

## ALL-IRELAND POLLINATOR PLAN

2021-2025





## Pollinator Plan

The first All-Ireland Pollinator Plan (2015-2020) was initiated by Dr Úna FitzPatrick (National Biodiversity Data Centre) and Prof. Jane Stout (Trinity College Dublin), and then developed by a 15-member All-Ireland steering group. The final Plan was produced by the steering group following a consultation phase, which included both public and stakeholder engagement. This new version, for 2021-2025, was developed by the Steering Group, listed below, to build on the successful

delivery of the 81 actions in the first Plan. Development included a 6-month open consultation, during which feedback could be submitted. Partner organisations, who committed to actions in the 2015-2020 Plan, agreed to new actions for 2021-2025. Potential new partner organisations were also contacted during the development phase. The second version of the AIPP builds on the success of the first phase and identifies a total of 186 actions.

#### **Pollinator Plan Steering Group**

Member	Affiliation
Dr Úna FitzPatrick (Chair)	National Biodiversity Data Centre
Prof Jane Stout (Deputy Chair)	Trinity College Dublin
Mr Ken Bradley	Department of Agriculture, Environment and Rural Affairs (DAERA); Environmental Policy Division
Ms Pauline Campbell	DAERA; Northern Ireland Environment Agency
Ms Niamh Carmichael	Centre for Environmental Data and Recording (CEDaR)
Ms Rachael Conway	Butterfly Conservation Northern Ireland
Ms Hannah Denniston	Department of Agriculture, Food and the Marine (DAFM)
Ms Eimear Fox	Local Communities, Tidy Towns Adjudicator
Ms Susie Hill	Ulster Beekeepers Association
Dr Catherine Keena	Teagasc, the Agriculture and Food Development Authority
Ms Annette Lynch	National Parks and Wildlife Service (NPWS)
Dr Mary Montaut	Federation of Irish Beekeepers' Associations (FIBKA)
Dr Archie Murchie	Agri-Food and Biosciences Institute NI (AFBI)
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 is coordinated by the National Biodiversity Data Centre www.biodiversityireland.ie

## Foreword

In an era defined by the great environmental challenges of biodiversity loss and climate change, it has never been more important to remember that the most powerful antidote to despair is *action*.



This is why the All-Ireland Pollinator Plan is such a significant publication: not only does it detail the 186 science-based actions we need to take to reverse pollinator decline, it translates them in a range of clear and creative ways that enable all sectors of society – schools, communities, farmers, businesses, gardeners, local authorities, etc. – to get involved in pollinator conservation.

In the five years since the first All-Ireland Pollinator Plan was published, thousands of people across this island have gotten their hands dirty to make space for nature in their schools, communities, businesses, gardens, public spaces, and on their farms.

I've been involved in a number of these projects myself, and I've seen first-hand just how impactful they can be – not only for bumblebees, solitary bees, honeybees, hoverflies and other pollinators, but for people too. Through the Plan, these amazing insects have brought us together in new ways, enhancing social cohesion and helping to improve our physical health and mental wellbeing.

I'm incredibly proud to be writing the foreword for the second iteration of this ground-breaking initiative. It has even more ambition than the first Plan: more partners, more actions, more support, more international interaction, more people on board, more nuanced guidance to support more sectors, more research, and more monitoring of what's being achieved – as well as

more monitoring of the pollinators themselves. I wish it every success.

It's worth noting that the All-Ireland Pollinator Plan was conceived by two female scientists who – in the face of ongoing declines of the species they had dedicated their professional lives to – decided to try to change the world. Their passion and dedication, and that of the team working with them, is an inspiration to us all and I hope it will continue to drive positive, collaborative action for nature across this island.

Ba mhaith liom gach deá-guí a tabhairt do gach duine a glacadh páirt leis an plean seo. Táim sceitimíneach chun fháil amach céard a bheidh sé in ann cuir ar fáil do nádúr agus don phobal an oileáin.



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## All-Ireland Pollinator Plan 2021-2025

## Creating an island where pollinators can survive and thrive

Irish pollinators are in decline. The problem is serious, and in order to ensure the sustainability of our food production; to avoid additional economic impact on the agricultural sector; and to protect the health of the environment, it requires immediate attention.

The All-Ireland Pollinator Plan is a shared plan of action. By working together, we can collectively take steps to help restore pollinator populations to healthy levels. Over the next five years, this plan will work to bring about a landscape where pollinators can flourish.

The loss of natural and semi-natural habitats has been a key driver in pollinator declines. At its core, the Pollinator Plan is about providing food and shelter across all types of land so that our pollinators can survive and thrive. It creates a framework to bring together pollinator initiatives across the island, so that through coordination and cooperation, we can achieve our goal.



Red-tailed Bumblebee, Bombus lapidarius © Steven Falk









#### The Pollinator Plan has six objectives:

Making farmland pollinator friendly

By working together with the farming community, we want to achieve an increased awareness of pollinators and the resources they need in order to survive on farmland.

2 Making public land pollinator friendly

By working together with Councils, Transport Authorities, Local Communities and others, we want to better coexist with biodiversity and help return food and shelter for pollinators to our island.

Making private land pollinator friendly

From gardens, to businesses, faith communities and sports clubs, we want to work together to create networks of biodiversity-friendly habitat across our landscape.

4 All-Ireland Honeybee Strategy

By supporting beekeepers, we want to achieve healthy, sustainable populations, and for honeybees to be part of a cohesive pollinator message that balances managed and wild pollinator populations.

**5** Conserving rare pollinators

By improving our knowledge on rare pollinators, and by raising awareness through dedicated initiatives, we want to achieve a Plan that protects as much wild pollinator diversity as possible.

6 Strategic coordination of the Plan

By continually raising awareness; addressing gaps in our knowledge through research; and by tracking where pollinators occur and how populations are changing, we want to work from an evidence base that enables us to coordinate a dynamic plan that is targeted and effective.

## Who is involved?

This Plan is a call to action. Every one of us can help.

Partner organisations are those that have committed to delivering the 186 actions in this All-Ireland Pollinator Plan 2021-2025. They also include those Councils that have formally signed up to the AIPP and agreed to take actions to support pollinators on the public land they manage. It is hoped that during the life of this Plan, new Councils will agree to become partners.

Over the next five years, we will also maintain a list of supporting organisations on the Pollinator Plan website. **Supporters** of the AIPP 2021-2025 are other groups/organisations who endorse the new Plan and agree to take actions themselves. General supporters will use the agreed framework to sign up and indicate how they will help (see page 62). This process will begin upon publication of the Plan, and it will be possible to sign up as a supporting organisation at any time over the coming five years. Business Supporters will continue to be managed as a distinct subgroup, using the existing Business Supporter Framework. This will carry through from 2015-2020. As of the end of 2020, there were 278 Business Supporters who committed to taking action to help pollinators.

## AIPP 2021-2025 partner organisations:

- National Biodiversity Data Centre
- Trinity College Dublin (TCD)
- The Heritage Council
- Department of Housing, Local Government and Heritage
- Department of Agriculture, Food and the Marine (DAFM)
- Department of Agriculture, Environment and Rural Affairs (DAERA)
- National Parks and Wildlife Service (NPWS)
- Northern Ireland Environment Agency (NIEA)
- Agri-Food and Biosciences Institute (AFBI)
- Butterfly Conservation
- Centre for Environmental Data and Recording (CEDaR)
- Federation of Irish Beekeepers' Associations (FIBKA)
- National Trust
- Teagasc
- Transport Infrastructure Ireland (TII)
- Ulster Beekeepers Association (UBKA)

- An Taisce
- Belmullet Tidy Towns
- BirdWatch Ireland
- Bord Bia
- Bord na Mona (BnM)
- BugLife
- Business in the Community (BITC)
- ChangeX
- Coillte
- College of Agriculture, Food and Rural Enterprise (CAFRE)
- Community Gardens Ireland
- Dublin City University (DCU)
- Department for Infrastructure NI
- Eastern and Midland Regional Assembly
- Eco-Congregation Ireland
- Eco-Schools
- Electricity Supply Board (ESB)
- Environmental Protection Agency (EPA)
- Gaelic Athletic Association (GAA)
- Gas Networks Ireland
- Golf Course Superintendents Association Of Ireland (GCSAI)
- Green-Campus
- Green-Schools
- Grow It Yourself (GIY)
- Local Authority
   Heritage and
   Biodiversity Officer
   network (Rol)

- larnród Éireann
- Institute of Northern Ireland Beekeepers (INIB)
- Irish Beekeepers Association CLG (IBA CLG)
- Irish Organic Association
- Irish Water
- Irish Wildlife Trust (IWT)
- Keep Northern Ireland Beautiful
- Maynooth University (MU)
- National Federation of Group Water Schemes (NFGWS)
- Native Irish Honeybee Society (NIHBS)
- National Museum of Ireland (Natural History)
- Northern Ireland Water
- National University of Ireland, Galway
- Office of Public Works (OPW)
- Organic Trust
- Royal Society for the Protection of Birds (RSPB NI)
- The Courts Service of Ireland
- Tidy Towns Unit
- Translink
- University College Dublin (UCD)
- Ulster Farmers' Union (UFU)
- Waterford Institute of Technology (WIT)
- Waterways Ireland

#### **Current Council Partners**

- Antrim and Newtownabbey Borough Council
- Ards and North Down Borough Council
- Clare County Council
- Cork City Council
- Derry City & Strabane District Council
- Donegal County Council
- Dublin City Council
- Dún Laoghaoire-Rathdown County Council
- Fingal County Council
- Galway City Council
- Kerry County Council
- Kildare County Council
- Kilkenny County Council
- Limerick City & County Council
- Lisburn & Castlereagh City Council
- Longford County Council
- Mayo County Council
- Meath County Council
- Monaghan County Council
- Offaly County Council
- South Dublin County Council
- Tipperary County Council
- Waterford City & County Council
- Wexford County Council
- Westmeath County Council
- Wicklow County Council

# How will the objectives be achieved?

This Plan identifies actions to make the island more pollinator friendly. A 16-member cross-sectoral Steering Group will continue to provide oversight of the Plan, with implementation coordinated by the National Biodiversity Data Centre.

The All-Ireland Pollinator Plan is entirely voluntary. Partner organisations who have committed to one or more actions, agree to fund action(s) themselves.

#### These funding partners are key to the overall successful delivery of the All-Ireland Pollinator Plan:



#### The Heritage Council



The National Biodiversity Data Centre is a programme of the Heritage Council, funded by the Council through core funding. The Data Centre will continue to coordinate implementation of the Plan as part of its core work programme, and provide project management, as well as supporting websites. Project officers will be based within the Data Centre.



## National Parks and Wildlife Service, Department of Housing, Local Government and Heritage

The National Parks and Wildlife Service have committed to funding a full-time Communities Project Officer to support implementation of the Plan across public and private land.



#### Department of Agriculture, Food and the Marine

DAFM have committed to funding a full-time Farmland Pollinator Project Officer to help deliver the actions under Objective 1, to make farmland more pollinator friendly. DAFM have also committed to providing additional funding to assist with the development of resources and promotional material.



#### **Bord Bia**

Bord Bia have committed to initial funding to support the network of business supporters in taking action for pollinators and biodiversity.

Across the life of the Plan, it is hoped that other funding sources can be secured that will further support implementation of specific actions in the Plan.

Existing networks played an enormous role in the successful delivery of the first Plan, for instance, Local Authority Heritage and Biodiversity Officer networks, and Environmental Awareness Officer networks. It is hoped that this support can continue across 2021-2025.

It is envisaged that various groups, including councils, academics, communities, environmental groups, etc. will take targets within the Plan and make them their own, developing new projects to achieve them. In this, it will be necessary to look to national funding instruments and their support agencies.

## Why protect our pollinators?

#### Pollinators are declining globally

Along with many other insects, wild pollinators are declining in occurrence and diversity across North-West Europe<sup>1,2</sup>. A 2006 assessment revealed that across the island, 30 of our 99 bee species are at risk of extinction<sup>3</sup>. In Britain, declines appear to be bigger in rare species and those that require specific habitat types4. This is of serious concern because of the fundamental role wild pollinators play across natural and managed ecosystems. The majority (78%) of European flowering plant species are animal pollinated<sup>5</sup>, as are 71 of the 100 crops that provide 90% of the world's food supply<sup>6</sup>. In Europe alone, 84% of the 264 crop species are animal pollinated and 4,000 vegetable varieties exist thanks to pollination by bees<sup>7,8</sup>. Across Europe, crop pollination accounts for nearly €15 billion of the total economic value of crop production per year<sup>9</sup>. In Ireland, the annual value of animal pollination to homeproduced food crops was recently estimated to be up to €59 million per year<sup>10</sup>.

#### Wider benefits of pollinators

While wild pollinators, through the pollination services they provide, are important for healthy diets, agricultural economies and nutritional security2, they also influence our lives in many more ways - pollinators affect ecosystem structure, processes, and other ecosystem services. Insect-pollinated plant species play

important ecological roles, e.g. providing fruits and seeds for birds and other wildlife, contributing to nutrient cycling (e.g. nitrogen fixation), and to climate change adaptation. Furthermore, wild pollinator conservation measures can directly benefit other beneficial taxa, such as natural pest enemies that enhance biological control, and may play an important role in landscapes in terms of microclimate regulation, soil erosion prevention and in creating windbreaks11. Therefore, wild pollinator conservation can represent a winwin solution for tackling both the biodiversity loss and the climate crises.

#### To protect pollination service, we need to protect as much wild pollinator diversity as possible

Because different wild pollinator species are active at different times of day and at different times of the year; have varying behaviour, body size and tongue length, flight distances, habitat and foraging preferences, and susceptibility to stressors, they vary in the plant species they pollinate. Studies have shown that, around the world, crop pollination and yields increase when there is more diversity of these traits in agricultural systems, when there are more species of pollinators, and when pollinators are more abundant in general<sup>12,13</sup>. Overall, systems that are more biodiverse tend to be more stable and more resistant to changes in climate<sup>14</sup>. Thus, it is vital that we conserve as much of our wild pollinator species diversity as possible.

#### Global initiatives

There has been recent widespread attention and enthusiasm for the protection and conservation of wild pollinators, particularly bees. In 2016, governments around the world approved the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) report on Pollinators, Pollination and Food Production<sup>2</sup>, which reviewed global value, status, risks and opportunities, and many have joined a global coalition to protect pollinators (www.promotepollinators.org). In 2017, the United

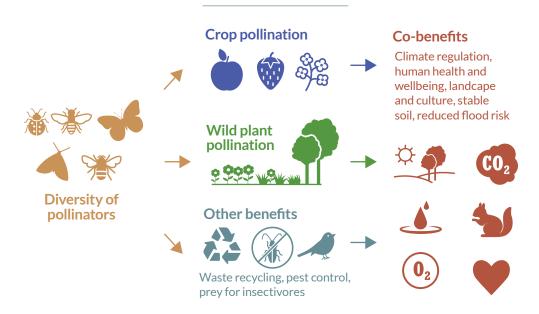


Nations designated May 20th as World Bee Day to raise awareness of the importance of pollinators, the threats they face, and their contribution to sustainable development. In 2018, the EU established the EU Pollinators Initiative (https://ec.europa.eu/environment/nature/conservation/species/pollinators/policy\_en.htm) to address the decline of wild pollinators in the EU, and to contribute to global conservation efforts, and there have been numerous local, national and corporate initiatives across Europe<sup>15</sup>. Public, political and scientific interest in pollinator conservation has popularised the implementation of conservation actions for pollinators in a range of sites, including rural and urban areas<sup>16,17</sup>.

## The global situation remains precarious and the time to act is now

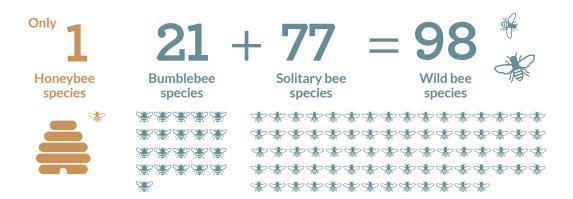
Despite ongoing efforts, and global knowledge gaps with regard to wild pollinator status and trends, most evidence points towards continued decline<sup>18</sup>. This decline is thought to be caused by a combination of indirect drivers, such as human population growth, urbanisation, agricultural intensification, and direct drivers, such as habitat loss, disease, and exposure to toxins19. This ongoing decline severely threatens our ability to deliver the Sustainable Development Goals, as we cannot meet social and economic goals without achieving the underpinning environmental goals. There is an urgent need for effective changes in policy and behaviour across all sectors, and at a range of levels, from individual land-managers, local communities, and small and medium enterprises (SMEs), to national governments, the European Commission and multinational businesses. To reverse pollinator loss, drivers of decline need to be removed, habitats must be restored, and the ecological, economic and societal business cases for action need to be recognised. On the island of Ireland, we have started this journey through the first phase of the All-Ireland Pollinator Plan.

#### Protecting pollinators brings many benefits



# Are pollinators under threat in Ireland?

The most important pollinators in Ireland are insects, particularly bees and flies.



Globally, bees are the most important pollinators because they visit flowers to collect pollen for their larvae, as well as feeding exclusively on the nectar of flowers as adults. Hence, the entire life cycle of bees is dependent on interactions with flowering plants. While adult hoverflies feed mainly on nectar and pollen, the larvae of many species are voracious predators of aphids and other pests. As a result, hoverflies contribute to both pollination and pest control.

Research has shown that more than half of Ireland's bee species have undergone substantial declines in numbers since 1980, with 30% of species considered threatened with extinction from Ireland according to IUCN criteria<sup>3</sup>. Three bee species that occur in Ireland are also threatened with extinction at the European level, and an additional four species are *near threatened*<sup>1</sup>. Unfortunately, we don't have historical data to assess changes in the abundance of our common wild pollinator species in Ireland. The All-Ireland Bumblebee Monitoring Scheme was established by the National Biodiversity Data Centre in 2012 to provide these data on bumblebees into the future.



Study after study confirms that maintaining pollinator diversity keeps agricultural systems and natural ecosystems resilient."



Great yellow bumblebee:
endangered in Ireland and

Bombus distinguendus © Dara Stanley

#### **Pollinator**

#### Status in Ireland

#### HONEYBEE



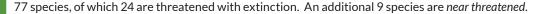
There is one species of honeybee (*Apis mellifera*) in Ireland, which is managed and maintained by beekeepers. Ireland has a vibrant and growing beekeeping sector. Research has shown that the island of Ireland has a pure population of *Apis mellifera mellifera*, the native Irish black bee<sup>20</sup>. Elsewhere in Northern Europe, the original home of *Apis mellifera mellifera*, it has been severely hybridized. There are also some unmanaged free-living honeybee colonies, with some colonies persisting naturally and unaided over multiple years<sup>21</sup>. As a managed pollinator, the honeybee is not given a formal conservation assessment. It is not considered to be under threat.

#### **BUMBIFBFF**



21 species, of which six are threatened with extinction from Ireland. An additional 3 species are *near threatened*. Current trends within the All-Ireland Bumblebee Monitoring Scheme are based on eight common species for which there is sufficient information to accurately assess changes. The current overall trend from 2012-2019 is a year-on-year decline of 4.8%. Two of the eight individual species show statistically significant declines.

#### **SOLITARY BEES**





180 species. An official conservation assessment has not yet occurred, but approximately 20% of species are estimated to be under threat (Martin Speight, pers comm.)

#### OTHER INSECTS



Other insects, such as butterflies, moths, beetles, wasps, and ants visit flowers and carry out small amounts of occasional pollination. Although these insects may be frequent flower visitors, their presence does not always result in consistent or successful pollination. On the island of Ireland, 18% of butterflies<sup>22</sup> and 8% of macro-moths<sup>23</sup> are threatened with extinction. Butterfly populations are monitoring by the National Biodiversity Data Centre through the Irish Butterfly Monitoring Scheme, which has been running since 2007. While the conservation status of most other insects is unknown, evidence from elsewhere suggests that many species are in decline.

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While honeybees face many threats, including pesticides and disease, honeybees are not endangered in Ireland but are actually increasing. Having too many honeybees in the landscape can negatively impact struggling wild bee populations. We need to halt declines in wild pollinators and create a balanced system that has a diversity of pollinator types."

## Progress so far

Success in protecting our pollinators can be measured in the short, medium, and long-term. In the short-term, success lies in delivering a cohesive all-island strategy. In the medium-term, it is the actions on the ground that change the way we manage our environment to provide pollinators with the food and shelter they need to survive. In the long-term, success will mean a diverse pollinator assemblage across the landscape that is healthy and sustainable.

In publishing the All-Ireland Pollinator Plan in September 2015, Ireland became one of the first countries in Europe to address the problem of pollinator declines. The initial Plan was developed from the ground up and evolved into a widespread and successful biodiversity initiative that has a large public profile.

The first phase of the AIPP achieved widescale buy-in, with more than 100 governmental and non-governmental organisations agreeing their support. It was a proven example of effective North-South cooperation, with both jurisdictions coming together to work within a common framework.

#### The All-Ireland Pollinator Plan (2015-2020) has achieved considerable impact:

- At the end of the five years, the 81 actions in the Plan have been delivered.
- Across all sectors, the number of engaged individuals and organisations continues to increase.
- Freely available, evidence-based resources, tailored by sector, have been developed. These have resulted in real engagement with the Plan in terms of actual and planned changes to land management.
- The All-Ireland Pollinator Plan is internationally regarded as an example of best practice, and has been recommended as a template for the development of national pollinator strategies by EU Member States.

- A publicly available GIS-based mapping system has been developed by the National Biodiversity Data Centre to track what actions are being taken across sectors (Actions for Pollinators: <a href="https://pollinators.biodiversityireland.ie">https://pollinators.biodiversityireland.ie</a>). It is the first system of its kind to track progress across multiple partners within a biodiversity plan. To date, more than 1,600 individual sites have logged more than 4,400 pollinator-friendly actions.
- Building on the AIPP, the National Biodiversity
  Data Centre successfully secured €1,194,679
  funding for a five-year project (2019-2023)
  on protecting farmland pollinators through
  the European Innovation Partnership (EIP)
  run by DAFM. This project is developing a
  framework by which all farms can become
  more pollinator friendly.
- Already, 55% of Councils across the island have formally partnered with the Plan and agreed to take actions to help.
- The Plan is supported by the four main Transport Authorities on the island, who endorsed evidence-based guidelines for pollinator-friendly management of transport corridors (2019).
- A dedicated pollinator award in the Tidy Towns competition (organised and funded by the Local Authority Heritage and Biodiversity Officer network) has seen more than 160 local communities make their local areas more pollinator friendly.





- \$278 businesses have signed up as Business Supporters and agreed to take action to help.
- Increasing numbers of state and semi-state organisations have agreed to manage their networks of sites for pollinators.
- Resources have been developed for schools (Junior Pollinator Plan, How-to-guide on developing a school pollinator plan) and the Plan has been incorporated into the Green-Schools and Green Campus initiatives. The AIPP partnered with SuperValu in 2020 on a large primary school education campaign, called 'Save the Bees'. An Education Pack was sent to 3,200 primary schools, with over half a million children.
- Many third level institutions have created their own Pollinator Plans and are implementing pollinator-friendly measures on campuses.
- Work has taken place to raise awareness and establish initiatives to help the Great Yellow Bumblebee, the most threatened bumblebee on the island of Ireland.
- All beekeeping associations, as well as the Native Irish Honeybee Society, have engaged with and supported the Plan during its first phase.
- The number of researchers working on pollinators has increased, and an Irish Pollinator Research Network has been established. The network meets annually to ensure collaboration, cohesion and that the evidence-base for policy and action is improved.
- There has been a significant increase in the number of people accessing pollinator identification resources and submitting data on wild bees and hoverflies to the National Biodiversity Data Centre and CEDaR.

A recent online poll (Trinity College Dublin, 2020) found AIPP participants to be knowledgeable about pollinators and to have positive attitudes towards them. The top three sectors that engaged with the Plan were individuals, businesses and community organisations. This aligned with the first set of tailored sectoral guidelines released by the AIPP, showing the importance of bespoke information for engagement.

The first phase of the Plan has been successfully delivered and has started a process of widespread change to land management to better support pollinators and other biodiversity. The success of the Plan in reversing declines cannot yet realistically be assessed. Assuming food and shelter can continue to be returned to the landscape through the AIPP, we would expect to begin to see positive impacts on wild pollinator abundances over the next decade. Only one scientifically rigorous monitoring scheme is currently in place. The All-Ireland Bumblebee Monitoring Scheme is a citizen science initiative that was established by the National Biodiversity Data Centre in 2012. The timing of the development and publication of the AIPP in 2015 was linked to this scheme so that some baseline data would be in place before implementation.



Megachile centuncularis © Steven Falk





# Building on the success of the first phase

We are at the start of the journey. As we look forward to the next five years and delivering the 186 actions in this 2021-2025 Plan, we know we will need to engage more, monitor more, and manage more land for biodiversity.

We need to support all those people, across all sectors, who want to help. We need to regularly monitor bumblebees, solitary bees and hoverflies across the island - in a scientific and systematic way - so that we can understand the long-term impacts of the Pollinator Plan. We need to build on the groundwork established in the first phase, so that we fully normalise a better way of managing our landscape that supports our struggling biodiversity. We need to talk less to the 'converted' and bring the message to new and wider audiences. We need to support beekeepers and ensure that honeybees are part of a balanced and cohesive pollinator message. We need to imagine what pollinators themselves would probably say - 'good start, but please do more and do it quicker!'

The Pollinator Plan has shown that in every sector and in every corner of this island, people do care about biodiversity, and that we can come together to make changes for the better. Lots of small actions, taken together, make a big difference. The booklet 'Working Together for Biodiversity', published to mark the end of the first phase, celebrates those efforts and the thousands of positive changes already made. Download your copy here: <a href="https://pollinators.ie/working-together-for-biodiversity/">https://pollinators.ie/working-together-for-biodiversity/</a>





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We know what we need to do. Across the island, the seeds of change are everywhere. We have to continue; but we also have to do more, and we have to do it quickly. Pollinators are in a better situation than they were five years ago, but they still face huge difficulties. If the last five years have taught us anything, it's that, together, we can change their fate.



Tales from the All-Ireland Pollinator Plan 2015-2020





## A call to action

This is a shared plan of action. At its core, it is about providing food and shelter across all types of land so that pollinators can survive and thrive. Everyone has a role to play. By working together, we can collectively take steps to help restore pollinator populations to healthy levels.

The main objective of the Plan is to make the island of Ireland pollinator friendly by taking actions on farmland, public land, and private land. This will be supported by additional actions across three other objectives. Within each objective, targets have been set and actions have been identified to help achieve that target. A total of 37 targets and 186 actions are identified.

Organisations who have volunteered to accept responsibility are listed, but in all cases, there is scope and space for others to get involved and play a role in delivery. It is hoped that during the life of this Plan, new initiatives and new ideas to address each target will be identified and implemented. For clarity, the term Republic of Ireland is used in the text to distinguish it from Northern Ireland.

Progress will be measured in terms of the number of actions that are achieved; by the number of organisations, groups and individuals who engage with the Plan; by the number of pollinator-friendly sites logged on the supporting mapping system; and ultimately by positive changes in the abundance of wild pollinators in the landscape. This Plan is about coming together and achieving as much as we can for Irish pollinators by working strategically and cohesively over the period 2021-2025.

OBJECTIVE 1	Making farmland pollinator friendly
Target 1.1	Increase the amount of farmland that is managed in a pollinator-friendly way
Target 1.2	Encourage the sustainable use of agricultural pesticides (insecticides, fungicides, and herbicides)
Target 1.3	Provide clear information and training on pollinators to the farming community
Target 1.4	Raise awareness and celebrate pollinator diversity on farmland
Target 1.5	Track changes in pollinators on farmland
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OBJECTIVE 2	Making public land pollinator friendly.
	Making public land pollinator friendly.  Increase the area of Council land that is managed in a pollinator-friendly way
OBJECTIVE 2	
OBJECTIVE 2 Target 2.1	Increase the area of Council land that is managed in a pollinator-friendly way
OBJECTIVE 2 Target 2.1 Target 2.2	Increase the area of Council land that is managed in a pollinator-friendly way  Make transport corridors more pollinator friendly  Make schools and educational properties more pollinator friendly  Organisations with site networks on public land to manage these in a
OBJECTIVE 2 Target 2.1 Target 2.2 Target 2.3 Target 2.4	Increase the area of Council land that is managed in a pollinator-friendly way  Make transport corridors more pollinator friendly  Make schools and educational properties more pollinator friendly  Organisations with site networks on public land to manage these in a pollinator-friendly way
OBJECTIVE 2 Target 2.1 Target 2.2 Target 2.3	Increase the area of Council land that is managed in a pollinator-friendly way  Make transport corridors more pollinator friendly  Make schools and educational properties more pollinator friendly  Organisations with site networks on public land to manage these in a
OBJECTIVE 2 Target 2.1 Target 2.2 Target 2.3 Target 2.4	Increase the area of Council land that is managed in a pollinator-friendly way  Make transport corridors more pollinator friendly  Make schools and educational properties more pollinator friendly  Organisations with site networks on public land to manage these in a pollinator-friendly way

Target 2.8	Complete policy investigations
Target 2.9	Strengthen links between the AIPP and other national initiatives
Target 2.10	Track changes in pollinators on public land
OBJECTIVE 3	Making private land pollinator friendly
Target 3.1	Increase the number of gardens that are pollinator friendly
Target 3.2	Increase the network of AIPP business supporters
Target 3.3	Increase the number of sports clubs that are pollinator friendly
Target 3.4	Increase the number of faith communities that are pollinator friendly
Target 3.5	Increase the number of Group Water Schemes sites that are pollinator friendly
Target 3.6	Track changes in pollinators on private land
OBJECTIVE 4	All-Ireland Honeybee Strategy
Target 4.1	Education and Knowledge Transfer
Target 4.2	Communication
Target 4.3	Surveillance and Biosecurity
Target 4.4	Conservation of the native honoupon strain. Anis multipara multipara
Target 4.4	Conservation of the native honeybee strain, Apis mellifera mellifera
Target 4.5	Data Sharing
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Target 4.5	Data Sharing
Target 4.5	Data Sharing
Target 4.5 Target 4.6	Data Sharing Tracking progress
Target 4.5 Target 4.6 OBJECTIVE 5	Data Sharing Tracking progress  Conserving rare pollinators
Target 4.5 Target 4.6 OBJECTIVE 5 Target 5.1	Data Sharing Tracking progress  Conserving rare pollinators  Ensure rare pollinators are protected by legislation where appropriate
Target 4.5 Target 4.6  OBJECTIVE 5 Target 5.1 Target 5.2	Data Sharing Tracking progress  Conserving rare pollinators  Ensure rare pollinators are protected by legislation where appropriate Raise awareness of rare pollinators  Publish best practice information on protecting rare pollinators  Publish and update All-Ireland conservation assessments for pollinating
Target 4.5 Target 4.6  OBJECTIVE 5 Target 5.1 Target 5.2 Target 5.3 Target 5.4	Data Sharing Tracking progress  Conserving rare pollinators  Ensure rare pollinators are protected by legislation where appropriate Raise awareness of rare pollinators  Publish best practice information on protecting rare pollinators  Publish and update All-Ireland conservation assessments for pollinating groups (Red Lists)
Target 4.5 Target 4.6  OBJECTIVE 5 Target 5.1 Target 5.2 Target 5.3	Data Sharing Tracking progress  Conserving rare pollinators  Ensure rare pollinators are protected by legislation where appropriate Raise awareness of rare pollinators  Publish best practice information on protecting rare pollinators  Publish and update All-Ireland conservation assessments for pollinating
Target 4.5 Target 4.6  OBJECTIVE 5 Target 5.1 Target 5.2 Target 5.3 Target 5.4  Target 5.5	Tracking progress  Conserving rare pollinators  Ensure rare pollinators are protected by legislation where appropriate  Raise awareness of rare pollinators  Publish best practice information on protecting rare pollinators  Publish and update All-Ireland conservation assessments for pollinating groups (Red Lists)  Track change in rare pollinators
Target 4.5 Target 4.6  OBJECTIVE 5 Target 5.1 Target 5.2 Target 5.3 Target 5.4  Target 5.5  OBJECTIVE 6	Tracking progress  Conserving rare pollinators  Ensure rare pollinators are protected by legislation where appropriate  Raise awareness of rare pollinators  Publish best practice information on protecting rare pollinators  Publish and update All-Ireland conservation assessments for pollinating groups (Red Lists)  Track change in rare pollinators  Strategic coordination of the Plan
Target 4.5 Target 4.6  OBJECTIVE 5 Target 5.1 Target 5.2 Target 5.3 Target 5.4  Target 5.5  OBJECTIVE 6 Target 6.1	Tracking progress  Conserving rare pollinators  Ensure rare pollinators are protected by legislation where appropriate  Raise awareness of rare pollinators  Publish best practice information on protecting rare pollinators  Publish and update All-Ireland conservation assessments for pollinating groups (Red Lists)  Track change in rare pollinators  Strategic coordination of the Plan  General awareness raising
Target 4.5 Target 4.6  OBJECTIVE 5 Target 5.1 Target 5.2 Target 5.3 Target 5.4  Target 5.5  OBJECTIVE 6 Target 6.1 Target 6.2	Tracking progress  Conserving rare pollinators  Ensure rare pollinators are protected by legislation where appropriate  Raise awareness of rare pollinators  Publish best practice information on protecting rare pollinators  Publish and update All-Ireland conservation assessments for pollinating groups (Red Lists)  Track change in rare pollinators  Strategic coordination of the Plan  General awareness raising  Researching the evidence base for action
Target 4.5 Target 4.6  OBJECTIVE 5 Target 5.1 Target 5.2 Target 5.3 Target 5.4  Target 5.5  OBJECTIVE 6 Target 6.1 Target 6.2 Target 6.3	Tracking progress  Conserving rare pollinators  Ensure rare pollinators are protected by legislation where appropriate  Raise awareness of rare pollinators  Publish best practice information on protecting rare pollinators  Publish and update All-Ireland conservation assessments for pollinating groups (Red Lists)  Track change in rare pollinators  Strategic coordination of the Plan  General awareness raising  Researching the evidence base for action  Establishment and maintenance of supporting databases
Target 4.5 Target 4.6  OBJECTIVE 5 Target 5.1 Target 5.2 Target 5.3 Target 5.4  Target 5.5  OBJECTIVE 6 Target 6.1 Target 6.2	Tracking progress  Conserving rare pollinators  Ensure rare pollinators are protected by legislation where appropriate  Raise awareness of rare pollinators  Publish best practice information on protecting rare pollinators  Publish and update All-Ireland conservation assessments for pollinating groups (Red Lists)  Track change in rare pollinators  Strategic coordination of the Plan  General awareness raising  Researching the evidence base for action

## OBJECTIVE

Making farmland pollinator friendly

#### Farmland targets for 2021-2025:

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

TARGET 1.2: Encourage the sustainable use of agricultural pesticides (insecticides, fungicides, and

herbicides)

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

TARGET 1.4 Raise awareness and celebrate pollinator diversity on farmland

TARGET 1.5 Track changes in pollinators on farmland



Funding: Full delivery of this objective will require a dedicated AIPP Farmland Project Officer. Initial funding for this post has been agreed with the Department of Agriculture, Food and the Marine (DAFM).

It is assumed that organisations who accept responsibility for an action will also accept funding responsibility. Actions that require additional funding are highlighted.

## Target 1.1

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

1.1	Action	Progress measure	Responsibility
	1 Incorporate relevant evidence-based pollinator- friendly actions and prescriptions into agricultural and agri-environment schemes in Republic of Ireland (RoI).	<ul> <li>Incorporation of pollinator conservation actions into agrienvironment schemes</li> <li>Uptake by farmers</li> </ul>	Department of Agriculture, Food and the Marine (DAFM)
	2 Incorporate relevant evidence-based pollinator- friendly actions and prescriptions into existing agricultural and agri- environment schemes in Northern Ireland (NI).	<ul> <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)
	<b>3</b> Encourage more organic farming (which has been shown to support more pollinators).	> Participation in the Organic Farming Scheme	DAFM
	<b>4</b> Establish a network of stakeholders, including agri-businesses who agree to manage their own farms or test sites in a pollinatorfriendly way, e.g. DAFM, AFBI, individual agri-businesses.	<ul> <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



## Target 1.2

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

1.2	Action	Progress measure	Responsibility
	<b>5</b> Encourage the responsible and sustainable use of pesticides (insecticides, herbicides and fungicides) in Rol.	> Through the National Action Plan for the Sustainable Use of Pesticides, encourage farmers to minimise the impact of pesticides on pollinators	DAFM
	<b>6</b> Encourage the responsible and sustainable use of pesticides (insecticides, herbicides and fungicides) in NI.	<ul> <li>&gt; 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>&gt; Support the UK-wide Voluntary Initiative on Promoting Responsible Pesticide Use</li> </ul>	DAERA/Agri-Food and Biosciences Institute (AFBI) Ulster Farmers' Union (UFU)
	<b>7</b> Summarise and publish annual trends in agricultural pesticide use across the island.	<ul> <li>&gt; Summarised trends published for Rol</li> <li>&gt; Summarised trends published for NI</li> </ul>	DAFM and AFBI

## Target 1.3

Provide clear information and training on pollinators to the farming community

1.3	Action	Progress measure	Responsibility
	<b>8</b> Establish an All-Ireland farming subgroup to advise and steer on pollinator actions for farmland from the farmers' perspective.	<ul> <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
	<b>9</b> Provide comprehensive and freely available online resources for the farming sector at www.pollinators. ie/farmland	<ul> <li>&gt; Up-to-date resources provided on the website</li> <li>&gt; To include: evidence-based guideline documents, flyers, videos, blogs, webinars, presentations, case studies, animations</li> <li>&gt; All 2015–2020 resources to be updated where necessary</li> </ul>	AIPP Farmland Officer
	<b>10</b> Establish a knowledge exchange programme for farmers on protecting pollinators.	> Knowledge exchange programme developed and rolled out > Farmer participation	DAFM, Teagasc, College of Agriculture, Food and Rural Enterprise (CAFRE)



Action	Progress measure	Responsibility
<b>11</b> Agricultural colleges to support training and awareness-raising in Rol.	<ul> <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>	Teagasc
<b>12</b> Agricultural colleges to support training and awareness-raising in NI.	<ul> <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
<b>13.</b> Farming organisations and agricultural networks to promote pollinator-friendly actions to their members.	<ul> <li>&gt; Partner organisations to promote pollinator-friendly actions</li> <li>&gt; Those listed under responsibility agreed to this action at time of publication</li> </ul>	UFU, Irish Organic Association, Organic Trust, others to agree
<b>14</b> Publish a guideline document outlining evidence-based pollinator actions for forestry.	<ul> <li>&gt; Publication of guidelines for forestry</li> <li>&gt; Dissemination to all relevant bodies</li> </ul>	AIPP Farmland Officer and relevant partners
15 Publish a guideline document that links pollinator/biodiversity actions to their carbon/climate benefits on farmland.	<ul> <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
<b>16</b> Publish other new evidence-based pollinator guideline documents for the farming sector as necessary.	<ul> <li>Investigate which guideline documents are required and prioritise a programme for their development. May include, but not limited to:</li> <li>Pollinator-friendly management of stud farms (equine industry)</li> <li>Integration of pollinator-friendly guidelines into the Agricultural Catchments Programme</li> <li>Development of pollinator-friendly guidelines for archaeological sites on farmland</li> </ul>	AIPP Farmland Officer and relevant partners
<b>17</b> Promote best practice in the use of imported bumblebee colonies.	> Relevant organisations to disseminate the evidence-based guideline document: Guidelines for users of imported bumblebee colonies (AIPP, 2020)	Teagasc, DAERA, Bord Bia
<b>18</b> Promote the AIPP at key agricultural events.	<ul> <li>Attendance at the National Ploughing Championship, Rol</li> <li>Attendance at the Balmoral Show, NI</li> <li>Attendance at other relevant agricultural events</li> </ul>	AIPP Farmland Officer



## Target 1.4

## Raise awareness and celebrate pollinator diversity on farmland

1	Action	Progress measure	Responsibility
	19 Investigate the potential for an All-Ireland farmland meadow competition.	<ul> <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 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>	Coordinated by AIPP Farmland Officer  Needs a funding body/sponsor
	<b>20</b> Investigate the potential for an annual May Hedgerow Festival.	<ul> <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>	Coordinated by AIPP Farmland Officer Needs a funding body/sponsor
	<b>21.</b> Run a campaign to raise awareness and celebrate pollinator diversity on farmland.	<ul> <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 European Innovation Partnership)</li> </ul>	National Biodiversity Data Centre



## Target 1.5

## Track changes in pollinators on farmland

1.5	Action	Progress measure	Responsibility
	<b>22</b> Publish an annual review of farmland actions.	<ul> <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
	<b>23</b> Track progress within the farmland sector.	<ul> <li>Open up the online mapping system Actions for Pollinators to the farmland sector https://pollinators.biodiversityireland.ie/</li> <li>Number of farms logging their pollinator-friendly actions</li> </ul>	AIPP Farmland Officer
	<b>24</b> Monitor pollinators across a network of farmland sites.	<ul> <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
	<b>25</b> Publish an annual farmland pollinator index.	> Based on the annual data from a National Pollinator Monitoring Scheme, publish annual trends as a farmland pollinator index	National Pollinator Monitoring Scheme
	<b>26</b> Develop a Citizen Science recording scheme for farmland.	<ul> <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)



## OBJECTIVE



# Making public land pollinator friendly

#### Public land targets for 2021-2025:

TARGET 2.1	Increase the area of Council land that is managed in a pollinator-friendly way
TARGET 2.2	Make transport corridors more pollinator friendly
TARGET 2.3	Make schools and educational properties more pollinator friendly
TARGET 2.4	Organisations with site networks on public land to manage these in a pollinator-friendly way
TARGET 2.5	Make local communities more pollinator friendly
TARGET 2.6	Manage protected land in a pollinator- friendly way where appropriate
TARGET 2.7	Make healthcare sites more pollinator friendly
TARGET 2.8	Complete policy investigations
TARGET 2.9	Strengthen links between the AIPP and other national initiatives
TARGET 2.10	Track changes in pollinators on public land



Funding: Full delivery of objectives two and three will require a dedicated AIPP Communities Officer. Initial funding for this post has been agreed with the National Parks and Wildlife Service (NPWS).

It is assumed that organisations who accept responsibility for an action also accept funding responsibility. Actions that require additional funding are highlighted.

## Target 2.1

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

2.1	Action	Progress measure	Responsibility
	<b>27</b> Increase the number of Councils who formally agree to partner with the Plan and take actions.	> 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.	AIPP Communities Officer
	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> <li>&gt; 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>&gt; 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
	29 Provide comprehensive and freely available online resources for the Council sector at www. pollinators.ie/councils	<ul> <li>&gt; Up-to-date resources provided on the website. To include: evidence-based guideline documents, flyers, videos, blogs, webinars, presentations, case studies, animations</li> <li>&gt; All 2015–2020 resources to be updated where necessary in consultation with Councils</li> <li>&gt; 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>&gt; Promote new and innovative ways for Councils to engage with the AIPP, e.g. Promotion of the successful Midleton Pollinator Plan 2020 (Cork CoCo)</li> </ul>	AIPP Communities Officer



2.1	Action	Progress measure	Responsibility
	<b>30</b> Provide an ongoing knowledge exchange programme for Council staff.	<ul> <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

**31** Increase the number of Regional Assemblies who agree to partner with the Plan and support implementation within local government, where appropriate.

- > There are three Regional Assemblies in RoI. Each to be approached on supporting the objectives of the AIPP 2021-2025.
- 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.
- > 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)

The Eastern and Midland Regional Assembly, others to agree

**32** Develop an All-Ireland 'Pollinator Trail' across public land, composed of a network of sites demonstrating high quality pollinator/biodiversity-friendly management.

- > AIPP to develop criteria for the initiative
- > Local Authorities to identify suitable publicly owned sites to form part of a trail.
- > 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
- > Begin with Council sites, but develop a roadmap to expand this to other sectors, e.g. local community examples
- 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
- > Increase in the number of sites within the Trail

Coordinated by Heritage and Biodiversity Officer network and AIPP Communities Officer

Requires resources for branding



Early bumblebee, Bombus pratorum © Janet Whelehan

Action	Progress measure	Responsibility
<b>33</b> Encourage the development of 'Pollinator-friendly Parks' on public land, i.e. parks that demonstrate a wide range of pollinator-friendly actions.	<ul> <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-economically disadvantaged areas.</li> </ul>	Coordinated by Heritage and Biodiversity Officer network, other relevant sections of Councils & AIPP Communities Officer
<b>34</b> Promote pollinator awards for Council-owned/managed land.	<ul> <li>Continue to promote and support the pollinator award in the An Taisce Green Flag for Parks initiative in Rol</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. (Rol and NI)</li> </ul>	An Taisce, AIPP Communities Officer, other partners as relevant

## Make transport corridors more pollinator friendly

2.2	Action	Progress measure	Responsibility
	<b>35</b> Provide comprehensive and freely available online resources for Transport Authorities at www.pollinators. ie/transportcorridors	<ul> <li>&gt; Up-to-date resources provided on AIPP website To include: evidence-based guideline documents, flyers, videos, blogs, webinars, presentations, case studies, animations</li> <li>&gt; All 2015-2020 resources to be updated where necessary</li> <li>&gt; Toolkit to be expanded to meet needs, under the advice of Transport Authority partners.</li> </ul>	AIPP Communities Officer
	<b>36</b> TII to promote pollinator- friendly management of the national road network in Rol.	<ul> <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)



2.2	Action	Progress measure	Responsibility
	37 Department for Infrastructure NI to promote pollinator-friendly management of the national road network in NI.	<ul> <li>&gt; Review Dfl Roads' environmental policies to promote pollinator-friendly practices and to encourage their inclusion on road schemes, where practicable</li> <li>&gt; 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>&gt; Design of roadside planting on Strategic Road Projects to incorporate pollinator-friendly plants</li> <li>&gt; Areas of pollinator-friendly management to be identified and recorded</li> <li>&gt; Consider alternatives to the use of pesticides on the network</li> <li>&gt; Continue to control and manage the spread of invasive plant species</li> </ul>	Department for Infrastructure NI
	<b>38</b> larnród Éireann to promote pollinator-friendly management of the national rail network in Rol.	<ul> <li>&gt; Improvement of grassland management and pollinator-friendly planting across all stations</li> <li>&gt; Grass-cutting frequency to move from condition-based maintenance to a specified programme, i.e. reduced number of cuts per year</li> <li>&gt; All new landscaping planting specifications to incorporate AIPP pollinator-friendly planting code</li> <li>&gt; Areas of pollinator-friendly management mapped on GIS</li> <li>&gt; Reduction in the use of pesticides on the network. Commit to trialing alternatives to glyphosate in station carparks and platforms</li> <li>&gt; Control and manage the spread of invasive plant species</li> <li>&gt; Creation of pollinator-friendly habitat on non-operational lands</li> </ul>	Iarnród Éireann
	<b>39</b> Translink to promote pollinator-friendly management of the national public transport network in NI.	<ul> <li>&gt; Promote the message of the All-Ireland Pollinator Plan 2021-2025, and associated guidelines across Translink, stakeholders and contractors</li> <li>&gt; Ensure increasing pollinators is a key facet within the proposed new Translink Biodiversity Strategy         <ul> <li>including the improvement of grassland management and pollinator-friendly planting across the Translink estate</li> </ul> </li> <li>&gt; Develop a suite of Translink Biodiversity Information sheets focused on pollinators</li> <li>&gt; All new landscaping planting specifications to incorporate AIPP pollinator-friendly planting code</li> <li>&gt; Areas of pollinator-friendly management mapped on GIS</li> <li>&gt; Continue to work in partnership with employees, contractors, local communities, and environmental NGOs to promote pollinator-friendly planting.</li> </ul>	Translink



2.2	Action	Progress measure	Responsibility
	<b>40</b> Waterways Ireland to promote pollinator-friendly management of the national waterway towpath network.	<ul> <li>&gt; Promote the message of the All-Ireland Pollinator Plan 2021-2025 within Waterways Ireland and with stakeholders.</li> <li>&gt; Continued rollout of biodiversity-rich grassland management as standalone and through community partnerships.</li> <li>&gt; Grass-cutting frequency to favour pollinators, i.e. reduced number of cuts per year.</li> <li>&gt; Areas of pollinator-friendly management mapped on the AIPP GIS.</li> <li>&gt; Control and manage the spread of invasive plant species.</li> <li>&gt; Continue to ensure biodiversity and pollinator actions are core elements of the new Waterways Ireland Heritage Plan 2030.</li> <li>&gt; Support grant applications that support biodiversity.</li> </ul>	Waterways Ireland
	<b>41</b> Promote pollinator-friendly management of future transport routes, e.g. future greenway cycle routes.	<ul> <li>&gt; Guideline document (Pollinator-friendly management of Transport Corridors 2019) to be applied to new projects as relevant, e.g., MetroLink and all future light rail projects</li> <li>&gt; Continue to reach out to new partners and to promote the adoption of the guideline document for new transport routes.</li> <li>&gt; Develop additional resources around pollinator-friendly management of greenways and new cycle routes</li> </ul>	AIPP Communities Officer and relevant partners

## Make schools and educational properties more pollinator friendly

2.3	Action	Progress measure	Responsibility
	<b>42</b> Provide comprehensive and freely available online resources for Schools at www.pollinators. ie/schools	<ul> <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> <li>All 2015–2020 resources to be updated where necessary.</li> </ul>	AIPP Communities Officer
	<b>43</b> Green-Schools to encourage pollinator-friendly management of schools in Rol.	<ul> <li>&gt; Pollinators to continue to be promoted within the Green-Schools Initiative</li> <li>&gt; Increase in the numbers of students, teachers, principals and caretakers exposed to pollinator information</li> <li>&gt; Investigate the possibility of schools being awarded a pollinator award upon production and implementation of a School Pollinator Plan.</li> </ul>	Green-Schools



2.3	Action	Progress measure	Responsibility
	<b>44</b> Eco-Schools to encourage pollinator-friendly management of schools in NI.	<ul> <li>&gt; Pollinators to continue to be promoted within the Eco-Schools Initiative</li> <li>&gt; Increase in the numbers of students, teachers, principals and caretakers exposed to pollinator information</li> <li>&gt; Investigate the possibility of schools being awarded a pollinator award upon production and implementation of a School Pollinator Plan.</li> </ul>	Eco-Schools
	<b>45</b> Run a 'Pitches for pollinators' summer campaign to leave school pitches unmown during the summer holidays to provide food for pollinators.	<ul> <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> <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>	AIPP Communities Officer
	<b>46</b> Green-Campus to encourage pollinator-friendly management of third level campuses across the island.	<ul> <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

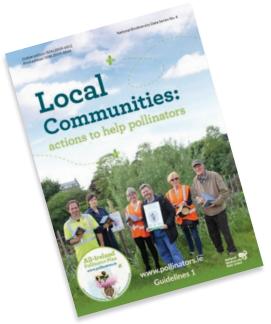
## Organisations with site networks on public land to manage these in a pollinator-friendly way

4	Action	Progress measure	Responsibility
	<b>47</b> Maintain a network of partner organisations who agree to manage their public site networks in a pollinatorfriendly way.	<ul> <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> <li>Expand the network to bring in new partners where possible</li> </ul>	AIPP Communitie Officer
	<b>48</b> BirdWatch Ireland to adopt pollinator-friendly management within their reserves, where appropriate.	<ul> <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 Irelan

Action	Progress measure	Responsibility
<b>49</b> Bord na Móna to adopt pollinator-friendly management across site network, where appropriate.	<ul> <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)
<b>50</b> Coillte to adopt pollinator- friendly management across site network, where appropriate.	> Number of participating sites	Coillte
<b>51</b> Environmental Protection Agency to adopt pollinator- friendly management across site network, where appropriate.	> Number of participating sites	Environmental Protection Agency (EPA)
<b>52</b> Electricity Supply Board to adopt pollinator-friendly management across site network, where appropriate.	<ul> <li>Number of participating sites</li> <li>Delivery of pollinator awareness workshops to ESB staff</li> </ul>	Electricity Supply Board (ESB)
<b>53</b> Gas Networks Ireland to adopt pollinator-friendly management across site network, where appropriate.	<ul> <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 biodiversity guideline procedures</li> </ul>	Gas Networks Ireland
<b>54</b> Irish Water to adopt pollinator-friendly management across site network, where appropriate.	> Number of participating sites	Irish Water
<b>55</b> National Trust to adopt pollinator-friendly management across network of sites and properties, where appropriate.	<ul> <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



Action	Progress measure	Responsibility
<b>56</b> Northern Ireland Water to adopt pollinator-friendly management across site network, where appropriate.	> Number of participating sites	Northern Ireland Water
<b>57</b> Encouragement and, where appropriate, adoption of pollinator-friendly management on NPWS property, including Statutory Nature Reserves and National Parks.	> Number of participating sites	National Parks and Wildlife Service (NPWS)
<b>58</b> Office of Public Works to adopt pollinator-friendly management across site network, where appropriate.	<ul> <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)
<b>59</b> The Royal Society for the Protection of Birds (NI) to adopt pollinator-friendly management within their reserves, where appropriate.	<ul> <li>&gt; Undertake monitoring through the Bumblebee Monitoring Scheme at key reserves</li> <li>&gt; Maintain habitats for nesting bees</li> <li>&gt; Incorporate pollinators into reserve management plans (where appropriate and when reviewed)</li> </ul>	The Royal Society for the Protection of Birds (RSPB NI)
60 The Courts Service of Ireland to adopt pollinator-friendly management across site network, where appropriate.	> Number of participating sites	The Courts Service of Ireland





## Make local communities more pollinator friendly

5	Action	Progress measure	Responsibility
	<b>61</b> Provide comprehensive and freely available online resources for Local Communities at www. pollinators.ie/localcommunities	<ul> <li>&gt; Up-to-date resources provided on AIPP website. To include: evidence-based guideline documents, flyers, videos, blogs, webinars, presentations, case studies, animations</li> <li>&gt; All 2015-2020 resources to be updated where necessary</li> </ul>	AIPP Communities Officer
	<b>62</b> Promote pollinator-friendly actions within the Tidy Towns network.	<ul> <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
	63 Support Tidy Towns groups to be pollinator friendly through the Local Authority Pollinator Award in the National Tidy Towns competition.	<ul> <li>Continue to annually fund and administer the special pollinator award in the national Tidy Towns competition</li> <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>	Heritage and Biodiversity Officer network, with support from AIPP Communities Officer
	<b>64</b> Promote pollinator-friendly actions within the Keep Northern Ireland Beautiful network.	<ul> <li>Continue to promote pollinator-friendly actions within the Keep Northern Ireland Beautiful initiative, as appropriate</li> <li>Investigate possible mechanisms for a pollinator award within the Live Here Love Here Volunteer Award</li> </ul>	Keep Northern Ireland Beautiful
	<b>65</b> Deliver community-based training on Ireland's bees, bee monitoring and bee-friendly habitat creation through the IWT People for Bees initiative.	<ul> <li>Continue to provide introductory training to support local communities and members of the public in helping pollinators</li> <li>Number of workshops delivered</li> </ul>	Irish Wildlife Trust (IWT)
	<b>66</b> Support additional communities in coming together to protect pollinators.	> Explore the possibility of using the ChangeX platform to support wider implementation of the Plan at the community level	ChangeX
	<b>67</b> Better promote pollinator-friendly land management to Residents' Associations.	> Dedicated resources for Residents' Associations developed and added to AIPP website	AIPP Communities Officer



2.5	Action	Progress measure	Responsibility
	<b>68</b> Promote the AIPP to other community volunteer networks.	<ul> <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, University of the Third Age, Volunteer Now, etc.</li> </ul>	AIPP Communities Officer
	<b>69</b> Recognise those towns/ villages that are helping pollinators through eliminating pesticide use.	> Maintain an online list of towns/villages that have decided to go pesticide free (herbicide, fungicide and insecticide)	AIPP Communities Officer

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

2.6	Action	Progress measure	Responsibility
	<b>70</b> 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> <li>&gt; Uptake where appropriate on a site-by-site basis</li> <li>&gt; Develop demonstration/example sites on NIEA properties and use for education and knowledge exchange</li> </ul>	Northern Ireland Environment Agency (NIEA)
	<b>71</b> Incorporate pollinator-friendly management on designated land in Natura 2000 and nationally designated sites in Rol.	> Uptake where appropriate on a site-by-site basis	National Parks and Wildlife Service (NPWS)

## Target 2.7

## Make healthcare sites more pollinator friendly

2.7	Action	Progress measure	Responsibility
	<b>72</b> Publish guidelines for pollinator-friendly management of hospital grounds, clinics and nursing homes.	<ul> <li>&gt; Publication of guidelines that also stress the additional benefits of pollinator actions to human health and wellbeing</li> <li>&gt; Dissemination to all relevant bodies</li> <li>&gt; Develop a new section of the website to provide resources for healthcare sites</li> </ul>	AIPP Communities Officer
	<b>73</b> Investigate a potential nature campaign for healthcare sites.	> Discuss with relevant bodies the possibility of a pilot scheme	AIPP Communities Officer



#### Complete policy investigations

2.8	Action	Progress measure	Responsibility
	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> <li>&gt; Publish as a scoping study</li> <li>&gt; Include a public consultation element</li> </ul>	AIPP team and relevant partners
	<b>75</b> Create a roadmap towards eliminating pesticides on certain public lands (schools/hospitals/playgrounds).	<ul> <li>&gt; Critically review the evidence-base for this approach</li> <li>&gt; Publish roadmap in collaboration with relevant partners</li> <li>&gt; 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

## Target 2.9

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

9	Action	Progress measure	Responsibility
	<b>76</b> Strengthen links between the AIPP and Climate Adaptation Plans.	<ul> <li>&gt; 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> <li>&gt; 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>&gt; Liaise with Climate Action Regional Offices (CARO) and link with Local Authority Climate Action Officers.</li> </ul>	AIPP team and relevant partners
	<b>77</b> Explore and strengthen links between the AIPP and Green Infrastructure Planning.	<ul> <li>&gt; Publication of a guideline document linking pollinator/ biodiversity actions to their Green Infrastructure benefits</li> <li>&gt; 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

2.9	Action	Progress measure	Responsibility
	<b>78</b> Strengthen links between the AIPP and health and wellbeing initiatives	<ul> <li>&gt; Publication of a guideline document linking pollinator/ biodiversity actions to their health and wellbeing benefits</li> <li>&gt; Repackage pollinator actions in this context so that they can easily slot into Local Authority community wellbeing initiatives</li> <li>&gt; Establish a working relationship with relevant bodies such as Healthy Ireland, Sports Ireland</li> </ul>	AIPP team and relevant partners
	<b>79</b> Strengthen links between the AIPP and existing tree planting initiatives.	<ul> <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

## Track changes in pollinators on public land

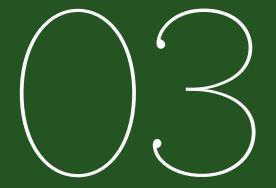
10	Action	Progress measure	Responsibility
	<b>80</b> Publish an annual review of public land actions.	<ul> <li>Development of an annual review outlining progress within the actions under this objective</li> <li>Publication on AIPP website annually each December</li> </ul>	Coordinated by AIPP Communities Officer
	<b>81</b> Track progress within the public sector.	> Number of public land sites logging their pollinator-friendly actions on Actions for Pollinators mapping system, https://pollinators.biodiversityireland.ie/.	Coordinated by AIPP Communities Officer
	<b>82</b> Monitor pollinators across a network of public sites.	<ul> <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
	83 Continue to manage and support Citizen Science monitoring schemes that track changes in pollinators across all land types, including public land.	<ul> <li>Increase the number of Bumblebee Monitoring Scheme transects being carried out on public 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 public 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

### 66

We are at the start of the journey. As we look forward to the next five years and delivering the 186 actions in this 2021-2025 Plan, we know we will need to engage more, monitor more, and manage more land for biodiversity.



# OBJECTIVE



# Making private land pollinator friendly

### Private land targets for 2021-2025:

**TARGET 3.1** Increase the number of gardens that are pollinator friendly

TARGET 3.2 Increase the network of AIPP business supporters

TARGET 3.3 Increase the number of sports clubs that are pollinator friendly

TARGET 3.4 Increase the number of faith communities that are pollinator friendly

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

TARGET 3.6 Track changes in pollinators on private land



Funding: Full delivery of this objective will require additional resources – in particular, to support Target 3.2. Bord Bia have committed to initial funding to support the network of business supporters in taking action for pollinators and biodiversity.

It is assumed that organisations who accept responsibility for an action also accept funding responsibility. Actions that require additional funding are highlighted.

# Target 3.1

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

3.1	Action	Progress measure	Responsibility
	<b>84</b> Provide comprehensive and freely available online resources for gardeners at https://pollinators.ie/gardens/	<ul> <li>&gt; Up-to-date resources provided on AIPP website</li> <li>&gt; To include: evidence-based guideline documents, flyers, videos, blogs, webinars, presentations, case studies, animations</li> <li>&gt; All 2015-2020 resources to be updated where necessary</li> <li>&gt; Investigate sustainable signage options that the public can use to indicate that they are making their garden pollinator friendly.</li> </ul>	AIPP Communities Officer
	<b>85</b> An Taisce to promote pollinator-friendly garden actions within their Green Communities network.	<ul> <li>&gt; Promotion to members</li> <li>&gt; Uptake by community groups</li> </ul>	An Taisce
	<b>86</b> Community Gardens Ireland to promote pollinator-friendly garden actions within their network.	<ul><li>&gt; Promotion to members</li><li>&gt; Uptake by groups</li></ul>	Community Gardens Ireland
	<b>87</b> GIY to promote pollinator-friendly garden actions within their network.	<ul> <li>&gt; Promotion to members</li> <li>&gt; Actions adopted at GIY HQ and used for demonstration purposes</li> <li>&gt; Training courses offered at GIY HQ as appropriate</li> </ul>	Grow It Yourself (GIY)
	<b>88</b> Raise awareness to discourage the importation of wild pollinators into gardens, e.g. Red Mason Bee.	<ul> <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



# Target 3.2

## Increase the network of AIPP business supporters

!	Action	Progress measure	Responsibility
	<b>89</b> Fully support and grow the network of business supporters. Currently stands at 278 (end 2020).	<ul> <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 (funding dependent)
	<b>90</b> Provide comprehensive and freely available online resources for businesses at https://pollinators.ie/businesses/	<ul> <li>&gt; Up-to-date resources provided on AIPP website</li> <li>&gt; To include: evidence-based guideline documents, flyers, videos, blogs, webinars, presentations, case studies, animations</li> <li>&gt; All 2015–2020 resources to be updated where necessary</li> </ul>	AIPP business officer (funding dependent)
	<b>91</b> Disseminate relevant resources to the business community through existing networks.	> Dissemination of information through existing networks	Bord Bia, Business in the Community
	<b>92</b> Establish a dedicated framework for Garden Centre supporters.	<ul> <li>Establish framework/charter whereby garden centres 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>	AIPP business officer (funding dependent)
	<b>93</b> Publish new guideline documents with evidence-based pollinator actions that are industry-specific.	<ul> <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





# Target 3.3

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

3.3	Action	Progress measure	Responsibility
	<b>94</b> Provide comprehensive and freely available online resources for Sports Clubs at www.pollinators.ie/sportsclubs	<ul> <li>Guideline document (Pollinator-friendly management of sports clubs, 2020) promoted to clubs</li> <li>Promotion and dissemination</li> </ul>	AIPP Communities Officer
	95 Golf Course Superintendents Association Of Ireland (GCSAI) to encourage golf courses to become more pollinator friendly.	<ul> <li>Guideline document (Pollinator-friendly management of golf courses, 2019) promoted to network</li> <li>Uptake by golf courses</li> </ul>	GCSAI
	<b>96</b> Gaelic Athletic Association (GAA) to encourage clubs to become more pollinator friendly.	<ul> <li>Clubs encouraged to become more pollinator-friendly within the Green Club programme</li> <li>Uptake by clubs</li> </ul>	GAA

# Target 3.4

### Increase the number of faith communities that are pollinator friendly

3.4	Action	Progress measure	Responsibility
	<b>97</b> Eco Congregation Ireland to promote pollinator-friendly actions.	> Guideline document (Faith Communities: actions to help pollinators, 2018) promoted to members	Eco Congregation Ireland
	<b>98</b> Provide freely available online resources for faith communities at www. pollinators.ie/faithcommunities	<ul> <li>&gt; Up-to-date resources provided on AIPP website. To include: evidence-based guideline documents, flyers, videos, blogs, webinars, presentations, case studies, animations</li> <li>&gt; All 2015–2020 resources to be updated where necessary.</li> </ul>	AIPP Communities Officer
	<b>99</b> Publish a guideline document outlining evidencebased pollinator actions for graveyards.	<ul> <li>Development of guideline document</li> <li>Publication and dissemination</li> <li>Uptake by sites.</li> </ul>	AIPP Communities Officer & partner organisations



# Target 3.5

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

3.5	Action	Progress measure	Responsibility
	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> <li>&gt; Guideline document (Pollinator-friendly management of Group Water Scheme Sites, 2018) distributed to Schemes</li> <li>&gt; Uptake by Schemes</li> <li>&gt; 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>&gt; Establishment of a dedicated biodiversity category in a future Group Water Scheme excellence awards programme</li> </ul>	National Federation of Group Water Schemes (NFGWS)

# Target 3.6

### Track changes in pollinators on private land

Action	Progress measure	Responsibility
<b>101</b> Publish an annual review of private land actions.	<ul> <li>Development of an annual review outlining progress within the actions under this objective</li> <li>Publication on the website annually each December</li> </ul>	Coordinated by AIPP Communities Officer
<b>102</b> Track progress within the garden sector.	> Number of garden sites logged on the mapping system Actions for Pollinators https://pollinators.biodiversityireland.ie/.	Coordinated by AIPP Communities Officer
<b>103</b> Track progress within the business sector.	<ul> <li>&gt; Development of an annual report on the actions taken by the business supporter network</li> <li>&gt; Publication of this annual report on AIPP website each December</li> <li>&gt; Number of business sites logged on the mapping system Actions for Pollinators https://pollinators.biodiversityireland.ie/</li> </ul>	Coordinated by AIPP Business Officer (funding dependent)
<b>104</b> Track progress within the sports club sector.	> Number of sports club sites logged on the mapping system Actions for Pollinators https://pollinators.biodiversityireland.ie/	Coordinated by AIPP Communities



6	Action	Progress measure	Responsibility
	<b>105</b> Track progress within the faith community sector.	> Number of faith community sites logged on the mapping system Actions for Pollinators https://pollinators.biodiversityireland.ie/	Coordinated by AIPP Communities Officer
	<b>106</b> Track progress across Group Water Scheme sites.	> Number of Group Water Scheme sites logged on the mapping system Actions for Pollinators https://pollinators.biodiversityireland.ie/	Coordinated by AIPP Communities Officer
	<b>107</b> Continue to manage and support Citizen Science monitoring schemes that track changes in pollinators across all land types, including private land.	<ul> <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



Grey Mining Bee, Andrena cineraria © Lill Dunne

# OBJECTIVE

# All-Ireland Honeybee Strategy

### **Targets for 2021-2025:**

TARGET 4.1 Education and Knowledge Transfer

TARGET 4.2 Communication

TARGET 4.3 Surveillance and Biosecurity

TARGET 4.4 Conservation of the native honeybee

strain, Apis mellifera mellifera

TARGET 4.5 Data Sharing

TARGET 4.6 Tracking progress



The All-Ireland Honeybee Strategy 2021–2025 is a standalone strategy but also slots into the AIPP as objective 4. Annual reporting on the strategy occurs within the broader AIPP framework. However, oversight is provided by the Honeybee Strategy Steering Group, which is distinct from the AIPP Steering Group.

The Honeybee Strategy is intended to be considered in the context of the All-Ireland Pollinator Plan. Honeybees are different to other pollinators in the Plan. They are predominantly farmed, represented by beekeeping organisations and overseen by legislation enacted by DAERA and DAFM. The aim is not therefore conservation of honeybees per se, aside from the Irish black bee, nor economic development of the sector, although arguments could be made for an Irish honey and bee products marketing strategy. Rather, the overarching aims of this strategy are:

- ✓ Honeybees as part of a cohesive pollinator message.
- Healthy honeybees, healthy pollinators.

### All-Ireland Honeybee Strategy Steering Group

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

### Acronmyns

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

## Education and Knowledge Transfer

4.1	Action	Progress measure	Responsibility
	<b>108</b> Conferences used as a means of disseminating good practice to beekeepers.	> Conferences organised and used as a means of disseminating good practice	UBKA, FIBKA, INIB, IBA CLG, NIHBS
	<b>109</b> Expand beekeeping qualification courses to cover other environmental issues, including impacts of beekeeping on native pollinators.	<ul> <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

# Target 4.2

### Communication

1.2	Action	Progress measure	Responsibility
	<b>110</b> Establish a Steering Group to oversee the All-Ireland Honeybee Strategy 2021–2025.	<ul> <li>Honeybee Strategy Steering Group established</li> <li>Twice-yearly meeting to discuss progress and share expertise</li> <li>Group to promote the Strategy.</li> </ul>	Honeybee Strategy Steering Group
	<b>111</b> Beekeeping associations to promote the aims of this strategy and the wider All-Ireland Pollinator Plan to members.	<ul> <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
	112 Honeybee Strategy Steering Group to provide evidence-based guidelines to stakeholders as necessary to ensure healthy honeybees and effective beekeeping.	> Agree communication strategy and provide evidence-based guidelines to relevant organisations as appropriate (e.g. Farming Unions)	Honeybee Strategy Steering Group
	113 Beekeeping associations to continue to promote and support the wider All-Ireland Pollinator Plan in public engagement activities.	> Associations to promote the AIPP as relevant	UBKA, FIBKA, INIB, IBA CLG, NIHBS



## Surveillance and Biosecurity

.3	Action	Progress measure	Responsibility
	<b>114</b> Prepare a paper to establish the need for Honeybee Inspectors in Rol.	> Publication of a paper establishing the need and remit for seasonal bee inspectors to support beekeepers	Honeybee Strategy Steering Group
	115 DAERA to circulate the agreed NI Bee Health Contingency Plan and updated Strategy for the sustainability of the honeybee when completed.	> Plan circulated	DAERA
	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).	> North-South meetings to maximise cooperation	DAFM, DAERA
	<b>117</b> Voluntary registration to be encouraged in Rol prior to new EU legislation, which may make registration compulsory.	> Organisations to actively encourage members to register	FIBKA, IBA CLG, NIHBS, DAFM
	<b>118</b> Voluntary registration to be encouraged in NI through the 'Databees' platform.	> Organisations to actively encourage members to register	UBKA, INIB, NIHBS, DAERA
	<b>119</b> Data on overwintering losses and disease prevalence from the COLOSS survey to be shared at an island-wide scale.	<ul> <li>Information shared across the island</li> <li>Disseminated by beekeeping organisations</li> </ul>	AFBI, DAFM
	120 Honeybee Strategy Steering Group to bring associations together to discuss and agree a common policy on importations.	<ul> <li>Clarify current rules and regulations</li> <li>Agree principles to be published and promoted by Beekeeping Associations</li> </ul>	Honeybee Strategy Steering Group, DAERA, DAFM



4.3	Action	Progress measure	Responsibility
	<b>121</b> Complete and publish all- Ireland pest risk assessments for invasive pests and pathogens of honeybees.	<ul> <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)
	<b>122</b> Investigate the feasibility of a unified approach to managing Foulbrood on the island of Ireland.	<ul> <li>Clarify statutory rules North and South</li> <li>Recognition of the diseases' importance and management options explained</li> <li>Honeybee Strategy Steering Group to agree principles</li> <li>Disease ID sheets made available 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

### Conservation of the native honeybee 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.

4.4	Action	Progress measure	Responsibility
	<b>123</b> NIHBS to continue to promote the conservation of the native Irish Black Bee.	> Continued activities of the NIHBS	NIHBS
	<b>124</b> Beekeeping sector to encourage an education process on the merits of the subspecies/strains of honeybee including the Irish Black Bee.	<ul> <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 Apis mellifera mellifera encouraged where appropriate</li> </ul>	FIBKA, UBKA, INIB, IBA CLG, DAFM, DAERA
	<b>125</b> Publication of an agreed management strategy for Apis mellifera mellifera on the island of Ireland.	> Publication of the strategy. To include development of a roadmap towards the island of Ireland being recognised as a 'stronghold' for Apis mellifera mellifera	NIHBS, NUI Galway



### Data sharing

5	Action	Progress measure	Responsibility
	<b>126</b> DAFM and AFBI to make results of pesticide surveys publicly available.	<ul> <li>Results of pesticide surveys made available in Rol</li> <li>Results of pesticide surveys made available in NI</li> </ul>	AFBI, DAFM
	127 Promote BeeConnected in NI as a mechanism to connect beekeepers and farmers so that beekeepers can be kept informed about spraying events in their vicinity.	<ul> <li>&gt; Beekeeping Associations to encourage members to register</li> <li>&gt; BeeConnected promoted to farmers by the Ulster Farmers</li> <li>Union</li> </ul>	UBKA, INIB, UFU, NIHBS
	<b>128</b> Investigate possible mechanisms linking farmers and beekeepers so that they can be notified of spraying events in Rol.	> Possible mechanisms identified	Honeybee Strategy Steering Group
	<b>129</b> Honeybee Strategy Steering Group to develop a roadmap towards a system to capture hive density per hectad (10km²).	<ul> <li>&gt; Road map developed to:</li> <li>better balance managed and wild pollinator populations across the island</li> <li>enable implementation of alerts and action plans against new pests/pathogens</li> <li>avoid selling non-native honeybees into Voluntary Conservation Areas.</li> <li>&gt; Explore the possibility of testing in one specific region (e.g. Enniskillen)</li> </ul>	Honeybee Strategy Steering Group, UBKA

# Target 4.6

### Data sharing

4.6	Action	Progress measure	Responsibility
	<b>130</b> Publish an annual review	> Annual review published outlining progress against each of	Honeybee Strategy
	of the All-Ireland Honeybee	the actions	Steering Group
	Strategy 2021–2025.	> Annual reviews made available via beekeeping organisation	
		websites.	



# OBJECTIVE

# Conserving rare pollinators

### Targets for 2021-2025:

TARGET 5.1 Ensure rare pollinators are protected by legislation where appropriate

**TARGET 5.2** Raise awareness of rare pollinators

**TARGET 5.3** Publish best practice information on protecting rare pollinators

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

**TARGET 5.5** Track change in rare pollinators



# Target 5.1

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

5.1	Action	Progress measure	Responsibility
	<b>131</b> Protect rare pollinators through the Wildlife Act in Rol when warranted.	> Species added to Schedule 5 of Wildlife Act	National Parks and Wildlife Service (NPWS)
	<b>132</b> Ensure rare pollinators are protected by legislation in NI where appropriate.	> Included on Priority Species list, under The Wildlife and Natural Environment Act	Northern Ireland Environment Agency (NIEA), Centre for Environmental Data and Recording NI (CEDaR)

# Target 5.2

### Raise awareness of rare pollinators

5.2	Action	Progress measure	Responsibility
	133 Work to develop initiatives to assist recovery of the endangered Great Yellow Bumblebee (Bombus distinguendus).	<ul> <li>&gt; Guideline document (Protecting rare pollinators: Great Yellow Bumblebee, 2019) promoted and distributed to all relevant stakeholders</li> <li>&gt; Awareness raising within local communities in remaining Great Yellow Bumblebee strongholds (Mullet Peninsula, Mayo)</li> <li>&gt; Development of a species recovery plan for the Great Yellow Bumblebee</li> <li>&gt; Continued management of BirdWatch Ireland reserves in the Mullet Peninsula to also support the Great Yellow Bumblebee.</li> <li>&gt; Investigation into funding mechanisms to increase the area of land that is managed to support the Great Yellow Bumblebee.</li> </ul>	National Biodiversity Data Centre, NPWS, BirdWatch Ireland, Mayo County Council, Belmullet Tidy Towns, University College Dublin (UCD)



5.2	Action	Progress measure	Responsibility
	<b>134</b> Work to develop initiatives to assist recovery of the near threatened Large Carder Bee (Bombus muscorum).	<ul> <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
	<b>135</b> Develop resources on rare pollinators and make freely available.	> As resources are developed, all collated and added to the website: https://pollinators.ie/helping-endangered-pollinators/	AIPP team in collaboration with relevant partners
	<b>136</b> Promote rare pollinator species through social media campaigns.	<ul> <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

# Target 5.3

### Publish best practice information on protecting rare pollinators

5.3	Action	Progress measure	Responsibility
	<b>137</b> Publish how-to-guides	> New species-specific guides published within the AIPP	AIPP team in
	on protecting rare pollinator	Protecting rare pollinators series when a sufficient evidence-	collaboration with
	species.	base is available.	relevant partners

# Target 5.4

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

5.4	Action	Progress measure	Responsibility
	<b>138</b> Publish an All-Ireland Hoverfly Red List.	> Publication of an All-Ireland Red List outlining the conservation status of Ireland's hoverfly species.	NPWS, NIEA
	<b>139</b> Develop a roadmap towards updating the All-Ireland Bee Red List (2006).	<ul> <li>&gt; Publication of an updated checklist of Irish Bees</li> <li>&gt; Development of a roadmap outlining necessary data collection that would allow updating of the 2006 Bee Red List.</li> </ul>	NPWS, NIEA, National Biodiversity Data Centre, CEDaR



# Target 5.5

## Track change in rare pollinators

5.5	Action	Progress measure	Responsibility
	<b>140</b> Conduct dedicated surveys to establish the status and distribution of the Northern Colletes bee and the Redshanked Carder bee in NI.	<ul> <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
	<b>141</b> Attempt to increase the number of volunteers tracking rare species within the All-Ireland Bumblebee Monitoring scheme.	<ul> <li>&gt; 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>&gt; Attempts made to encourage Citizen Science volunteers to walk specific routes to monitor these rare bumblebees.</li> </ul>	National Biodiversity Data Centre
	<b>142</b> Organise field meetings with volunteer recording networks to search for rare species.	> 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.	National Biodiversity Data Centre, CEDaR, BugLife



# OBJECTIVE

# Strategic coordination of the Plan

### **Targets for 2021-2025:**

TARGET 6.1 General awareness raising

TARGET 6.2 Researching the evidence base for action

TARGET 6.3 Establishment and maintenance of supporting databases

TARGET 6.4 Maintenance of a network of supporting organisations

TARGET 6.5 Overall coordination



### General awareness raising

Action	Progress measure	Responsibility
<b>143</b> Continually maintain and update AIPP website to provide stand-alone toolkit for those who want to help.	> Continued management and updating of website www.pollinators.ie	AIPP team
<b>144</b> Maintain Twitter and Instagram accounts.	<ul> <li>&gt; Growth in the number of followers</li> <li>&gt; Run dedicated annual campaigns on both platforms. May include, but not limited to: Let Dandelions Be, No Mow May</li> </ul>	AIPP team
<b>145</b> Promote the AIPP in national and local media.	<ul> <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> <li>Track numbers of published media articles and other engagements</li> </ul>	AIPP team
<b>146</b> Focus engagement efforts on new audiences.	> Number of engagement efforts with new sectors who have not heavily engaged with the 2015–2020 Plan	AIPP team
<b>147</b> Distribute a monthly digital newsletter to the mailing list.	> Digital newsletter distributed to the mailing list each month	AIPP team
<b>148</b> Organise an annual AIPP conference.	<ul> <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
<b>149</b> Run an annual programme of engagement around World Bee Day (20th May).	<ul> <li>&gt; Programme of engagement organised</li> <li>&gt; Activities listed on a dedicated page on pollinators.ie.</li> </ul>	All partners
<b>150</b> Run an annual programme of engagement around international Pollinator Week (late June).	<ul> <li>&gt; Programme of engagement organised</li> <li>&gt; Activities listed on a dedicated page on pollinators.ie.</li> </ul>	All partners
<b>151</b> Recognise the contribution of local pollinator ambassadors/champions.	<ul> <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



6.1	Action	Progress measure	Responsibility
	<b>152</b> Raise awareness of an additional pollinating insect group annually. (The main focus of the All-Ireland Pollinator Plan is on bees.)	> 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	Butterfly Conservation NI, BugLife, others as appropriate
	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 native, local provenance wildflower seed.	> Continued messaging through social media and other online platforms	AIPP team

### Researching the evidence base for action

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

5.2	Action	Progress measure	Responsibility
	Dissemination and communication		
	<b>154</b> Maintain the Pollinator Research Network to discuss ongoing research, and to build collaborations for future research.	<ul> <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, Waterford Institute of Technology (WIT), and others
	<b>155</b> Maintain bee health research-policy-practice dialogue.	> Annual Bee Health meetings between researchers, decision-makers, and practitioners.	MU, TCD, DAFM, Teagasc, AFBI, DAERA



Action	Progress measure	Responsibility	
Pollinator and pollination ecology			
<b>156</b> Expand knowledge of Ireland's wild bee populations.	<ul> <li>&gt; Research into genetic differentiation/distinction among populations at different scales, linking with ecological/behavioural differences</li> <li>&gt; Research into nesting and floral requirements of solitary bee species</li> <li>&gt; Continue to investigate the prevalence, health and longevity of honeybee colonies that exist in the wild.</li> </ul>	Researchers	
<b>157</b> Improve understanding of hoverfly populations.	> Research into hoverfly abundance/diversity across different land uses, microhabitat use, and/or service provision (biocontrol, pollination, nutrient cycling).	Researchers	
<b>158</b> Improve knowledge of rare and at-risk pollinators.	<ul> <li>Research to inform conservation of extinction-risk species in the Irish context</li> <li>Provide evidence base for conservation of specialized habitats in which rare/at-risk species live.</li> </ul>	Researchers, NPWS	
<b>159</b> Expand knowledge of urban pollinators.	<ul> <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	
<b>160</b> Expand knowledge of plant-pollinator interactions and dynamics, and pollination service delivery.	<ul> <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 in wild plant species.</li> </ul>	Researchers	
<b>161</b> Expand understanding of interactions between managed and wild pollinators.	> 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).	Researchers, Beekeepers	
<b>162</b> Expand knowledge of bee diseases and health risks.	<ul> <li>&gt; Generate baselines of disease prevalence in honeybees and investigate potential for disease transfer</li> <li>&gt; Determine whether promotion of managed honeybee colonies in the wild poses a disease risk to wild pollinators</li> <li>&gt; Undertake new research into Chalkbrood disease in honeybees.</li> </ul>	Researchers, DAFM, AFBI, DAERA	



Action	Progress measure	Responsibility	
Drivers of decline and conservation measures			
<b>163</b> Understand extent of exposure to pesticides and other pollutants across ecosystems.	<ul> <li>&gt; Determine exposure routes for multiple pesticides/ pollutants and pollinator taxa</li> <li>&gt; Quantify pesticide residues in plants, soil, water, bee products</li> <li>&gt; Improve understanding of impacts of environmental pollution, e.g. heavy metals on bee health and bee products.</li> </ul>	Researchers, DAFM	
<b>164</b> Research impacts of climate change and climate action policies on pollinators.	<ul> <li>Research into how climate change affects pollinators</li> <li>Research into how policies to tackle climate change affect pollinators.</li> </ul>	Researchers	
<b>165</b> Assess effectiveness of conservation measures.	<ul> <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	
<b>166</b> Determine effectiveness of Pollinator Trail sites	> Research to monitor the network of Pollinator Trail sites to specifically assess the impact of different pollinator actions versus control sites	Researchers	
<b>167</b> Investigate the role of specific plants in supporting pollinators to determine best ones to plant for bees in different habitat types.	<ul> <li>Research into role of trees to inform tree-planting initiatives</li> <li>Research into replacements for invasive plants used by beekeepers to provide forage for honeybees (e.g. Himalayan Balsam)</li> </ul>	Researchers	
<b>168</b> Review publicly managed land in terms of suitability for key pollinator populations.	<ul> <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	
Multiple benefits and wideni	ng engagement		
<b>169</b> Research multiple co-benefits of pollinator conservation for other elements of biodiversity and ecosystem service delivery.	> Research into co-benefits of pollinator conservation actions	Researchers	
<b>170</b> Expand understanding of why people engage with pollinator conservation and how to reach those who are not yet engaging.	> Cross-disciplinary research into engagement with pollinator conservation action. To include studies of behaviour change, attitudes, perceptions, etc.	Researchers	



6.2	Action	Progress measure	Responsibility
	<b>171</b> Test methods for non-lethal monitoring across habitats.	<ul> <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

## Establishment and maintenance of supporting databases

3 Action		Progress measure	Responsibility
<b>172</b> Continue to	manage	> Manage and maintain the GIS based mapping system	National
and maintain th	e online	> Open it up to all sectors	Biodiversity Data
mapping systen	Actions for	> Improve reporting by increasing the number of sites logged	Centre
Pollinators, wh	ere all those	> Where funding is available, work to expand	
who have taken	pollinator-	the functionality of the system	
friendly actions	can log their	> Use this emerging map of	
location and the	action(s)	pollinator-friendly habitat to direct future	* 4
taken.		actions to the most appropriate areas	Anti-
		pollinators.biodiversityireland.ie	3 American Market Marke
			39999

6.3	Action	Progress measure	Responsibility
	<b>173</b> Maintain data on wild pollinator distribution and	> Maintain and manage databases. Ensure that as much data is open access as possible	National Biodiversity Data
	make available through an	<ul> <li>Make available through online Atlases of wild bees and</li> </ul>	Centre; CEDaR
	online Atlas of Irish pollinators and the NBN Atlas for Northern	hoverflies  Increase the number of active recorders who can accurately	
	Ireland.	identify pollinator species	
		Where funding is available, continue to develop and publish online identification courses for pollinator identification	



.3	Action	Progress measure	Responsibility
	<b>174</b> Maintain and grow Citizen Science pollinator monitoring networks and databases.	<ul> <li>Continue to support and grow the All-Ireland Bumblebee Monitoring Scheme . This is an expert-level Citizen Science scheme.</li> <li>Continue to support and grow the Flower-Insect Timed Count monitoring scheme . This is a beginner-level Citizen Science scheme.</li> </ul>	National Biodiversity Data Centre
	<b>175</b> Maintain a database on plant-pollinator interactions.	<ul> <li>Maintain database</li> <li>Add new data as it becomes available</li> </ul>	National Biodiversity Data Centre
	<b>176</b> Maintain an online database of Irish Pollinator research.	<ul><li>&gt; Establish and populate database</li><li>&gt; Make available via www.pollinators.ie</li><li>&gt; Update annually</li></ul>	Pollinator Research Network
	<b>177</b> Develop a digital database of pollinator collections in the National Museum of Ireland (Natural History).	> Investigate funding mechanisms that would allow the national bee collection to be fully curated by the Natural History Museum. This should include image, accession number, specimen - all digitally linked and searchable	National Museum of Ireland (Natural History)
	<b>178</b> Collate and maintain data on scientific engagement polls/ surveys, so that the initiative can continue to learn from this feedback.	<ul> <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

## Maintenance of a network of supporting organisations

6.4	Action	Progress measure	Responsibility
	179 Maintain a network of organisations who agree to help promote or otherwise assist the All-Ireland Pollinator Plan.	<ul> <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 (template on page 62)</li> <li>Maintain a list of all supporting organisations on the website</li> <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>	AIPP team



### Overall coordination

Action	Progress measure	Responsibility
<b>180</b> Promote the Plan to new organisations and sectors as relevant.	<ul> <li>&gt; Plan promoted to new organisations and sectors</li> <li>&gt; Increase in the number of organisations supporting the Plan</li> <li>&gt; 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
<b>181</b> Ensure that the Pollinator Plan is compatible with other biodiversity initiatives.	> Liaise with other partners to ensure land management advice for promoting biodiversity is joined up and is not contradictive	AIPP Project Manager and Steering Group
<b>182</b> Ensure the incorporation of the Pollinator Plan into future relevant national strategies, where appropriate.	> Promotion of the Plan to relevant organisations and those working on national strategies/planning	AIPP Project Manager and Steering Group
<b>183</b> Develop an online toolkit, based on lessons learned from the AIPP 2015–2020 to ensure knowledge sharing at the EU level and beyond.	<ul> <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
<b>184</b> Publish an overall annual review of the 186 actions in the Plan.	<ul> <li>Development of a collated annual review, outlining progress on all actions within the Plan</li> <li>Publication of this annual review on the website each December</li> </ul>	AIPP Project Manager
<b>185</b> Annually review the Steering Group.	> Review the Steering Group annually and restructure as required	AIPP Steering Group Chair
<b>186</b> Renew the Plan in 2025.	> A new version of the Pollinator Plan to be developed for 2026–2030	Steering Group





## All-Ireland Pollinator Plan 2021-2025

## Supporter agreement

We all depend on pollinators and the important service they provide. Unfortunately, our pollinators are in decline. Of the 99 different types of bees on the island of Ireland, almost one third are threatened with extinction. The All-Ireland Pollinator Plan is a strategy that addresses this problem. It is a shared plan of action that aims to help pollinators and improve biodiversity across the island. In publishing the All-Ireland Pollinator Plan 2015-2020, Ireland became one of the first countries to a develop a pollinator strategy. Thanks to the buy-in across sectors throughout the island, we are now recognised as a world leader. It is hoped that we can refocus and come together again to build on what we have already achieved and make the 2021-2025 Plan even more successful.

To sign up as a supporter of the All-Ireland Pollinator Plan 2021-2025, please complete this signed framework and return to pollinators@biodiversityireland.ie

In becoming a supporter of the AIPP 2021-2025, you agree to:

- > Support the ethos of the AIPP and its aim to make the island more pollinator-friendly
- > Provide a short update (max 300 words) on your activities to support the Plan, if requested, in November each year. This will be used to show progress and to help with knowledge exchange across sectors.
- > Where relevant, to log your actions on the online mapping system 'Actions for Pollinators' at https://pollinators. biodiversityireland.ie

Please tick any other actions that you are willing to agree to:

Possible actions	~
Promote the All-Ireland Pollinator Plan to your own networks, where relevant	
Manage your site(s) in a pollinator-friendly way in line with the AIPP guidelines	
Monitor the impact of your pollinator-friendly actions by taking part in one of the associated citizen science monitoring schemes: Bumblebee Monitoring Scheme; Flower Insect Timed Counts.	
Offer technical or expert support/advice to the AIPP where relevant	
Other actions - you may have other specific actions that you would like to agree to, and we are very grateful where this is the case. Please list these here:	

Organisation:	
Signature(s):	
Print name:	
THILTIAITIE.	••••••
Role:	

The AIPP is a voluntary Plan and is not policed. It does not have a project budget. Organisations agree to fund their own pollinator activities.

The Supporter Agreement on page 62 refers to Target 6.4; Action 179: Maintain a network of organisations who agree to help promote or otherwise assist the All-Ireland Pollinator Plan. Organisations can sign up as a supporter of the Plan using the framework and indicate what specific actions they are willing to take in support.

## References

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<sup>9</sup>Leonhardt, S.D., et al., Economic gain, stability of pollination and bee diversity decrease from southern to northern Europe. Basic and Applied Ecology, 2013. 14(6): p. 461-471.

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