West – Buncrana Tidy Towns</p> <p>Small town winners: Midlands &amp; East – Geashill Tidy Towns South &amp; Mid West – Castlegregory Tidy Towns South East – Tullahought Tidy Towns North West West – Belcarra Tidy Towns</p>
64	<p>Promote pollinator-friendly actions within the Keep Northern Ireland Beautiful network.</p>	<ul style="list-style-type: none"> <li>• Continue to promote pollinator-friendly actions within the Keep Northern Ireland Beautiful initiative, as appropriate</li> </ul>	<p>Keep Northern Ireland Beautiful</p>	<p>✓ <b>Workshops</b> delivered to all shared housing and community groups involved in the <b>Eco-Schools</b> Radius Housing Biodiversity Project.</p> <p>Workshop 1 x 3 Growing in small spaces</p>

		<ul style="list-style-type: none"> <li>Investigate possible mechanisms for a pollinator award within the Live Here Love Here Volunteer Award</li> </ul>		<p>Workshop 2 x 3 Biodiversity in small spaces</p> <p>Growing in small spaces youtube link:  <a href="https://youtu.be/jxcejV7XDJ0">https://youtu.be/jxcejV7XDJ0</a></p> <p>Biodiversity in small spaces youtube link:  <a href="https://youtu.be/KMPz_cyKPMs">https://youtu.be/KMPz_cyKPMs</a></p> <ul style="list-style-type: none"> <li>✓ 4 x online Q &amp; A sessions hosted for <b>Live Here Love Here</b> pollinator grant recipients (schools and communities) with expert guests Rosie Irwin from Butterfly Conservation and Pauline Campbell (DAERA NIEA).</li> <li>✓ One Q&amp;A session recorded and uploaded to <b>Live Here Love Here</b> YouTube channel for future reference  <a href="https://www.youtube.com/watch?v=3M0UbTCUsks">https://www.youtube.com/watch?v=3M0UbTCUsks</a></li> <li>✓ <b>Live Here Love Here</b> Specific Schools Pollinator Grant scheme (funded by DAERA) – opened 4<sup>th</sup> April, closed 28<sup>th</sup> April with a total of <b>£2,388,832.65 awarded to 300 schools.</b></li> <li>✓ <b>Live Here Love Here</b> Platinum Jubilee Pollinator Garden Award (funded by DAERA) awarded to Magheralin Parish Church for the creation of a legacy garden to connect people to pollinators. £100,000 awarded.</li> <li>✓ 89 sites being improved through the <b>Live Here Love Here</b> Small Grant Scheme.</li> </ul>
--	--	---	--	---

				<ul style="list-style-type: none"> <li>✓ All <b>Live Here Love Here</b> grants promote and only fund peat-free compost products.</li> <li>✓ Video content created to support individuals and communities make the most of their kits and uploaded to You Tube: Food growing tips video <a href="https://www.youtube.com/watch?v=QNrE17f4ZgA">https://www.youtube.com/watch?v=QNrE17f4ZgA</a> Planting for pollinators <a href="https://www.youtube.com/watch?v=jo_NfQjH5Zs">https://www.youtube.com/watch?v=jo_NfQjH5Zs</a></li> <li>✓ <b>Live Here Love Here Adopt A Spot Kits</b> have diversified to include a wildlife kit. Also food growing kit. 108 Wildlife kits requested, 72 food growing kits requested to date.</li> <li>✓ Inaugural pollinator awards for <b>Green Flag spaces</b> – Part of the GF award ceremony in July 2022, attended by the DAERA minister and officials (Action 34). A video was commissioned to champion both the community and organisation/council winners of the pollinator award – to be used to promote the winners and encourage participation next year.</li> <li>✓ AIPP promoted at Balmoral Show 2022</li> <li>✓ Posters available to download under license for community groups and schools to use to encourage engagement in identification projects.</li> </ul>
65	Deliver community-based training on Ireland's bees, bee monitoring and bee-	<ul style="list-style-type: none"> <li>• Continue to provide introductory training to support local communities</li> </ul>	Irish Wildlife Trust (IWT)	In 2022 the Irish Wildlife Trust delivered 8 People for Bees workshops in counties Dublin, Carlow, Galway, Monaghan & Wexford. The workshop covered an introduction to Ireland's bees, wild bee habitat creation and bee

	friendly habitat creation through the IWT <i>People for Bees</i> initiative.	<ul style="list-style-type: none"> <li>and members of the public in helping pollinators</li> <li>Number of workshops delivered</li> </ul>		<p>monitoring &amp; surveying techniques. 2022's workshops engaged a diverse audience and were delivered in conjunction with IWT local branches, An Post and an Erasmus+ programme with Galway Roscommon ETB.</p> <p># Workshops: 8 # Participants: 185 # Counties: 5</p>	
66	Support additional communities in coming together to protect pollinators.	<ul style="list-style-type: none"> <li>Explore the possibility of using the ChangeX platform to support wider implementation of the Plan at the community level</li> </ul>	ChangeX	<p>ChangeX, the social innovation platform which draws together excellent social innovations, funding partners (Accenture, AWS and Greencoat Renewables), and community/volunteer groups, is now partnered with AIPP. Change X has provided two online 2-minute pitch platforms in 2022 for Agri Business Officer Sarah Kelly (Greencoat Renewables and Microsoft) to highlight the Pollinator Plan as a potential social innovation project to community/volunteer groups from across the island.</p>	
67	Better promote pollinator-friendly land management to Residents' Associations.	<ul style="list-style-type: none"> <li>Dedicated resources for Residents' Associations developed and added to AIPP website</li> </ul>	AIPP Communities Officer	<p>A short new resource has been developed specifically for Residents' Associations. It will be launched in spring 2023.</p>	
68	Promote the AIPP to other community volunteer networks.	<ul style="list-style-type: none"> <li>Explore possibility of providing training to Rural Social Schemes and other similar initiatives.</li> <li>Connect with relevant networks and ask them to inform members about the AIPP, e.g. Men's Sheds,</li> </ul>	AIPP Communities Officer	<p>Within this phase, the AIPP has linked with Volunteer Ireland to promote pollinator-friendly actions during National Volunteering Week.</p> <p>In 2022, contacts were made with some local libraries to explore this connection going forward.</p> <p>This action will be further progressed in future years</p>	

		University of the Third Age, Volunteer Now, etc.			
69	Recognise those towns/villages that are helping pollinators through eliminating pesticide use.	<ul style="list-style-type: none"> <li>Maintain an online list of towns/villages that have decided to go pesticide free (herbicide, fungicide and insecticide)</li> </ul>	AIPP Communities Officer	This action has not yet been progressed, but is scheduled for 2023.	

#### Target 2.6 Manage protected land in a pollinator-friendly way where appropriate

	Action	Progress measure	Responsibility	Progress by November 2022	
70	Encourage pollinator-friendly management of State and public-owned Nature Reserves and National Parks and, where appropriate, Natura 2000 and nationally designated sites in NI.	<ul style="list-style-type: none"> <li>Uptake where appropriate on a site-by-site basis</li> <li>Develop demonstration/example sites on NIEA properties and use for education and knowledge exchange</li> </ul>	Northern Ireland Environment Agency (NIEA)	<p>Continued AIPP actions by NIEA regional teams include:</p> <ul style="list-style-type: none"> <li>New areas and sites created for pollinator use, with appropriate planting/reseeding/management</li> <li>Reduction in pesticide application</li> <li>Increased number of hedgerows managed for pollinators</li> <li>NIEA pollinator actions in Country Parks now being logged onto Actions portal</li> <li>AIPP signage promoted on demonstration/example sites eg. Peatlands Park</li> </ul> <p>Dept. for Infrastructure has now announced that all road verges in NI will be managed for nature; Urban</p>	

				roads cut twice a year, rural roads one late cut per year.	
71	Incorporate pollinator-friendly management on designated land in Natura 2000 and nationally designated sites in RoI.	<ul style="list-style-type: none"> <li>• Uptake where appropriate on a site-by-site basis</li> </ul>	National Parks and Wildlife Service (NPWS)	<p>Special Areas of Conservation (SAC) and Special Protection Areas (SPA) managed for pollinators:</p> <ul style="list-style-type: none"> <li>✓ River Little Brosna Callows SPA Co Offaly</li> <li>✓ Kilkeran Lake and Castlefreke Dunes SAC Co Cork</li> <li>✓ Clonakilty Bay SAC/SPA Co Cork</li> <li>✓ Cullahill Mountain SAC Co Kilkenny</li> <li>✓ Spa Hill/Clomantagh Hill SAC Co Kilkenny</li> <li>✓ Castlesampson Esker SAC Co Roscommon</li> </ul> <p>Management practices include: Scrub control, mowing, low intensity grazing, no fertilizer or herbicide usage, log piles left in situ, hedgelaying and some sites are specifically managed for marsh fritillary.</p> <p>Monitoring projects include:</p> <ul style="list-style-type: none"> <li>✓ Marsh fritillary larval web monitoring.</li> <li>✓ Grazing trials and monitoring to improve species diversity.</li> </ul> <p>Management plans are currently being drawn up for the following sites:</p> <ul style="list-style-type: none"> <li>✓ Sheephaven SAC Co Donegal</li> <li>✓ Horn Head and Rinclevan SAC Co Donegal</li> <li>✓ Donegal Bay (Murvagh) SAC Co Donegal</li> <li>✓ Raven Point NR Co Wexford</li> </ul>	



### Target 2.7 Make healthcare sites more pollinator friendly

	Action	Progress measure	Responsibility	Progress by November 2022	
72	Publish guidelines for pollinator-friendly management of hospital grounds, clinics and nursing homes.	<ul style="list-style-type: none"> <li>• Publication of guidelines that also stress the additional benefits of pollinator actions to human health and wellbeing</li> <li>• Dissemination to all relevant bodies</li> <li>• Develop a new section of the website to provide resources for healthcare sites</li> </ul>	AIPP Communities Officer	This guideline is in the very early stages of development. It will be prioritised in 2023.	
73	Investigate a potential nature campaign for healthcare sites.	<ul style="list-style-type: none"> <li>• Discuss with relevant bodies the possibility of a pilot scheme</li> </ul>	AIPP Communities Officer	This will not be progressed until Action 72 above is completed.	

### Target 2.8 Complete policy investigations

	Action	Progress measure	Responsibility	Progress by November 2022	
74	Carry out a critical review of how some countries established a roadside verge cutting decree (e.g. the Flemish Roadside Act '1984' means roadside verges must be left uncut until after a certain date).	<ul style="list-style-type: none"> <li>• Publish as a scoping study</li> <li>• Include a public consultation element</li> </ul>	AIPP team and relevant partners	This action has not yet progressed. However, in very positive news, there have already been changes to policy on the island. In late 2022, a Northern Ireland policy review on roadside verge cutting was publicised through a ministerial announcement which was covered by local media and can be viewed on the links below. This will result in more biodiversity friendly management of the 45,000km of verges in NI.	

				<a href="https://www.infrastructure-ni.gov.uk/news/odowd-announces-new-approach-road-verge-management-protect-environment">https://www.infrastructure-ni.gov.uk/news/odowd-announces-new-approach-road-verge-management-protect-environment</a>  <a href="https://www.belfastlive.co.uk/news/northern-ireland/minister-john-odowd-announces-major-25158027">https://www.belfastlive.co.uk/news/northern-ireland/minister-john-odowd-announces-major-25158027</a>	
75	Create a roadmap towards eliminating pesticides on certain public lands (schools, hospitals, playgrounds).	<ul style="list-style-type: none"> <li>• Critically review the evidence-base for this approach</li> <li>• Publish roadmap in collaboration with relevant partners</li> <li>• Consider roll out as a small pilot – supported by information on alternatives, monitoring of impacts and social attitudes, etc.</li> </ul>	AIPP team and relevant partners	This action has not yet been progressed.	

#### Target 2.9 Strengthen links between the AIPP and other national initiatives

	Action	Progress measure	Responsibility	Progress by November 2022	
76	Strengthen links between the AIPP and Climate Adaptation Plans.	<ul style="list-style-type: none"> <li>• Publication of a guideline document linking pollinator/biodiversity actions to their carbon/climate benefits on public land. Active research area so timing of guideline document should be as appropriate</li> </ul>	AIPP team and relevant partners	This has not yet been progressed.	

		<ul style="list-style-type: none"> <li>• Establish appropriate AIPP actions as tools in nature-based climate change mitigation actions within Local Authorities – repackage actions in this context so that they can easily slot into Climate Adaptation Plans (or County Development Plans, Local Economic and Community Plans, etc.)</li> <li>• Liaise with Climate Action Regional Offices (CARO) and link with Local Authority Climate Action Officers.</li> </ul>			
77	Explore and strengthen links between the AIPP and Green Infrastructure Planning.	<ul style="list-style-type: none"> <li>• Publication of a guideline document linking pollinator/biodiversity actions to their Green Infrastructure benefits</li> <li>• Repackage pollinator actions in this context so that they can easily slot into Local Authority Green Infrastructure Plans</li> </ul>	AIPP team and relevant partners	This action has not yet been progressed.	
78	Strengthen links between the AIPP and health and wellbeing initiatives.	<ul style="list-style-type: none"> <li>• Publication of a guideline document linking pollinator/biodiversity actions to their health and wellbeing benefits</li> <li>• Repackage pollinator actions in this context so that they can easily slot into Local</li> </ul>	AIPP team and relevant partners	This action has not yet been progressed. It is prioritised for 2023 in line with Target 2.7.	

		<p>Authority community wellbeing initiatives</p> <ul style="list-style-type: none"> <li>• Establish a working relationship with relevant bodies such as Healthy Ireland, Sports Ireland</li> </ul>			
79	Strengthen links between the AIPP and existing tree planting initiatives.	<ul style="list-style-type: none"> <li>• Links created with 2020 DAFM scheme – Woodland Creation on Public Lands</li> <li>• Establishment of working relationships with other existing tree planting initiatives, e.g. Tree Council of Ireland, Native Woodland Trust, Crann, Trees on the Land, Easytreesie etc.</li> <li>• Encourage a proportion of trees planted to be pollinator-friendly and report on numbers planted</li> <li>• Pollinator-friendly tree guide published in collaboration with relevant partners</li> </ul>	AIPP team and relevant partners	A short flyer on planting trees for pollinators (right tree, right space, right place) has been produced in collaboration with DAFM, The Tree Council of Ireland, The Native Woodland Trust and Trees on the Land. It will be promoted in 2023.	

### Target 2.10 Track changes in pollinators on public land

	Action	Progress measure	Responsibility	Progress by November 2022	
80	Publish an annual review of public land actions.	<ul style="list-style-type: none"> <li>Development of an annual review outlining progress within the actions under this objective</li> <li>Publication on AIPP website annually each December</li> </ul>	Coordinated by AIPP Communities Officer	This document provides a review of the public land actions in 2022.	
81	Track progress within the public sector.	<ul style="list-style-type: none"> <li>Number of public land sites logging their pollinator-friendly actions on <i>Actions for Pollinators</i> mapping system, <a href="https://pollinators.biodiversityireland.ie/">https://pollinators.biodiversityireland.ie/</a>.</li> </ul>	Coordinated by AIPP Communities Officer	As of the end of November 2022, 1,639 sites are logged on 'Actions for Pollinators'. Councils (375), Schools (188), Local Communities (1,076). <a href="https://pollinators.biodiversityireland.ie/">https://pollinators.biodiversityireland.ie/</a>	
82	Monitor pollinators across a network of public sites.	<ul style="list-style-type: none"> <li>Investigate the framework necessary for a national pollinator monitoring scheme to include sites across farmland, public and protected land. This should be in line with the European Pollinator Monitoring Scheme recommendations (2020)</li> <li>Source funding and roll out this scheme to monitor pollinators across a network of public sites</li> </ul>	National Pollinator Monitoring Scheme requires funding	In 2021, DAFM and NPWS granted initial funding for this scheme which is being managed by the National Biodiversity Data Centre. The project began in September 2021 and was rolled out as a National Pollinator Monitoring Scheme pilot in 2022. A total of 36 sites were monitored across farmland, semi-natural sites, and urban parks. Of these, 15 are semi-natural sites and 4 are urban parks.	
83	Continue to manage and support Citizen Science monitoring schemes that track changes in pollinators	<ul style="list-style-type: none"> <li>Increase the number of Bumblebee Monitoring Scheme transects being carried out on public land.</li> </ul>	National Biodiversity Data Centre, CEDaR	Both the All-Ireland Bumblebee Monitoring Scheme and FIT Counts were managed and promoted by the National Biodiversity Data Centre in 2022. CEDaR promoted both schemes.	

	across all land types, including public land.	<p>This is an expert-level Citizen Science scheme.</p> <ul style="list-style-type: none"> <li>• Increase in the number of regular Flower-Insect Timed Counts (FIT Counts) being completed on public land. This is a beginner-level Citizen Science scheme.</li> <li>• Publication of annual reports on the findings of both schemes</li> </ul>		<p>Data submission within the Bumblebee Monitoring Scheme continues until 31<sup>st</sup> December each year. Annual reports are produced in the following year to update the trends. The 2012-2021 report is available here:</p> <p><a href="https://biodiversityireland.ie/app/uploads/2022/10/Bumblebee-Monitoring-Scheme_Annual-Report_2012-2021.pdf">https://biodiversityireland.ie/app/uploads/2022/10/Bumblebee-Monitoring-Scheme_Annual-Report_2012-2021.pdf</a></p> <p>Data submission with the FIT Count Scheme continues until 31<sup>st</sup> December each year. Currently ~700 FIT Counts have been submitted for 2022.</p> <p>New Bumblebee Monitoring Scheme transects have been established on public land in 2022. Many FIT Counts have taken place on public land.</p>	
--	---	--	--	---	--

### OBJECTIVE 3: MAKING PRIVATE LAND POLLINATOR FRIENDLY

#### Target 3.1 Increase the number of gardens that are pollinator friendly

	Action	Progress measure	Responsibility	Progress by November 2022	
84	Provide comprehensive and freely available online resources for gardeners	<ul style="list-style-type: none"> <li>Up-to-date resources provided on AIPP website To include: evidence-based guideline documents, flyers, videos, blogs, webinars, presentations, case studies, animations</li> <li>All 2015-2020 resources to be updated where necessary</li> <li>Investigate sustainable signage options that the public can use to indicate that they are making their garden pollinator friendly.</li> </ul>	AIPP Communities Officer	<p>This website is kept up to date: <a href="https://pollinators.ie/gardens/">https://pollinators.ie/gardens/</a></p> <p>New blogs were added in 2022 e.g., <a href="https://pollinators.ie/the-joy-of-making-your-garden-pollinator-friendly/">https://pollinators.ie/the-joy-of-making-your-garden-pollinator-friendly/</a></p>	
85	An Taisce to promote pollinator-friendly garden actions within their Green Communities network.	<ul style="list-style-type: none"> <li>Promotion to members</li> <li>Uptake by community groups</li> </ul>	An Taisce	All-Ireland Pollinator Plan 2021-2025 activity in 2022 was widely promoted by An Taisce Green Communities on Facebook and Twitter. Events and activities relating to the plan were also circulated via the Green Communities/Green Flag Award news bulletin to approximately 1,800 email recipients.	
86	Community Gardens Ireland to promote pollinator-friendly garden actions within their network.	<ul style="list-style-type: none"> <li>Promotion to members</li> <li>Uptake by groups</li> </ul>	Community Gardens Ireland	<p>In 2022, Community Gardens Ireland have continued to support new allotments and community gardens getting established in Ireland by providing them with advice that are pollinator friendly.</p> <p>At our online gathering in March 2022 (organised</p>	

				<p>jointly with Social Farms &amp; Gardens Northern Ireland) we asked gardens from all over the island of Ireland to present on their activities in the previous year, including members from the Cork Food Policy Council and Food Ethics Council. We were also delighted to be joined by Mary Reynolds (nature activist) who gave advice to all community gardeners on the call about how to think and plan locally when it comes to plants, growing and biodiversity.</p> <p>Also in March 2022, Community Gardens Ireland gave a presentation to the Joint Oireachtas Committee on Housing, Local Government &amp; Heritage where we called for a new policy to support community growing spaces in Ireland. Since this meeting we met with Minister Peter Burke and Minister Malcolm Noonan who have now both committed to a new policy on this. As part of both presentations we highlighted the positive benefits that come from community growing spaces, including those for biodiversity and climate change actions.</p> <p>In 2022, the Intergovernmental Panel on Climate Change's Working Group III report highlighted how urban agriculture initiatives such as community gardening assist with reducing greenhouse gases, improving urban food security, improving biodiversity and adapting to climate change impacts. Community Gardens Ireland have referenced this in numerous submissions to the Irish Government, including in separate submissions to the Climate Action Plan 2023,</p>	
--	--	--	--	---	--



				<p>Citizens' Assembly on Biodiversity Loss and the 4th National Biodiversity Action Plan.</p> <p>In November 2022, Community Gardens Ireland held an event in Carlow which we had a seed sharing table. As part of this, native seeds were shared with community gardens from all over the island of Ireland.</p> <p>We will be continuing our work to promote pollinator friendly &amp; community friendly actions as part of our plans for 2023!</p>	
87	GIY to promote pollinator-friendly garden actions within their network.	<ul style="list-style-type: none"> <li>• Promotion to members</li> <li>• Actions adopted at GIY HQ and used for demonstration purposes</li> <li>• Training courses offered at GIY HQ as appropriate</li> </ul>	Grow It Yourself (GIY)	<ul style="list-style-type: none"> <li>✓ AIPP actions included in GIY GROWCircle Programme, reaching ≤800 people.</li> <li>✓ AIPP actions included in all GIY newsletters, reaching ≤2500 people.</li> <li>✓ AIPP actions at GROWHQ, Waterford City, Co. Waterford: <ul style="list-style-type: none"> <li>• Management of grass areas to maximise habitat for pollinators i.e. leaving most areas to form informal meadows with cutting in July post-flowering.</li> <li>• Ensuring any ornamental areas are planted with pollinator-friendly plants.</li> <li>• Managing productive areas with no spraying of agro-chemicals (even ones permitted under the organic standards).</li> </ul> </li> </ul>	

				<ul style="list-style-type: none"> <li>• Leaving vegetable plants to flower (particularly brassicas) where possible.</li> <li>• Leaving hedge bottoms with rough vegetation to provide nesting areas.</li> <li>• Weekly garden walk and talks through the Summer on how to manage a garden to maximise benefit to pollinators.</li> </ul> <p>✓ 32 schools participating in the pilot GROW at School programme from 2018-2021 received educational resources with one lesson dedicated to biodiversity. The in-person 'How to Create a School Garden' teacher training course allocates one of five training days to increasing biodiversity through the school garden. GIY will be creating an online version of this course to be available by August 2023.</p>	
88	Raise awareness to discourage the importation of wild pollinators into gardens, e.g. Red Mason Bee.	<ul style="list-style-type: none"> <li>• Short guideline document developed explaining the dangers of imported pollinators to the health of our native species</li> <li>• Social media campaign to discourage gardeners from buying non-Irish Red Mason Bee colonies online</li> </ul>	AIPP team	This action has not yet been progressed.	

### Target 3.2 Increase the network of AIPP business supporters

	Action	Progress measures	Responsibility	Progress by November 2022	
89	Fully support and grow the network of business supporters. Currently stands at 283 (end 2020).	<ul style="list-style-type: none"> <li>✓ Increase the number of business supporters of the AIPP</li> <li>✓ Provide day-to-day support to the large network of business supporters</li> <li>✓ Organise and run an event for businesses</li> <li>✓ Provide training courses for businesses</li> <li>✓ Organise an annual pollinator award for businesses</li> <li>✓ Run a regular webinar series for businesses</li> <li>✓ Monthly digital newsletter for businesses</li> <li>✓ Regularly promote the network through mainstream and social media</li> </ul>	AIPP business officer (funded by Bord Bia from June-Dec 2021)	<ul style="list-style-type: none"> <li>✓ Since inception, the number of AIPP businesses supporters has increased year on year.</li> <li>✓ An increase of 93 new businesses, in the period 1<sup>st</sup> November 2021 – 31<sup>st</sup> October 2022 from 327 supporters to 420, was experienced.</li> <li>✓ With the new 2021-2025 phase requirement for businesses to submit an Annual Review report and map actions on 'Actions for Pollinators', 80 have not submitted a 2022 report and will be removed from the business supporters list. N.B. They may re-engage at any point. This is a mandatory requirement to support the integrity of the network.</li> <li>✓ 55 of Bord Bia Origin Green's verified member companies (until May 2023) have reported, confirmed by Origin Green).</li> <li>✓ As of the end of November 2022, <b>340</b> (420-80) businesses across the island are supporting the All-Ireland Pollinator Plan 2021-2025 through actions for pollinators-biodiversity. See what actions each of these companies have taken in the 2022 Business Supporter Annual review <a href="https://pollinators.ie/aipp-2021-2025/">https://pollinators.ie/aipp-2021-2025/</a></li> <li>✓ Day to day support to the business supporters' network has included: registering new members and short online presentations to provide a 'snapshot' of good practice from Day 1. Also help in data mapping on the 'Actions for Pollinators' unique data-mapping portal.</li> </ul>	

				<ul style="list-style-type: none"> <li>✓ Three webinars were delivered to Origin Green companies in collaboration with Bord Bia.</li> <li>✓ The Agri-business officer also delivered numerous webinars to the larger corporates seeking to provide educational webinars for employees on pollinators-biodiversity.</li> <li>✓ A monthly digital newsletter has been issued each month to AIPP business supporters.</li> <li>✓ Key updates have been posted on Twitter/Facebook/Instagram/LinkedIn.</li> </ul>	
90	Provide comprehensive and freely available online resources for businesses at	<ul style="list-style-type: none"> <li>• Up-to-date resources provided on AIPP website To include: evidence-based guideline documents, flyers, videos, blogs, webinars, presentations, case studies, animations</li> <li>• All 2015–2020 resources to be updated where necessary</li> </ul>	AIPP business officer (funding dependent)	This website is continually updated <a href="https://pollinators.ie/businesses/">https://pollinators.ie/businesses/</a>	
91	Disseminate relevant resources to the business community through existing networks.	<ul style="list-style-type: none"> <li>• Dissemination of information through existing networks</li> </ul>	Bord Bia, Business in the Community	Both partners have promoted the AIPP business framework in 2022. The AIPP has strengthened its alliances through Bord Bia's Origin Green food sustainability programme – the AIPP is now aligned as 'pollinator actions' within members biodiversity targets. It is also aligned with Business in the Community (Ireland) within its 'Biodiversity Handbook for Business'.	
92	Establish a dedicated framework for	<ul style="list-style-type: none"> <li>• Establish framework/charter whereby garden centres</li> </ul>	AIPP business officer (funding dependent)	This action has not yet been progressed	

	Garden Centre supporters.	<ul style="list-style-type: none"> <li>can sign up as a supporter of the AIPP</li> <li>Increase the number of garden centre supporters who sign up and promote the AIPP, pollinator-friendly plants, and the pollinator-friendly pesticide code.</li> </ul>			
93	Publish new guideline documents with evidence-based pollinator actions that are industry-specific.	<ul style="list-style-type: none"> <li>Investigate which guideline documents are required and prioritise a programme for their development</li> <li>Publish these industry-specific documents. May include, but not limited to: Agri-food businesses, Developers, Wind farms, Solar farms, Quarries.</li> </ul>	AIPP team and relevant partner organisations	<p>Guidelines for Wind Farms were published in 2021: <a href="https://pollinators.ie/wp-content/uploads/2021/04/Windfarm_Pollinator_Guidelines-WEB.pdf">https://pollinators.ie/wp-content/uploads/2021/04/Windfarm_Pollinator_Guidelines-WEB.pdf</a></p> <p>It is hoped that an equivalent guide can be developed for Solar Farms in 2023. Resources for Aviation are also being considered.</p>	

### Target 3.3 Increase the number of sports clubs that are pollinator friendly

	Action	Progress measure	Responsibility	Progress by November 2022	
94	Provide comprehensive and freely available online resources for Sports Clubs at	<ul style="list-style-type: none"> <li>Guideline document (<i>Pollinator-friendly management of sports clubs, 2020</i>) distributed to clubs</li> <li>Promotion and dissemination</li> </ul>	AIPP Communities Officer	<p>This website is kept up to date: <a href="https://pollinators.ie/sports-clubs/">https://pollinators.ie/sports-clubs/</a></p> <p>New blogs have been added in 2022 e.g., <a href="https://pollinators.ie/mullingar-shamrocks-gaa-green-by-emblem-green-by-nature/">https://pollinators.ie/mullingar-shamrocks-gaa-green-by-emblem-green-by-nature/</a></p>	
95	Golf Course Superintendents Association Of Ireland	<ul style="list-style-type: none"> <li>Guideline document (<i>Pollinator-friendly management of golf</i>)</li> </ul>	GCSAI	The guideline has been promoted and the action will be further progressed in 2023	

	(GCSAI) to encourage golf courses to become more pollinator friendly.	<i>courses, 2019) promoted to network</i> <ul style="list-style-type: none"> <li>• Uptake by golf courses</li> </ul>			
96	Gaelic Athletic Association (GAA) to encourage clubs to become more pollinator friendly.	<ul style="list-style-type: none"> <li>✓ Clubs encouraged to become more pollinator-friendly within the Green Club programme</li> <li>✓ Uptake by clubs</li> </ul>	GAA	<p>GAA clubs involved in Phase 1 of the GAA's Green Club programme engaged in a range of projects in 2022 to become more pollinator-friendly. These actions included:</p> <ul style="list-style-type: none"> <li>• reduction in herbicide use through the use of alternative products and the adoption of new maintenance regimes</li> <li>• the replacement of non-native hedging with pollinator-friendly native trees</li> <li>• the planting of pollinator-friendly shrubs and plants</li> <li>• collaborations with Easy Treesie, Pocket Forests, Coillte and Trees on the Land in the planting of native trees</li> <li>• the introduction of no-mow areas on club grounds</li> <li>• the installation of biodiversity signage on club walkways</li> <li>• the creation of biodiversity buffer zones by river banks</li> <li>• the installation of habitats for birds, insects and bees</li> </ul> <p>Clubs have been supported in their actions with guidance from the AIPP Pollinator-friendly management of Sports Clubs Guidance. The first GAA Green Club Biodiversity Toolkit is published in December 2022.</p>	

**Target 3.4 Increase the number of faith communities that are pollinator friendly**

	Action	Progress measures	Responsibility	Progress by November 2022	
97	Eco Congregation Ireland to promote pollinator-friendly actions.	<ul style="list-style-type: none"> <li>Guideline document (<i>Faith Communities: actions to help pollinators</i>, 2018) promoted to members</li> </ul>	Eco Congregation Ireland	We continue to include the All-Ireland Pollinators plan in our bimonthly email newsletter and regularly refer to it on our social media platforms. It is also a central part of the many talks and seminars that we give to parishes all over Ireland. We also provide a link to the Faith communities document on our website and in our guidelines for churches who are getting started.	
98	Provide freely available online resources for faith communities at	<ul style="list-style-type: none"> <li>Up-to-date resources provided on AIPP website. To include: evidence-based guideline documents, flyers, videos, blogs, webinars, presentations, case studies, animations</li> <li>All 2015–2020 resources to be updated where necessary.</li> </ul>	AIPP Communities Officer	<p>This website is kept up to date: <a href="https://pollinators.ie/faith-communities/">https://pollinators.ie/faith-communities/</a></p> <p>New blogs have been added in 2022 e.g.,  <a href="https://pollinators.ie/our-common-home-protecting-pollinators-in-rathgar-parish/">https://pollinators.ie/our-common-home-protecting-pollinators-in-rathgar-parish/</a>,  <a href="https://pollinators.ie/whitechurch-parish-on-becoming-bee-aware/">https://pollinators.ie/whitechurch-parish-on-becoming-bee-aware/</a></p>	
99	Publish a guideline document outlining evidence-based pollinator actions for graveyards.	<ul style="list-style-type: none"> <li>Development of guideline document</li> <li>Publication and dissemination</li> <li>Uptake by sites.</li> </ul>	AIPP Communities Officer & partner organisations	This action will be progressed in future years. Laois and Offaly County Councils are delivering a Just Transition project <i>Conservation and Pollination - Medieval Churches Laois and Offaly</i> during the years 2021 to 2023. The guideline document will be developed as part of this project.	

### 3.5: Increase the number of Group Water Scheme sites that are pollinator friendly

	Action	Progress measures	Responsibility	Progress by November 2022	
100	National Federation of Group Water Schemes (NFGWS) to encourage all Schemes to manage their sites (sources, reservoirs, treatment plants) in a pollinator-friendly way.	<ul style="list-style-type: none"> <li>✓ Guideline document (<i>Pollinator-friendly management of Group Water Scheme Sites</i>, 2018) distributed to Schemes</li> <li>✓ Uptake by Schemes</li> <li>✓ Promotion of biodiversity to wider drinking water catchments through dedicated initiatives with rural communities e.g. 'I've planted a tree and gone pesticide free' campaign</li> <li>✓ Establishment of a dedicated biodiversity category in a future Group Water Scheme excellence awards programme</li> </ul>	National Federation of Group Water Schemes (NFGWS)	<ul style="list-style-type: none"> <li>✓ The recommendations of biodiversity actions plans completed in Co. Roscommon were largely implemented, with a focus on interlinking with each GWS source protection plan. Funding is being sought for additional plans currently.</li> <li>✓ The 'I've planted a tree and gone pesticide free' was rolled out in areas of Cavan, Tipperary, Mayo and Monaghan. In addition, the 'let it bee' campaign was replicated in Mayo.</li> <li>✓ Integrated source protection plans (ISPP's) continued to be developed in 2022, with many measures implemented across 14 GWS, with DHLGH and DAFM financial support. These measures are developed with habitat retention and creation in mind.</li> <li>✓ Interaction was held between GWS managers and NFGWS staff with men's' sheds across a series of catchments. Some of these sheds work closely with people with disabilities, who have built over 600 bee hotels so far.</li> <li>✓ The Group Scheme excellence awards programme continued in 2022. 3 GWS achieved excellence in the biodiversity section, with schemes being announced at the</li> </ul>	



				<p>annual rural water conference on 8<sup>th</sup> September 2022.</p> <ul style="list-style-type: none"> <li>✓ A Climate Action and Biodiversity work programme, known as the BECA project, which now involves 35 GWS is currently underway. This is focusing on making GWS both biodiversity and climate friendly, not only in their own operations, but in the wider catchment. Key objectives include reduction of carbon footprint, management of sites in a biodiversity friendly manner, an elimination of pesticide usage in GWS operations as well as providing appropriate training for GWS personnel.</li> <li>✓ An NFGWS database was created to track actions being taken by individual GWS.</li> <li>✓ The NFGWS made a submission to the citizens assembly on biodiversity loss outlining the potential and work completed in the GWS sector, and made a presentation to the assembly on the 5/11/22</li> </ul>	
--	--	--	--	--	--

### 3.5: Track changes in pollinators on private land

	Action	Progress measure	Responsibility	Progress by November 2022	
101	Publish an annual review of private land actions.	<ul style="list-style-type: none"> <li>• Development of an annual review outlining progress</li> </ul>	Coordinated by AIPP Communities Officer	This document provides a review of the private land actions in 2022.	

		<p>within the actions under this objective</p> <ul style="list-style-type: none"> <li>• Publication on the website annually each December</li> </ul>			
102	Track progress within the garden sector.	<ul style="list-style-type: none"> <li>• Number of garden sites logged on the mapping system <i>Actions for Pollinators</i> <a href="https://pollinators.biodiversityireland.ie/">https://pollinators.biodiversityireland.ie/</a>.</li> </ul>	Coordinated by AIPP Communities Officer	<p>As of the end of November 2022, 735 garden sites are logged on 'Actions for Pollinators' <a href="https://pollinators.biodiversityireland.ie/">https://pollinators.biodiversityireland.ie/</a></p> <p>A total of 1,833 people have 'Pledged their Garden' for pollinators as part of that initiative <a href="https://pollinators.ie/gardens/">https://pollinators.ie/gardens/</a></p>	
103	Track progress within the business sector.	<ul style="list-style-type: none"> <li>• Development of an annual report on the actions taken by the business supporter network</li> <li>• Publication of this annual report on AIPP website each December</li> <li>• Number of business sites logged on the mapping system <i>Actions for Pollinators</i> <a href="https://pollinators.biodiversityireland.ie/">https://pollinators.biodiversityireland.ie/</a></li> </ul>	Coordinated by AIPP Business Officer (funding dependent)	<p>The 2022 Annual Review of actions taken by business supporters is available here: <a href="https://pollinators.ie/aipp-2021-2025/">https://pollinators.ie/aipp-2021-2025/</a></p> <p>As of the end of November 2022, 833 business sites are logged on 'Actions for Pollinators'. Some business supporters will log multiple sites <a href="https://pollinators.biodiversityireland.ie/">https://pollinators.biodiversityireland.ie/</a></p>	
104	Track progress within the sports club sector.	<ul style="list-style-type: none"> <li>• Number of sports club sites logged on the mapping system <i>Actions for Pollinators</i> <a href="https://pollinators.biodiversityireland.ie/">https://pollinators.biodiversityireland.ie/</a></li> </ul>	Coordinated by AIPP Communities Officer	The 'Actions for Pollinators' mapping system has not yet been opened up to Sports Clubs. This will take place in December 2022.	
105	Track progress within the faith community sector.	<ul style="list-style-type: none"> <li>• Number of faith community sites logged on the mapping system <i>Actions for Pollinators</i></li> </ul>	Coordinated by AIPP Communities Officer	As of the end of November 2022, 18 faith community sites are logged on 'Actions for Pollinators'. The system has not yet been actively promoted to the sector. <a href="https://pollinators.biodiversityireland.ie/">https://pollinators.biodiversityireland.ie/</a>	

		<a href="https://pollinators.biodiversityireland.ie/">https://pollinators.biodiversityireland.ie/</a>			
106	Track progress across Group Water Scheme sites.	<ul style="list-style-type: none"> <li>Number of Group Water Scheme sites logged on the mapping system <i>Actions for Pollinators</i> <a href="https://pollinators.biodiversityireland.ie/">https://pollinators.biodiversityireland.ie/</a></li> </ul>	Coordinated by AIPP Communities Officer	As of the end of November 2022, 34 Group Water Scheme sites are logged on 'Actions for Pollinators' <a href="https://pollinators.biodiversityireland.ie/">https://pollinators.biodiversityireland.ie/</a>	
107	Continue to manage and support Citizen Science monitoring schemes that track changes in pollinators across all land types, including private land.	<ul style="list-style-type: none"> <li>Increase the number of Bumblebee Monitoring Scheme transects being carried out on private land. This is an expert-level Citizen Science scheme</li> <li>Increase in the number of regular Flower-Insect Timed Counts (FIT Counts) being completed on private land. This is a beginner-level Citizen Science scheme</li> <li>Publication of annual reports on the findings of both schemes</li> </ul>	National Biodiversity Data Centre, CEDaR	<p>Both the All-Ireland Bumblebee Monitoring Scheme and FIT Counts were managed and promoted by the National Biodiversity Data Centre in 2022. CEDaR promoted both schemes.</p> <p>Data submission within the Bumblebee Monitoring Scheme continues until 31<sup>st</sup> December each year. Annual reports are produced in the following year to update the trends. The 2012-2021 report is available here: <a href="https://biodiversityireland.ie/app/uploads/2022/10/Bumblebee-Monitoring-Scheme_Annual-Report_2012-2021.pdf">https://biodiversityireland.ie/app/uploads/2022/10/Bumblebee-Monitoring-Scheme_Annual-Report_2012-2021.pdf</a></p> <p>Data submission with the FIT Count Scheme continues until 31<sup>st</sup> December each year. Currently ~700 FIT Counts have been submitted for 2022.</p> <p>New Bumblebee Monitoring Scheme transects have been established on private land in 2022. Many FIT Counts have also taken place on private land.</p>	

## OBJECTIVE 4: ALL-IRELAND HONEY BEE STRATEGY

*The 2022 All-Ireland Honey bee Strategy annual report was compiled by Dr Archie Murchie*

### Target 4.1 Education and Knowledge Transfer

	Action	Progress measure	Responsibility	Progress by November 2022	
108	Conferences used as a means of disseminating good practice to beekeepers.	<ul style="list-style-type: none"> <li>Conferences organised and used as a means of disseminating good practice</li> </ul>	UBKA, FIBKA, INIB, IBA CLG, NIHBS	The beekeeping organisations have a good series of conferences, exhibits, summer schools, workshops, honey shows and online talks.	
109	Expand beekeeping qualification courses to cover other environmental issues, including impacts of beekeeping on native pollinators.	<ul style="list-style-type: none"> <li>Courses expanded and participants informed about other environmental issues</li> <li>Relevant fact sheets produced</li> </ul>	UBKA, FIBKA, INIB (via BBKA), IBA CLG	The beekeeping organisations have agreed to include greater awareness of all pollinators within their courses.	

### Target 4.2 Communication

	Action	Progress measure	Responsibility	Progress by November 2022	
110	Establish a Steering Group to oversee the All-Ireland Honey bee Strategy 2021–2025.	<ul style="list-style-type: none"> <li>Honey bee Strategy Steering Group established</li> <li>Twice-yearly meeting to discuss progress and share expertise</li> </ul>	Honey bee Strategy Steering Group	The Steering Group meetings have taken place in June and November 2022. The Group has agreed to promote the AIPP Honey bee Strategy at appropriate opportunities.	

		<ul style="list-style-type: none"> <li>Group to promote the Strategy.</li> </ul>			
111	Beekeeping associations to promote the aims of this strategy and the wider All-Ireland Pollinator Plan to members.	<ul style="list-style-type: none"> <li>Strategy promoted via conferences</li> <li>Strategy promoted via roadshow and workshops</li> <li>Strategy promoted via teaching/mentoring activities</li> <li>Strategy promoted in Beekeeping publications and newsletters</li> </ul>	UBKA, FIBKA, INIB, IBA CLG, NIHBS	All beekeeping organisations continue to promote the AIPP and Honey bee Strategy.	
112	Honey bee Strategy Steering Group to provide evidence-based guidelines to stakeholders as necessary to ensure healthy Honey bees and effective beekeeping.	<ul style="list-style-type: none"> <li>Agree communication strategy and provide evidence-based guidelines to relevant organisations as appropriate (e.g. Farming Unions)</li> </ul>	Honey bee Strategy Steering Group	This continues as a work in progress. Discussions have centred around the purpose of the message and to whom. An existing leaflet with general guidelines for farmers about how they can help beekeepers requires updating.	
113	Beekeeping associations to continue to promote and support the wider All-Ireland Pollinator Plan in public engagement activities.	<ul style="list-style-type: none"> <li>Associations to promote the AIPP as relevant</li> </ul>	UBKA, FIBKA, INIB, IBA CLG, NIHBS	Representatives of the beekeeping organisations have agreed in principle to support and promote the All-Ireland Pollinator Plan within their education and outreach activities.	

### Target 4.3 Surveillance and Biosecurity

	Action	Progress measure	Responsibility	Progress by November 2022	
114	Prepare a paper to establish the need for Honey bee Inspectors in RoI.	<ul style="list-style-type: none"> <li>Publication of a paper establishing the need and remit for seasonal bee inspectors to support beekeepers</li> </ul>	Honey bee Strategy Steering Group	This objective has stalled somewhat following some initial work last year. The incorporation of bees into Regulation (EU) 2016/429 on transmissible animal diseases ("Animal Health Law") has prompted some discussions about the ownership of bee health and bee inspections within DAERA.	
115	DAERA to circulate the agreed NI Bee Health Contingency Plan and updated Strategy for the sustainability of the Honey bee when completed.	<ul style="list-style-type: none"> <li>Plan circulated</li> </ul>	DAERA	<p>The NI Bee Health Contingency Plan is available on the DAERA website under bee health (<a href="http://www.daera-ni.gov.uk/articles/bee-health">www.daera-ni.gov.uk/articles/bee-health</a>). The plan is reviewed and tested each year. The current version needs to be updated.</p> <p>The Strategy for Sustainability of the Honey bee is now unlikely to be updated until issues with Animal Health Law and EU-exit/transition are sorted.</p>	
116	DAERA and DAFM to coordinate surveillance and share information on bee health, invasive species, and plant health (where relevant to bee health, e.g. pathway analyses).	<ul style="list-style-type: none"> <li>North-South meetings to maximise cooperation</li> </ul>	DAFM, DAERA	Meetings continue at an individual level, but high-level formal meetings are currently paused due to EU-exit/transition and suspension of the NI Assembly	
117	Voluntary registration to be encouraged in RoI	<ul style="list-style-type: none"> <li>Organisations to actively encourage members to register</li> </ul>	FIBKA, IBA CLG, NIHBS, DAFM	Agreed in principle but no further action to date.	

	prior to new EU legislation, which may make registration compulsory.				
118	Voluntary registration to be encouraged in NI through the 'DataBees' platform.	<ul style="list-style-type: none"> <li>Organisations to actively encourage members to register</li> </ul>	UBKA, INIB, NIHBS, DAERA	This is ongoing. 'DataBees' continues to be promoted to beekeepers in NI.	
119	Data on overwintering losses and disease prevalence from the COLOSS survey to be shared at an island-wide scale.	<ul style="list-style-type: none"> <li>Information shared across the island</li> <li>Disseminated by beekeeping organisations</li> </ul>	AFBI, DAFM	<p>RoI COLOSS survey data published in An Beachaire.</p> <p>AFBI annual survey started in 2009 and published annually on the AFBI website.</p> <p>Composite data are normally published in the Journal of Apicultural Research as open access papers.</p> <p>Gray et al. 2022. Honey bee colony loss rates in 37 countries using the COLOSS survey for winter 2019–2020: the combined effects of operation size, migration and queen replacement. Journal of Apicultural Research: 1-7. doi 10.1080/00218839.2022.2113329.</p>	
120	Honey bee Strategy Steering Group to bring associations together to discuss and agree a common policy on importations.	<ul style="list-style-type: none"> <li>Clarify current rules and regulations</li> <li>Agree principles to be published and promoted by Beekeeping Associations</li> </ul>	Honey bee Strategy Steering Group, DAERA, DAFM	Ongoing. The beekeeping organisations agree that sustainability of locally produced Honey bees is the correct strategy, which will be achieved through education, discouraging excessive imports and supporting local queen rearing.	

121	Complete and publish all-Ireland pest risk assessments for invasive pests and pathogens of Honey bees.	<ul style="list-style-type: none"> <li>Disseminate DAERA Asian Hornet contingency plan</li> <li>Publish All-Ireland risk assessments for invasive pests and existing pathogens</li> <li>Publish All-Ireland risk assessments for unknown but emerging pests and pathogen</li> </ul>	AFBI, DAFM, DAERA NIEA (invasive species)	<p>The Northern Ireland Rapid Response Contingency Plan for Asian Hornet is available on: <a href="http://invasivespeciesireland.com/wp-content/uploads/2020/06/Northern-Ireland-AH-RR-Contingency-Plan-minus-contacts-details.pdf">http://invasivespeciesireland.com/wp-content/uploads/2020/06/Northern-Ireland-AH-RR-Contingency-Plan-minus-contacts-details.pdf</a></p> <p>Draft risk assessments for some pests have been produced by AFBI but are not yet publicly available.</p>	
122	Investigate the feasibility of a unified approach to managing Foulbrood on the island of Ireland.	<ul style="list-style-type: none"> <li>Clarify statutory rules North and South</li> <li>Recognition of the diseases' importance and management options explained</li> <li>Honey bee Strategy Steering Group to agree principles</li> <li>Disease ID sheets on the AIPP website for both forms of Foulbrood</li> <li>Education events to focus on foulbrood</li> <li>Association questionnaire for options re foulbrood (South)</li> </ul>	AFBI, DAFM, DAERA	<p>Ongoing work. Foulbrood cases in NI and RoI are published on the DAERA and DAFM websites respectively along with statutory rules: <a href="http://www.daera-ni.gov.uk/articles/bee-health">www.daera-ni.gov.uk/articles/bee-health</a> <a href="https://assets.gov.ie/124541/622ed885-8fcc-4794-a874-af1f4f1a4f41.pdf">https://assets.gov.ie/124541/622ed885-8fcc-4794-a874-af1f4f1a4f41.pdf</a></p> <p>Foulbrood management is a frequent topic for invited speakers and workshops at association events.</p>	



#### Target 4.4 Conservation of the native Honey bee strain, *Apis mellifera mellifera*

Research has shown that Ireland has a pure population of *Apis mellifera mellifera*, the native Irish black bee. Elsewhere in Northern Europe, the original home of *Apis mellifera mellifera*, it has been severely hybridized. Ireland has a duty to conserve this genetic resource.

	Action	Progress measure	Responsibility	Progress by November 2022	
123	NIHBS to continue to promote the conservation of the native Irish Black Bee.	<ul style="list-style-type: none"> <li>Continued activities of the NIHBS</li> </ul>	NIHBS	Work is ongoing (please see <a href="http://www.NIHBS.org">www.NIHBS.org</a> ). NIHBS are currently focused on 3 main projects- the 'Protection of the Native Irish Honey Bee Bill' that is progressing through the Seanad (currently at stage 3), the support of queen rearing group schemes and the establishment of conservation areas all of which are progressing well.	
124	Beekeeping sector to encourage an education process on the merits of the subspecies/strains of Honey bee including the Irish Black Bee.	<ul style="list-style-type: none"> <li>This to include identification of subspecies, issues of local provenance and climatic suitability across the island of Ireland</li> <li>The Irish strain of <i>Apis mellifera mellifera</i> encouraged where appropriate</li> </ul>	FIBKA, UBKA, INIB, IBA CLG, DAFM, DAERA	Ongoing work. The beekeeping associations agree in principle to this target and there are examples of educational events on the suitability of different bee subspecies/strains, including A.m.m.	
125	Publication of an agreed management strategy for <i>Apis mellifera mellifera</i> on the island of Ireland.	<ul style="list-style-type: none"> <li>Publication of the strategy. To include development of a roadmap towards the island of Ireland being recognised as a 'stronghold' for <i>Apis mellifera mellifera</i></li> </ul>	NIHBS, NUI Galway	<p>Ongoing work. Steering Group discussions have been on developing a strategy to recognise Ireland (or areas) as a special conservation area (stronghold) for A.m.m.</p> <p>The 'Protection of the Native Irish Honey Bee Bill 2021' is scheduled for its third reading in the Seanad. It is likely that the Bill will go through the Seanad easily but might have difficulty going through the Dail. Potential timeline of up to 10 years.</p>	

#### Target 4.5 Data sharing

	Action	Progress measure	Responsibility	Progress by November 2022	
126	DAFM and AFBI to make results of pesticide surveys publicly available.	<ul style="list-style-type: none"> <li>Results of pesticide surveys made available in RoI</li> <li>Results of pesticide surveys made available in NI</li> </ul>	AFBI, DAFM	NI pesticide usage data available on: <a href="http://www.afbini.gov.uk/articles/pesticide-usage-monitoring-reports">www.afbini.gov.uk/articles/pesticide-usage-monitoring-reports</a> RoI pesticide usage data at: <a href="https://www.pcs.agriculture.gov.ie/sud/pesticidestatistics/">https://www.pcs.agriculture.gov.ie/sud/pesticidestatistics/</a>	
127	Promote <i>BeeConnected</i> in NI as a mechanism to connect beekeepers and farmers so that beekeepers can be kept informed about spraying events in their vicinity.	<ul style="list-style-type: none"> <li>Beekeeping Associations to encourage members to register</li> <li><i>BeeConnected</i> promoted to farmers by the Ulster Farmers Union</li> </ul>	UBKA, INIB, UFU, NIHBS	BeeConnected ( <a href="https://beeconnected.org.uk">https://beeconnected.org.uk</a> ) is an up and running app supported by the beekeeping associations and the Ulster Farmers Union. The scheme was launched in NI in 2017 and continues to be promoted.	
128	Investigate possible mechanisms linking farmers and beekeepers so that they can be notified of spraying events in RoI.	<ul style="list-style-type: none"> <li>Possible mechanisms identified</li> </ul>	Honey bee Strategy Steering Group	Ongoing work. Literature on BeeConnected needs to be updated to link in with AIPP.  The Steering Group still need to confirm the status of BeeConnected in RoI and whether it can be promoted here.	
129	Honey bee Strategy Steering Group to develop a roadmap towards a system to	<ul style="list-style-type: none"> <li>Road map developed to: - enable management of the overall pollinator resources across the island</li> </ul>	Honey bee Strategy Steering Group, UBKA	Work in progress. DAERA's 'DataBees' allows apiaries to be mapped and therefore some estimate of hive density. However, there would be caveats with respect to coverage and accuracy of hive numbers, which will fluctuate, and hives may also be moved.	

	capture hive density per hectad (10km <sup>2</sup> ).	<ul style="list-style-type: none"> <li>- enable implementation of alerts and action plans against new pests/pathogens</li> <li>- avoid selling non-native Honey bees into Voluntary Conservation Areas.</li> <li>• Explore the possibility of testing in one specific region (e.g. Enniskillen).</li> </ul>		It was noted that there are some cases of some beekeepers overstocking particularly in the Dublin area and FIBKA are working to discourage this. All agreed that is important to highlight that the AIPP does not necessarily promote having more honeybees/ beehives. Education needed in pointing people in the direction of an alternative (i.e. creating habitats for wild bees).	
--	---	---	--	---	--

#### Target 4.6 Tracking progress

	Action	Progress measure	Responsibility	Progress by November 2022	
130	Publish an annual review of the All-Ireland Honey bee Strategy 2021–2025.	<ul style="list-style-type: none"> <li>• Annual review published outlining progress against each of the actions</li> <li>• Annual reviews made available via beekeeping organisation websites.</li> </ul>	Honey bee Strategy Steering Group	This document fulfils this action.	

### All-Ireland Honey bee Strategy Steering Group 2022

Member	Affiliation
Archie Murchie (Chair)	AFBI (deputy Ivan Forsythe)
Susie Hill	UBKA
Mary Montaut	FIBKA
Lyndon Wortley	INIB
Aoife Nic Giolla Coda	NIHBS
Caroline McDonald	IBA CLG
Thomas Williamson	DAERA (chief bee inspector NI)
Mary Coffey	DAFM
Úna FitzPatrick/Jane Stout	All-Ireland Pollinator Plan Steering Group

Acronyms			
AFBI	Agri-Food and Biosciences Institute	INIB	Institute of Northern Ireland Beekeepers
BBKA	British Beekeepers Association	NIHBS	Native Irish Honey Bee Society
DAERA	Department of Agriculture, Environment and Rural Affairs	NUI Galway	National University of Ireland, Galway
DAFM	Department of Agriculture, Food & the Marine	UFU	Ulster Farmers' Union
FIBKA	Federation of Irish Beekeepers' Associations	UKBA	Ulster Beekeepers Association
IBA CLG	Irish Beekeepers' Association CLG		

## OBJECTIVE 5: CONSERVING RARE POLLINATORS

### Target 5.1 Ensure rare pollinators are protected by legislation where appropriate

	Action	Progress measure	Responsibility	Progress by November 2022	
131	Protect rare pollinators through the Wildlife Act in RoI when warranted.	<ul style="list-style-type: none"> <li>Species added to Schedule 5 of Wildlife Act</li> </ul>	National Parks and Wildlife Service (NPWS)	All critically endangered bees have been proposed for legal protection together with <i>Bombus distinguendus</i> . This will be prepared as part of the new Wildlife Act which is in early stages of drafting.	
132	Ensure rare pollinators are protected by legislation in NI where appropriate.	<ul style="list-style-type: none"> <li>Included on Priority Species list, under The Wildlife and Natural Environment Act</li> </ul>	Northern Ireland Environment Agency (NIEA), Centre for Environmental Data and Recording NI (CEDaR)	First Tranche of the NIPS Review currently with Minister for approval, with implementation planned for early Spring 2022. This will include reviewed Bees (14 species), and macro moths (66 species). A second tranche is progressing for consultation and CNCC approval in Spring 2022. This will include butterflies (11 species).	

### Target 5.2 Raise awareness of rare pollinators

	Action	Progress measure	Responsibility	Progress by November 2022	
133	Work to develop initiatives to assist recovery of the endangered Great Yellow Bumblebee ( <i>Bombus distinguendus</i> ).	<ul style="list-style-type: none"> <li>Guideline document (<i>Protecting rare pollinators: Great Yellow Bumblebee</i>, 2019) promoted and distributed to all relevant stakeholders</li> <li>Awareness raising within local communities in remaining Great Yellow Bumblebee strongholds (Mullet Peninsula, Mayo)</li> </ul>	National Biodiversity Data Centre, NPWS, BirdWatch Ireland, Mayo County Council, Belmullet Tidy Towns, University College Dublin (UCD)	BirdWatch Ireland: The management of our reserves on the Mullet Peninsula continues to be sympathetic to the ecological needs of the Great Yellow Bumblebee. Using this knowledge, and working closely with Belmullet Tidy Towns, Mayo County Council, UCD and others, then the Great Yellow Bumblebee Conservation Group was formed. The Group successfully received funding, through the European Innovation Partnership, to develop a pilot results-based project which was implemented across	

		<ul style="list-style-type: none"> <li>• Development of a species recovery plan for the Great Yellow Bumblebee</li> <li>• Continued management of BirdWatch Ireland reserves in the Mullet Peninsula to also support the Great Yellow Bumblebee.</li> <li>• Investigation into funding mechanisms to increase the area of land that is managed to support the Great Yellow Bumblebee.</li> </ul>		the Mullet Peninsula and Erris mainland, Co. Mayo during 2022.	
134	Work to develop initiatives to assist recovery of the near threatened Large Carder Bee ( <i>Bombus muscorum</i> ).	<ul style="list-style-type: none"> <li>• Continue to monitor its status - data from the All-Ireland Bumblebee Monitoring Scheme (2012-2019) shows an ongoing decline.</li> <li>• Identify a network of key locations where healthy populations remain</li> <li>• Work with local authorities and local communities to raise awareness of the Large Carder bee in these areas and to encourage pollinator-friendly actions to support it</li> </ul>	AIPP team in collaboration with relevant partners	<p>The 2012-2021 All-Ireland Bumblebee Monitoring Scheme data continues to show an ongoing decline in the Large Carder Bee. Following this year's analyses of the 2021 data, it moved from moderate to strong decline.</p> <p>Work has been ongoing with local communities who have populations of this bee within their local area. To date these have focused on Skerries (Co Dublin) and Tramore (Co Waterford). In both cases, the communities have worked with the relevant Local Authorities to create new habitat corridors. In 2022, the bee was observed to have expanded its range in both towns.</p> <p>Work has also begun to identify a network of other communities and Local Authorities across the island who could be encouraged to take similar action</p>	

				<p>around the Large Carder Bee. It is hoped this can be gradually rolled out in future years.</p> <p>The National Biodiversity Data Centre ran a weekend ‘wild bee festival’ of workshops and walks in Skerries in collaboration with Fingal CoCo (August 2022). The event was focussed on how local communities can support the Large Carder Bee.</p>	
135	Develop resources on rare pollinators and make freely available.	<ul style="list-style-type: none"> <li>As resources are developed, all collated and added to the website: <a href="https://pollinators.ie/helping-endangered-pollinators/">https://pollinators.ie/helping-endangered-pollinators/</a></li> </ul>	AIPP team in collaboration with relevant partners	Two additional evidence-based guidance documents on rare bees were published in 2022 and added to the website – Northern Colletes and Large Carder Bee (Action 137). These were both accompanied by other additional free resources e.g., signage templates	
136	Promote rare pollinator species through social media campaigns.	<ul style="list-style-type: none"> <li>Social media campaign to raise awareness on the status, identification, and ecology of one rare pollinator species each year</li> <li>Great Yellow Bumblebee, Large Carder Bee and Northern Colletes bee to be prioritised initially. Others to be finalised in future years.</li> </ul>	AIPP team in collaboration with relevant partners	As of the end of 2022, we now have evidence-based guidance documents on three rare bee species (Great Yellow Bumblebee, Large Carder Bee, Northern Colletes). These species are promoted on social media at appropriate times to raise awareness and encourage positive action. Additional species will be included in future years, once evidence-based resources are available.	

### Target 5.3 Publish best practice information on protecting rare pollinators

	Action	Progress measure	Responsibility	Progress by November 2022	
137	Publish how-to-guides on protecting rare pollinator species.	<ul style="list-style-type: none"> <li>New species-specific guides published within the <i>Protecting rare pollinators</i> series when a sufficient evidence-base is available.</li> </ul>	AIPP team in collaboration with relevant partners	<p>Two additional evidence-based guidance documents on rare bees were published in 2022:</p> <ul style="list-style-type: none"> <li>Protecting Rare Pollinators: Northern Colletes <a href="https://pollinators.ie/helping-endangered-pollinators/northern-colletes/">https://pollinators.ie/helping-endangered-pollinators/northern-colletes/</a> This was in collaboration with the National Trust.</li> <li>Protecting Rare Pollinators: Helping the Large Carder Bee in your local community <a href="https://pollinators.ie/helping-endangered-pollinators/large-carder-bee/">https://pollinators.ie/helping-endangered-pollinators/large-carder-bee/</a> This was in collaboration with Sustainable Skerries and Fingal County Council.</li> </ul>	

### Target 5.4 Publish and update All-Ireland conservation assessments for pollinating groups (Red Lists)

	Action	Progress measure	Responsibility	Progress by November 2022	
138	Publish an All-Ireland Hoverfly Red List.	<ul style="list-style-type: none"> <li>Publication of an All-Ireland Red List outlining the conservation status of Ireland's hoverfly species.</li> </ul>	NPWS, NIEA	This is being drafted at present – all-Ireland database has been created and first iteration of the list is completed with all Least concern species identified.	
139	Develop a roadmap towards updating the All-Ireland Bee Red List (2006).	<ul style="list-style-type: none"> <li>Publication of an updated checklist of Irish Bees</li> <li>Development of a roadmap outlining necessary data collection that would allow</li> </ul>	NPWS, NIEA, National Biodiversity Data Centre, CEDaR	Preparatory work is ongoing to publish an updated checklist of Irish Bees. Currently there are 102 bee species in Ireland. Two species were recorded for the	



		updating of the 2006 Bee Red List.		<p>first time in 2022: <i>Anthophora plumipes</i> (Hairy-footed Flower Bee) and <i>Nomada lathburiana</i>.</p> <p>The National Pollinator Monitoring Scheme (Action 24) will generate an important new dataset that can contribute towards updating of the Bee Red List over the coming years.</p>	
--	--	------------------------------------	--	--	--

#### Target 5.5 Track change in rare pollinators

	Action	Progress measure	Responsibility	Progress by November 2022	
140	Conduct dedicated surveys to establish the status and distribution of the Northern Colletes bee and the Red-shanked Carder bee in NI.	<ul style="list-style-type: none"> <li>NIEA to investigate whether surveys could be delivered through grant funding by partner organisations, e.g., Buglife</li> <li>Surveys successfully completed.</li> </ul>	NIEA and funded partners	A Northern Colletes survey was completed in 2021. Working with partners such as Buglife and BC to develop EF Strategic Strand project bids which will include elements of surveys for threatened pollinators.	
141	Attempt to increase the number of volunteers tracking rare species within the All-Ireland Bumblebee Monitoring scheme.	<ul style="list-style-type: none"> <li>Pending resources, identification workshops on the following rare bumblebee species, run in areas where they occur: Great Yellow Bumblebee, Shrill Carder Bee, Mountain Bumblebee</li> <li>Attempts made to encourage Citizen Science volunteers to walk specific routes to</li> </ul>	National Biodiversity Data Centre	A 2-day Skerries Wild Bee Festival was run in collaboration with Fingal County Council in August 2022. It focused on the declining Large Carder Bee ( <i>Bombus muscorum</i> ) and actions that can be taken to protect it. The event included a full workshop on the All-Ireland Bumblebee Monitoring Scheme and attempted to encourage new volunteers to walk routes to monitor this species within the scheme.	

		monitor these rare bumblebees.			
142	Organise field meetings with volunteer recording networks to search for rare species.	<ul style="list-style-type: none"> <li>Rare species hunts organised in appropriate areas, where funding allows. This will have to be limited to species that can be easily identified in the field.</li> </ul>	National Biodiversity Data Centre, CEDaR, BugLife	In 2022, a dedicated rare species survey was organised around the Ivy Bee. This solitary bee was recorded for the first time in Ireland in autumn 2021 at the Raven Nature Reserve in Co Wexford. The 2022 survey was organised by the National Biodiversity Data Centre and was run in collaboration with Prof Francis Ratnieks (Sussex University & Ivy Bee expert). It was opened to expert volunteers in the Southeast and a total of 20 people assisted with trying to work out the spread of the bee in 2022. New populations were found along the east coast, with the most northerly being at Brittas Bay in County Wicklow, some 60km from the original population.	

## OBJECTIVE 6: STRATEGIC COORDINATION OF THE PLAN

### Target 6.1 General awareness raising

	Action	Progress measure	Responsibility	Progress by November 2022	
143	Continually maintain and update AIPP website to provide stand-alone toolkit for those who want to help.	<ul style="list-style-type: none"> <li>Continued management and updating of website pollinators.ie</li> </ul>	AIPP team	<a href="http://www.pollinators.ie">www.pollinators.ie</a> continues to be maintained and regularly updated	
144	Maintain Twitter and Instagram accounts.	<ul style="list-style-type: none"> <li>Growth in the number of followers</li> <li>Run dedicated annual campaigns on both platforms. May include, but not limited to: Let Dandelions Be, No Mow May</li> </ul>	AIPP team	<p>As of the end of November 2022, the number of Twitter followers is 8,441 (39% increase on 2021).</p> <p>The number of Instagram followers has increased to 3,552 (23% increase on 2021).</p> <p>Social media campaigns (Let Dandelions Bee &amp; No Mow May) were run in 2022 and will be repeated in 2023. Investigations are also underway on additional social media campaigns for future years.</p>	
145	Promote the AIPP in national and local media.	<ul style="list-style-type: none"> <li>Maintain up-to-date media toolkit, to include bank of photographs</li> <li>Publish press release for key events</li> <li>Development of a range of promotional materials to promote pollinators</li> </ul>	AIPP team	<p>A media section is maintained on the website <a href="https://pollinators.ie/media/">https://pollinators.ie/media/</a> Press releases have been issued where relevant.</p> <p>The AIPP has been very widely covered in the National media across 2022. In addition to mentions in more than <b>150 articles</b> in print and digital newspaper versions, promotion has also included:</p>	

		<ul style="list-style-type: none"> <li>Track numbers of published media articles and other engagements</li> </ul>		<ul style="list-style-type: none"> <li>8 radio interviews/podcasts</li> <li>70 talks</li> </ul> <p>Significant promotion occurred around World Bee Day in 2022 (Action 149 below)</p>	
146	Focus engagement efforts on new audiences.	<ul style="list-style-type: none"> <li>Number of engagement efforts with new sectors who have not heavily engaged with the 2015–2020 Plan</li> </ul>	AIPP team	Specific efforts have been made to target new audiences in the second phase. These have included the following: GAA, Irish Science Teachers Association, Gaisce, Society of Chartered Surveyors Ireland, Hospitals, NI Housing Executive, Aviation sector, NI Education Authority.	
147	Distribute a monthly digital newsletter to the mailing list.	<ul style="list-style-type: none"> <li>Digital newsletter distributed to the mailing list each month</li> </ul>	AIPP team	A digital newsletter has been produced each month in 2022. It is distributed to the AIPP mailing list and made available at <a href="https://pollinators.ie/newsletters/">https://pollinators.ie/newsletters/</a>	
148	Organise an annual AIPP conference.	<ul style="list-style-type: none"> <li>Annual event organised to provide a forum for knowledge sharing and reporting on progress within the Plan</li> <li>Meeting venue to rotate around Provinces</li> </ul>	AIPP team	In 2022, this took the form of a wider event, organised by Limerick City and County Council and the National Biodiversity Data Centre: <i>How Local Authorities can address the biodiversity emergency</i> <a href="https://www.limerick.ie/council/newsroom/news/how-local-authorities-can-address-biodiversity-emergency">https://www.limerick.ie/council/newsroom/news/how-local-authorities-can-address-biodiversity-emergency</a> Pollinators were included within the wider programme. The intention is to return to a pollinator specific knowledge exchange event in 2023.	
149	Run an annual programme of engagement around World Bee Day (20 <sup>th</sup> May).	<ul style="list-style-type: none"> <li>Programme of engagement organised</li> <li>Activities listed on a dedicated page on pollinators.ie.</li> </ul>	All partners	A series of short freely available videos were created to mark World Bee Day 2022, following the theme of 'the basics of bees':  1. <a href="#">An Introduction to Ireland's Bees</a>	

				<p>2. <a href="#">Top Ten Actions for Pollinators</a></p> <p>3. <a href="#">Recording Pollinators</a></p> <p>The videos were shared on social media, on the World Bee Day web pages on pollinators.ie, and are on the National Biodiversity Data Centre YouTube channel.</p> <p>We worked with RTÉ Learn to update their biodiversity pages to include the new content for World Bee Day.</p> <p>Two new blogs were also released, targeted at a specialist and general audience:</p> <p><a href="#">Providing the Evidence: an update from the Irish Pollinator Research Network</a></p> <p><a href="#">The joy of making your garden pollinator-friendly</a></p>	
150	Run an annual programme of engagement around international Pollinator Week (late June).	<ul style="list-style-type: none"> <li>• Programme of engagement organised</li> <li>• Activities listed on a dedicated page on pollinators.ie.</li> </ul>	All partners	<p>To mark Solitary Bee Week 2022, the All-Ireland Pollinator Plan released a new set of resources on protecting the rare Northern Colletes Bee. These were produced in partnership with the National Trust, National Parks &amp; Wildlife Service, and Buglife.</p> <p>The resources included a <a href="#">new guideline document</a>, a <a href="#">sign</a> and a <a href="#">poster</a></p> <p>We collaborated with the National Trust on a press release for the new resources and wrote a blog which was included in the All-Ireland Pollinator Plan newsletter.</p>	

151	Recognise the contribution of local pollinator champions.	<ul style="list-style-type: none"> <li>Since 2017, we have recognized a small group of individuals annually (approx. six). This to continue. These are local influencers who make the plan happen on the ground, largely in a voluntary capacity</li> <li>Certificate and personal thanks are sent to new pollinator champions. Awardees are not publicised, as these are most often people who do not wish to be personally promoted</li> </ul>	AIPP team	These individuals are recognised each year in December/January. The 2022 champions will be identified, and personal thanks sent.	
152	Raise awareness of an additional pollinating insect group annually. (The main focus of the All-Ireland Pollinator Plan is on bees.)	<ul style="list-style-type: none"> <li>Social media campaign to raise awareness of one non-bee pollinating insect group annually. May include, but not limited to: hoverflies, nocturnal pollinators, day-flying moths, wasps, beetles</li> </ul>	Butterfly Conservation NI, BugLife, others as appropriate	The AIPP has promoted other pollinating insects across social media throughout 2022, particularly hoverflies and moths. Additional actions are planned for future years.	
153	Raise awareness to promote the use of appropriate grass management in preference to planting with wildflower seed and, where this is necessary, the use of	<ul style="list-style-type: none"> <li>Continued messaging through social media and other online platforms</li> </ul>	AIPP team	<p>This has expanded into a significant action in its own right. The use of 'wildflower' seed mixtures fails to address and even aggravates the real issues of biodiversity loss.</p> <p>To address this going forward, a wildflower seed action group was established in May 2021 with representatives from the National Parks and Wildlife Service, National Biodiversity Data Centre, National</p>	

	native, local provenance wildflower seed.			<p>Botanic Gardens, Department of Agriculture, Food and the Marine, Teagasc, TCD, UCD, as well as some independent ecological consultants.</p> <p>The group met regularly across 2022 and a dedicated section has been created on the AIPP website to better communicate on this issue:  <a href="https://pollinators.ie/wildflower-seed/">https://pollinators.ie/wildflower-seed/</a></p> <p>The group will continue to do all it can to encourage natural regeneration and the return of semi-natural grasslands, rather than inappropriate wildflower seed planting. This was boosted in 2022, by the launch of a new project by NPWS to celebrate Irish semi-natural grasslands called 'Great Irish Grasslands'  <a href="https://greatirishgrasslands.ie/">https://greatirishgrasslands.ie/</a> This has been supported by the National Biodiversity Data Centre. It creates a foundation to better celebrate meadows and manage expectations around what they should look like.</p>	
--	---	--	--	---	--

## Target 6.2 Researching the evidence base for action

Updates under Target 6.2 have been compiled by Prof Jane Stout

NOTE: Research actions are dependent on both funding and availability of appropriate researchers

	Action	Progress measure	Responsibility	Progress by November 2022	
	<b>Dissemination and communication</b>				
154	Maintain the Pollinator Research Network to discuss ongoing research, and to build collaborations for future research.	<ul style="list-style-type: none"> <li>Annual Pollinator Research Network meetings held</li> <li>Annual updates of researchers/research projects disseminated via pollinators.ie</li> </ul>	Pollinator Research Network – Trinity College Dublin (TCD), University College Dublin (UCD), Maynooth University (MU), Dublin City University (DCU), National University of Ireland, Galway, and others	<ul style="list-style-type: none"> <li>Annual meeting held in January 2022 @UCD</li> <li>World Bee Day research blog published <a href="https://pollinators.ie/providing-the-evidence-an-update-from-the-irish-pollinator-research-network/">https://pollinators.ie/providing-the-evidence-an-update-from-the-irish-pollinator-research-network/</a></li> <li>Annual update to research outputs <a href="https://pollinators.ie/research/publications/">https://pollinators.ie/research/publications/</a></li> <li>Meetings of farmland pollinators working group held every 6-8 weeks.</li> </ul>	
155	Maintain bee health research-policy-practice dialogue.	<ul style="list-style-type: none"> <li>Annual Bee Health meetings between researchers, decision-makers, and practitioners.</li> </ul>	MU, TCD, DAFM, Teagasc, AFBI, DAERA	<ul style="list-style-type: none"> <li>Annual Bee Health Meeting not held in 2022, but a research-policy meeting between PROTECTS project and DAFM was held</li> </ul>	
	<b>Pollinator and pollination ecology</b>				
156	Expand knowledge of Ireland's wild bee populations.	<ul style="list-style-type: none"> <li>Research into genetic differentiation/distinction among populations at different scales, linking with ecological/behavioral differences</li> </ul>	Researchers	<ul style="list-style-type: none"> <li>Research into stem-nesting solitary bees published (Hodge et al. 2022 <a href="https://doi.org/10.26786/1920-7603(2022)697">https://doi.org/10.26786/1920-7603(2022)697</a>)</li> <li>Research ongoing into genetic differentiation of <i>Bombus terrestris</i> (Irish, British, commercial) (Sarah Larragy &amp; Jim Carolan, MU; Jane Stout, TCD)</li> <li>Research ongoing into solitary bee nesting and floral preferences (Colm O'Leary, PhD student; Simon</li> </ul>	



		<ul style="list-style-type: none"> <li>• Research into nesting and floral requirements of solitary bee species</li> <li>• Continue to investigate the prevalence, health and longevity of honeybee colonies that exist in the wild.</li> </ul>		<p>Hodge, UCD; Steph Maher, Teagasc; Daire O'hUallachain, Teagasc; Jane Stout, TCD)</p> <ul style="list-style-type: none"> <li>• Research on solitary bee nesting on farmland: <a href="#">How to create solitary bee nest sites on your farm</a> evidence-based Action Sheet published (Saorla Kavanagh and Úna FitzpatrickK Protecting Farmland Pollinators EIP) <a href="https://biodiversityireland.ie/app/uploads/2022/05/ActionSheet_Solitary-Bees-WEB-2.pdf">https://biodiversityireland.ie/app/uploads/2022/05/ActionSheet_Solitary-Bees-WEB-2.pdf</a>.</li> <li>• Ongoing research on diversity and adaptation in Irish wild honeybee population (Grace McCormack, NUIG).</li> </ul>
157	Improve understanding of hoverfly populations.	<ul style="list-style-type: none"> <li>• Research into hoverfly abundance/diversity across different land uses, microhabitat use, and/or service provision (bio-control, pollination, nutrient cycling).</li> </ul>	Researchers	<ul style="list-style-type: none"> <li>• Research into hoverfly abundance and richness in relation to farmland feature quantity and quality ongoing (Steph Maher, Teagasc; Jane Stout, TCD; Simon Hodge, UCD; Farm Ecos team) – paper just submitted</li> <li>• Research into hoverfly diversity in crop fields and contributions to pollination services ongoing (Katherine Burns, Arrian Karbassioon, Alison O'Reilly, Dara Stanley, UCD)</li> </ul>
158	Improve knowledge of rare and at-risk pollinators.	<ul style="list-style-type: none"> <li>• Research to inform conservation of extinction-risk species in the Irish context</li> <li>• Provide evidence base for conservation of specialized</li> </ul>	Researchers, NIE	<ul style="list-style-type: none"> <li>• Research into <i>Bombus sylvarum</i> ecology, habitat preference ongoing (Michelle Larkin, NUIG; Dara Stanley, UCD;</li> <li>• Research into <i>Bombus distinguendus</i> ecology, habitat preference and population genetics ongoing (Lydia Thompson, PhD student; Dara Stanley, UCD; Julia Jones, UCD; Stephanie Maher, Teagasc</li> </ul>

		habitats in which rare/at-risk species live.			
159	Expand knowledge of urban pollinators.	<ul style="list-style-type: none"> <li>• Research to determine impacts of street lighting on pollinators and pollination service</li> <li>• Research to determine value of urban greening to pollinator populations.</li> </ul>	Researchers	<ul style="list-style-type: none"> <li>• Not yet advanced, though some knowledge sharing has occurred. The Chartered Institute of Ecology and Environmental Management (CIEEM) are an AIPP supporting organisation. They have committed to running an annual event where they consider how their members can undertake actions to protect pollinators. They organised a webinar on the 8<sup>th</sup> December 2021 on the importance of Nocturnal Pollinators and actions that can be considered to protect them: <a href="https://cieem.net/resource/cieem-webinar-considering-nocturnal-pollinators-cieem-and-the-all-ireland-pollinator-plan/">https://cieem.net/resource/cieem-webinar-considering-nocturnal-pollinators-cieem-and-the-all-ireland-pollinator-plan/</a></li> </ul>	
160	Expand knowledge of plant-pollinator interactions and dynamics, and pollination service delivery.	<ul style="list-style-type: none"> <li>• Continue research into farmland pollinators, how they respond to changes in floral availability within and between seasons</li> <li>• Research linking changes in pollinator communities with ecosystem function and service provision</li> </ul>	Researchers	<p>Research published on</p> <ul style="list-style-type: none"> <li>• role of bees vs other taxa in pollination of wild plants in European agricultural landscapes (Herbertsson et al. 2021 <a href="https://plecevo.eu/article/24693/">https://plecevo.eu/article/24693/</a>)</li> <li>• farmland pollinators and how they respond to woodland habitats in landscape (Ruas et al. 2022 <a href="https://research.thea.ie/handle/20.500.12065/4009">https://research.thea.ie/handle/20.500.12065/4009</a>)</li> <li>• diversity of pollination networks in urban and agricultural areas (White et al. 2022 <a href="https://www.frontiersin.org/articles/10.3389/fevo.2022.806615/full">https://www.frontiersin.org/articles/10.3389/fevo.2022.806615/full</a>)</li> <li>• foraging bumblebees and potential exposure to pesticides (Thompson et al. 2022 <a href="https://pubmed.ncbi.nlm.nih.gov/35866464/">https://pubmed.ncbi.nlm.nih.gov/35866464/</a>)</li> <li>• importance of diversity in Irish networks (Russo et al. 2022 <a href="https://doi.org/10.1002/ece3.9347">https://doi.org/10.1002/ece3.9347</a>)</li> </ul>	

		in wild plant species.			
161	Expand understanding of interactions between managed and wild pollinators.	<ul style="list-style-type: none"> <li>Investigate optimal placement of honeybee apiaries – how do honeybee hives affect availability of floral resources for other pollinators and how many hives should be located in different habitat types (e.g., forests, urban areas, farmed landscapes).</li> </ul>	Researchers, Beekeepers	<ul style="list-style-type: none"> <li>Research into how placement of honeybee hives in heathland habitats in the Dublin mountains affects wild bumblebees ongoing (Katie Burns and Dara Stanley, UCD)</li> </ul>	
162	Expand knowledge of bee diseases and health risks.	<ul style="list-style-type: none"> <li>Generate baselines of disease prevalence in honeybees and investigate potential for disease transfer</li> <li>Determine whether promotion of managed honeybee colonies in the wild poses a disease risk to wild pollinators</li> </ul>	Researchers, DAFM, AFBI, DAERA	<ul style="list-style-type: none"> <li>Research published on approach to pan-European assessment of bee health (Hodge et al. 2022 <a href="https://www.mdpi.com/2071-1050/14/17/10549">https://www.mdpi.com/2071-1050/14/17/10549</a>)</li> <li>SFI funded project at NUIG commencing in Dec 2021 will investigate factors impacting wild and matched managed colonies from the same location in collaboration with Stout lab (TCD), Jones lab (UCD), including disease.</li> </ul>	

		<ul style="list-style-type: none"> <li>Undertake new research into Chalkbrood disease in honeybees.</li> </ul>			
	<b>Drivers of decline and conservation measures</b>				
163	Understand extent of exposure to pesticides and other pollutants across ecosystems.	<ul style="list-style-type: none"> <li>Determine exposure routes for multiple pesticides/pollutants and pollinator taxa</li> <li>Quantify pesticide residues in plants, soil, water, bee products</li> <li>Improve understanding of impacts of environmental pollution, e.g. heavy metals on bee health and bee products.</li> </ul>	Researchers, DAFM	<ul style="list-style-type: none"> <li>Ongoing work to determine pesticide residues in plants and soils (PROTECTS project – TCD, DCU)</li> <li>SFI funded project at NUIG commencing in Dec 2021 will investigate factors impacting wild and managed colonies from the same location in collaboration with Stout lab (TCD), Jones lab (UCD), including pesticide levels in colonies.</li> </ul>	
164	Research impacts of climate change and climate action policies on pollinators.	<ul style="list-style-type: none"> <li>Research into how climate change affects pollinators</li> <li>Research into how policies to tackle climate change affect pollinators.</li> </ul>	Researchers	<ul style="list-style-type: none"> <li>Ongoing research into how weather affects pollinator activity, and creating a bee thermoregulation model to predict future responses to changing temperature (Arrian Karbassioon, Sarah MacQueen, Dara Stanley UCD)</li> </ul>	

165	Assess effectiveness of conservation measures.	<ul style="list-style-type: none"> <li>Research effectiveness of conservation actions for pollinator populations and communities</li> <li>Develop a simple tool to assess quality of conservation actions (e.g. meadows, parks, designated sites, no-mow lawns, Buglife's B-lines) in terms of provision of floral resources</li> </ul>	Researchers	<ul style="list-style-type: none"> <li>MSc (Res) ongoing with Kildare Co. Co. (Sophia Couchman &amp; Jim Carolan, MU, Jane Stout TCD, Una Fitzpatrick NBDC) to investigate non-chemical control methods for invasive/noxious plants and weeds on open public lands.</li> </ul>	
166	Determine effectiveness of Pollinator Trail sites	<ul style="list-style-type: none"> <li>Research to monitor the network of Pollinator Trail sites to specifically assess the impact of different pollinator actions versus control sites</li> </ul>	Researchers	Cannot be advanced until a trail is established (Action 32)	
167	Investigate the role of specific plants in supporting pollinators to	<ul style="list-style-type: none"> <li>Research into role of trees to inform tree-planting initiatives</li> </ul>	Researchers	<ul style="list-style-type: none"> <li>"Importance" of various taxa determined by investigation of Irish plant-pollinator networks published in 2022 <a href="https://doi.org/10.1002/ece3.9347">https://doi.org/10.1002/ece3.9347</a></li> </ul>	

	determine best ones to plant for bees in different habitat types.	<ul style="list-style-type: none"> <li>Research into replacements for invasive plants used by beekeepers to provide forage for honeybees (e.g. Himalayan Balsam)</li> </ul>			
168	Review publicly managed land in terms of suitability for key pollinator populations.	<ul style="list-style-type: none"> <li>Conduct review</li> <li>Develop a plan to prioritise the restoration of pollinator habitat, based on those areas that will yield the greatest expected net benefits</li> </ul>	Researchers, National Biodiversity Data Centre	Not yet advanced	
	<b>Multiple benefits and widening engagement</b>				
169	Research multiple co-benefits of pollinator conservation for other elements of biodiversity and ecosystem service delivery.	<ul style="list-style-type: none"> <li>Research into co-benefits of pollinator conservation actions</li> </ul>	Researchers	<ul style="list-style-type: none"> <li>Research into whether agri-environment schemes where biodiversity is assessed using plants are also useful for pollinators (i.e. co-benefits) published in 2021 (Michelle Larkin, NUIG/NBDC; Dara Stanley, UCD)  <a href="https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/1365-2664.13990">https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/1365-2664.13990</a></li> <li>Other research likely to be carried out within the life of the current Plan.</li> </ul>	

170	Expand understanding of why people engage with pollinator conservation and how to reach those who are not yet engaging.	<ul style="list-style-type: none"> <li>• Cross-disciplinary research into engagement with pollinator conservation action. To include studies of behaviour change, attitudes, perceptions, etc.</li> </ul>	Researchers	<ul style="list-style-type: none"> <li>• Opinion paper published (Stout and Dicks 2022 <a href="https://doi.org/10.1098/rstb.2021.0165">https://doi.org/10.1098/rstb.2021.0165</a>)</li> </ul>
171	Test methods for non-lethal monitoring across habitats.	<ul style="list-style-type: none"> <li>• Pilot studies and ground truthing of novel non-lethal monitoring technology, compatible with European Pollinator Monitoring Scheme</li> </ul>	Researchers, DAFM, National Biodiversity Data Centre	<ul style="list-style-type: none"> <li>• The National Biodiversity Data Centre ran a non-lethal moth sampling project on EIP farms in 2022 (funded by DAFM).</li> <li>• Research on FIT counts as methods to assess pollinators published (Mahon and Hodge 2022 <a href="https://www.pollinationecology.org/index.php/jpe/article/view/699">https://www.pollinationecology.org/index.php/jpe/article/view/699</a>)</li> </ul>

### Target 6.3 Establishment and maintenance of supporting databases

	Action	Progress measure	Responsibility	Progress by November 2022	
172	Continue to manage and maintain the online mapping system <i>Actions for Pollinators</i> , where all those who have taken pollinator-friendly actions can log their location and the action(s) taken.	<ul style="list-style-type: none"> <li>• Manage and maintain the GIS based mapping system</li> <li>• Open it up to all sectors</li> <li>• Improve reporting by increasing the number of sites logged</li> <li>• Where funding is available, work to expand the functionality of the system</li> <li>• Use this emerging map of pollinator-friendly habitat to direct future actions to the most appropriate areas</li> </ul>	National Biodiversity Data Centre	As of the end of November 2022, <b>3,400 sites</b> are logged on 'Actions for Pollinators'. Just over <b>8,900 individual actions</b> have been logged. The most popular action is pollinator-friendly planting (1,831), followed by reducing mowing (1,337) and reduced pesticide use (1,284) <a href="https://pollinators.biodiversityireland.ie/">https://pollinators.biodiversityireland.ie/</a>	
173	Maintain data on wild pollinator distribution and make available through an online Atlas of Irish pollinators and the NBN Atlas for Northern Ireland.	<ul style="list-style-type: none"> <li>• Maintain and manage databases. Ensure that as much data is open access as possible</li> <li>• Make available through online Atlases of wild bees and hoverflies</li> <li>• Increase the number of active recorders who can accurately identify pollinator species</li> <li>• Where funding is available, continue to develop and publish online identification courses for pollinator identification</li> </ul>	National Biodiversity Data Centre; CEDaR	<p>Bee data submitted online is validated in quarters. As of the end of September 2022, the National Bee Database, managed by the National Biodiversity Data Centre contains 90,953 validated records. It is fully open access: <a href="https://maps.biodiversityireland.ie/Dataset/5">https://maps.biodiversityireland.ie/Dataset/5</a></p> <p>Hoverfly data submitted online is validated annually. Currently, the National Hoverfly Database, managed by the National Biodiversity Data Centre contains 38,041 validated records. It is fully open access: <a href="https://maps.biodiversityireland.ie/Dataset/159">https://maps.biodiversityireland.ie/Dataset/159</a></p> <p>The number of active recorders continues to increase across both datasets.</p>	



				The National Biodiversity Data Centre currently has free online identification courses for bumblebees and hoverflies (added 2022): <a href="https://biodiversityireland.ie/online-training/">https://biodiversityireland.ie/online-training/</a>	
174	Maintain and grow Citizen Science pollinator monitoring networks and databases.	<ul style="list-style-type: none"> <li>Continue to support and grow the All-Ireland Bumblebee Monitoring Scheme (expert volunteer Citizen Science scheme)</li> <li>Continue to support and grow the Flower-Insect Timed Count monitoring scheme (general public Citizen Science scheme)</li> </ul>	National Biodiversity Data Centre	Both the All-Ireland Bumblebee Monitoring Scheme and the Flower-Insect Timed Count Scheme were fully supported in 2022.	
175	Maintain a database on plant-pollinator interactions.	<ul style="list-style-type: none"> <li>Maintain database</li> <li>Add new data as it becomes available</li> </ul>	National Biodiversity Data Centre	This database continues to be maintained within the National Biodiversity Data Centre. It is updated quarterly in line with bee data validation within the Centre. Currently, there are in the region of 15,900 pollinator species records that also include foraging information.	
176	Maintain an online database of Irish Pollinator research.	<ul style="list-style-type: none"> <li>Establish and populate database</li> <li>Make available via <a href="http://www.pollinators.ie">www.pollinators.ie</a></li> <li>Update annually</li> </ul>	Pollinator Research Network	<p>This is available at <a href="https://pollinators.ie/research/">https://pollinators.ie/research/</a> It is updated annually in November.</p> <p>Recent published research on Irish pollinators is listed. This has been updated for 2022: <a href="https://pollinators.ie/research/publications/">https://pollinators.ie/research/publications/</a></p>	
177	Develop a digital database of pollinator collections in the National	<ul style="list-style-type: none"> <li>Investigate funding mechanisms that would allow the national bee collection to be fully curated by the Natural</li> </ul>	National Museum of Ireland (Natural History)	A preliminary survey conducted by the NMI entomology curator has estimated that there are approx. 25,000 Irish bee specimens in the Natural History collection.	

	Museum of Ireland (Natural History).	History Museum. This should include image, accession number, specimen - all digitally linked and searchable		Suitable imaging systems have been identified and costed and can be readily purchased pending identification of an appropriate funding source. Protocols for efficient collation of geographic and temporal information from historical Museum specimens have been developed and published in scientific literature.	
178	Collate and maintain data on scientific engagement polls/surveys, so that the initiative can continue to learn from this feedback.	<ul style="list-style-type: none"> <li>Maintain a database of the findings of all engagement polls since the AIPP began in 2015. Some of these were run by the Plan itself through social media, others by third parties</li> <li>Use this information to improve engagement with all stakeholders</li> </ul>	AIPP team	This database is maintained with the National Biodiversity Data Centre and is used to improve our understanding on how to best engage with stakeholders.	

#### Target 6.4 Maintenance of a network of supporting organisations

	Action	Progress measure	Responsibility	Progress by November 2022	
179	Maintain a network of organisations who agree to help promote or otherwise assist the All-Ireland Pollinator Plan.	<ul style="list-style-type: none"> <li>Create a framework, whereby organisations can sign up as a supporter of the Plan and indicate what actions they are willing to take in support</li> <li>Maintain a list of all supporting organisations on the website</li> </ul>	AIPP team	<p>A list of all supporting organisations is maintained at: <a href="https://pollinators.ie/partners/supporters/">https://pollinators.ie/partners/supporters/</a></p> <p>As of the end of November 2022, there are <b>52</b> supporters of the AIPP 2021-2025</p> <p>In coming years, as the network grows, we will facilitate knowledge exchange within this group where possible.</p>	

		<ul style="list-style-type: none"> <li>• Maintain this network of supporting organisations and provide support as resources allow</li> <li>• Facilitate knowledge exchange where possible</li> <li>• Provide supporters with an opportunity to report on their activities each year as part of the annual review process</li> </ul>		These supporters are given the opportunity to report on their activities to the AIPP team as part of the annual review process.	
--	--	---	--	---	--

#### Target 6.5 Overall coordination

	Action	Progress measure	Responsibility	Progress by November 2022	
180	Promote the Plan to new organisations and sectors as relevant.	<ul style="list-style-type: none"> <li>• Plan promoted to new organisations and sectors</li> <li>• Increase in the number of organisations supporting the Plan</li> <li>• As appropriate, continue to explore possibilities to grow the reach of the Plan e.g. investigations into whether the planning process could include stipulations for pollinators</li> </ul>	AIPP Project Manager and Steering Group	<p>This continues to occur where possible. Significant efforts continue to be made to engage with new organisations and sectors.</p> <p>The number of supporting organisations continues to increase.</p>	
181	Ensure that the Pollinator Plan is compatible with other biodiversity initiatives.	<ul style="list-style-type: none"> <li>• Liaise with other partners to ensure land management advice for promoting biodiversity is joined up and is not contradictory</li> </ul>	AIPP Project Manager and Steering Group	Oversight is continually maintained on this action.	

182	Ensure the incorporation of the Pollinator Plan into future relevant national strategies, where appropriate.	<ul style="list-style-type: none"> <li>Promotion of the Plan to relevant organisations and those working on national strategies/planning</li> </ul>	AIPP Project Manager and Steering Group	Oversight is continually maintained on this action. Of most significance in 2022, is its inclusion within the draft National Biodiversity Plan in RoI.	
183	Develop an online toolkit, based on lessons learned from the AIPP 2015–2020 to ensure knowledge sharing at the EU level and beyond.	<ul style="list-style-type: none"> <li>Develop materials on lessons learned from the first phase of the All-Ireland Pollinator Plan 2015–2020</li> <li>Make available as an online toolkit for other countries interested in doing something similar</li> <li>Include templates and resources that can be shared</li> </ul>	AIPP Project Manager	<p>This has begun <a href="https://pollinators.ie/toolkit/">https://pollinators.ie/toolkit/</a> and will continue to be developed over the coming years.</p> <p>The AIPP continues to engage and provide advice to other countries who reach out and are interested in replicating our activities.</p>	
184	Publish an overall annual review of the 186 actions in the Plan.	<ul style="list-style-type: none"> <li>Development of a collated annual review, outlining progress on all actions within the Plan</li> <li>Publication of this review on the website each December</li> </ul>	AIPP Project Manager	This document fulfills this action	
185	Annually review the Steering Group.	<ul style="list-style-type: none"> <li>Review the Steering Group annually and restructure as required</li> </ul>	AIPP Steering Group Chair	This is an ongoing process that happens annually. It has been agreed that the size remain constant (max 16 members) but that expertise on the group reflects the key tasks that are being undertaken in any given year. The current Steering Group (2022) is below.	
186	Renew the Plan in 2025.	<ul style="list-style-type: none"> <li>A new version of the Pollinator Plan to be developed for 2026–2030</li> </ul>	Steering Group	Not yet relevant	

### All-Ireland Pollinator Plan Steering Group 202

Member	Affiliation
Dr Úna FitzPatrick (chair)	National Biodiversity Data Centre
Prof Jane Stout (deputy chair)	Trinity College Dublin
Mr Ken Bradley	DAERA; Environmental Policy Division
Ms Pauline Campbell	DAERA; Northern Ireland Environment Agency
Ms Niamh Carmichael	Centre for Environmental Data and Recording (CEDaR)
Ms Hannah Denniston	Department of Agriculture, Food and the Marine
Ms Eimear Fox	Local Communities, Tidy Towns Adjudicator
Ms Susie Hill	Ulster Beekeepers Association
Dr Catherine Keena	Teagasc
Ms Annette Lynch	National Parks and Wildlife Service
Dr Mary Montaut	Federation of Irish Beekeepers' Associations (FIBKA)
Dr Archie Murchie	Agri-Food and Biosciences NI
Ms Anne Murray	Local Authorities: Dún Laoghaire–Rathdown County Council
Ms Sarah Jane Phelan	Transport Infrastructure Ireland
Ms Melina Quinn	National Trust



Implementation of the *All-Ireland Pollinator Plan 2021-2025* is being coordinated by the National Biodiversity Data Centre. The *National Biodiversity Data Centre* is a programme of *The Heritage Council* and is operated under a service level agreement by Compass Informatics. The Biodiversity Data Centre is funded by *The Heritage Council* and the *Department of Housing, Local Government and Heritage*.



An Roinn Tithíochta,  
Rialtais Áitiúil agus Oidhreachta  
Department of Housing,  
Local Government and Heritage

An Chomhairle Oidhreachta  
The Heritage Council



**COMPASS INFORMATICS**  
Information and Location Insights