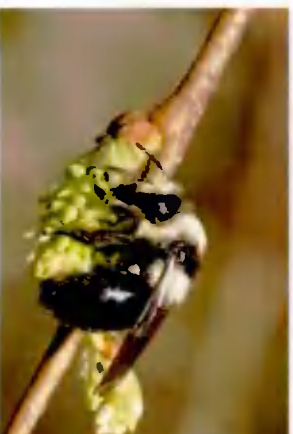


# ALL-IRELAND POLLINATOR PLAN

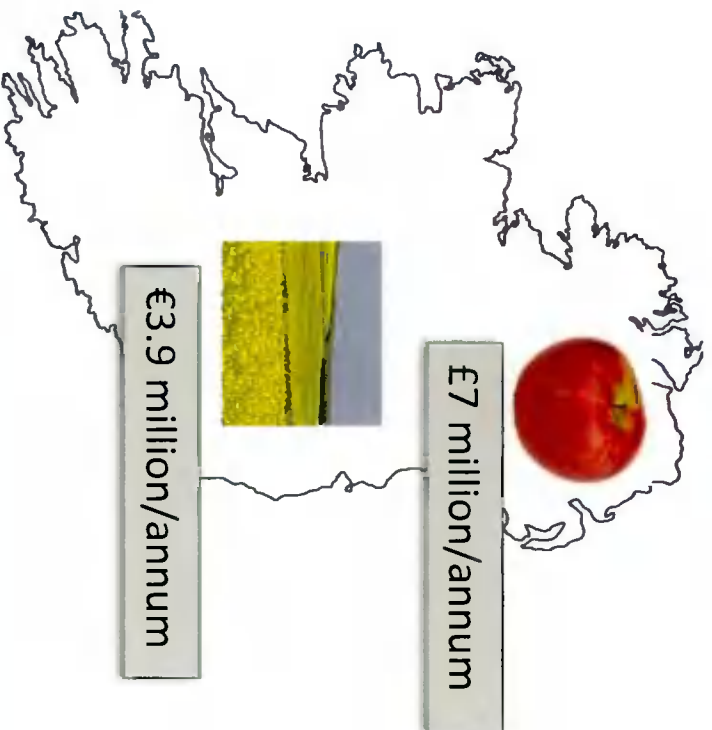


**Dr Úna FitzPatrick**  
Steering Group Chair; Project co-ordinator

**Juanita Browne**  
Project officer

# WHY IS POLLINATION IMPORTANT?

## Economy & Wealth



Free service they provide is worth:

**€53 million/year**



In Ireland within the last ten years the value of soft fruit, field vegetable, and apple production has increased by 17, 21 and 24% respectively

Economy  
& Wealth



Wildlife &  
Landscape



# Health & Wellbeing

100 crops provide

# 90%

of the  
world's food

71 are pollinated by bees



**We need pollinators if we want to grow our own**

**fruit and vegetables**



*Without pollinators it would  
be extremely difficult to have  
a healthy balanced diet*

Jan Feb March April May June July Aug Sept Oct Nov Dec



**Economy  
& Wealth**



**Health &  
Wellbeing**



## **Wildlife & Landscape**



78% of our wild plants benefit  
from being pollinated by insects



Economy & Wealth



Health & Wellbeing



## Wildlife & Landscape



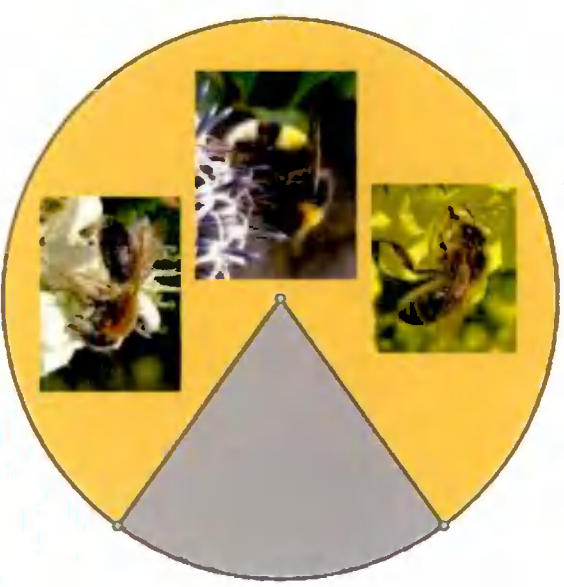
Protecting pollinators protects the whole environment

- ✓ Benefits tourism
- ✓ Helps create our 'green image' which is a point of differentiation across international markets for our exports

**Bees provide a simple vehicle that can be used to sell a wider biodiversity message**

*Without pollinators we'd have less diversity on our dinner plates and less colour in the countryside*

WHO ARE THE POLLINATORS IN IRELAND?



Most pollination of crops and wild plants is carried out by bees

The rest is provided by various other flower visiting insects, particularly flies

# BEES IN IRELAND

Ireland has **99** bee species:

Honeybee



1

Bumblebees



21

Data Stanley

Solitary bees



77

Oliverius Spina

WILD POLLINATORS

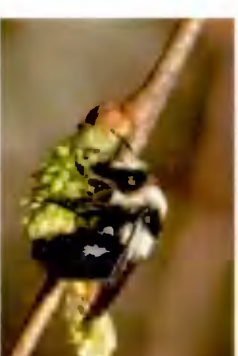


# POLLINATION SERVICE CANNOT BE PROVIDED BY HONEYBEES ALONE

**UK** - if all honeybee hives were used for crop pollination, they could only provide about **one third** of the service required by crops. The rest is provided free of charge by wild pollinators.

The economic contribution of pollination by wild bees was recently assessed as £1,800 or €2,400 per hectare.

**To maintain pollination you need healthy honeybees in combination with a diversity and abundance of wild bees and other insect pollinators**





# BUMBLEBEES – 21 DIFFERENT TYPES IN IRELAND



## Number 21!

Tree Bumblebee – first recorded in Ireland in Sept 2017



Unlike all our other bumblebees who make their nest at ground level this one nests above ground in tree holes and other suitable structures including empty bird boxes



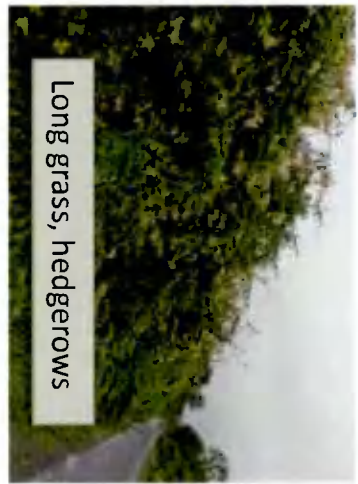
# BUMBLEBEES - LIFECYCLE



Food source

Feeds & finds a nest

Nest site



Queen emerges from hibernation in early spring

Prepares a pollen loaf and a nectar pot and starts laying eggs fertilised with sperm stored from previous year

Hibernation site

Mated new queen feeds to build up reserves before hibernation. Workers, males and old queen die



Female workers emerge and take over nest duties

Food source

New queens and males leave the nest to find mates

Food source

In mid-late summer the queen lays unfertilised eggs which will become males. She also allows some new queens to develop

Queen remains in the nest laying eggs

# BUMBLEBEES NEED FOOD SOURCES THROUGHOUT THE YEAR

## EARLY SPRING: queens are establishing nests

In the early days of the nest it is estimated that a *Bombus terrestris* queen may have to visit as many as 6000 flowers/day to get enough nectar to maintain the heat needed to brood her eggs



## SPRING – SUMMER: nests are growing, workers are active



## AUTUMN: queens are fattening up ready for hibernation

*Bombus terrestris* queens need to weigh at least 0.6 g to successfully hibernate and emerge next spring.





# SOLITARY BEES – 77 DIFFERENT TYPES IN IRELAND



# SOLITARY BEES - LIFECYCLE



Nest site

Mate

Females and males emerge in spring



Female prepares a nest

Food source

Female lays eggs and leaves a food supply of pollen

The larvae overwinter

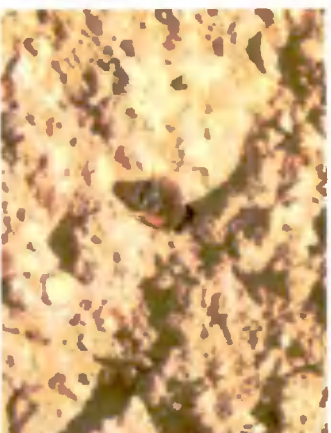
Males and females die





## WHAT DO SOLITARY BEES NEED?

62 species (80%) are mining bees who nest in bare ground or south/east facing banks of bare earth (soil, sand, clay, peat)



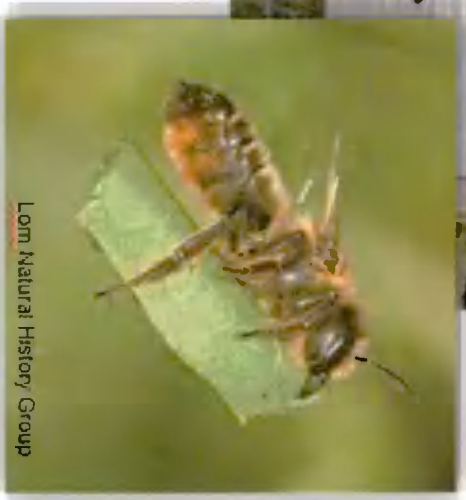


## WHERE DO SOLITARY BEES NEST?

15 species are cavity nesting bees who nest in south facing stone walls, masonry wooden structures or commercially available nest boxes



**BIG IS NOT BETTER!**





# HOW FAR DO WILD BEES FLY TO FORAGE?

Bumblebees can travel up to 5km but commonly forage within 1-2km of their nest



Solitary bees can travel up to 1km but commonly forage within 100-200m of their nest

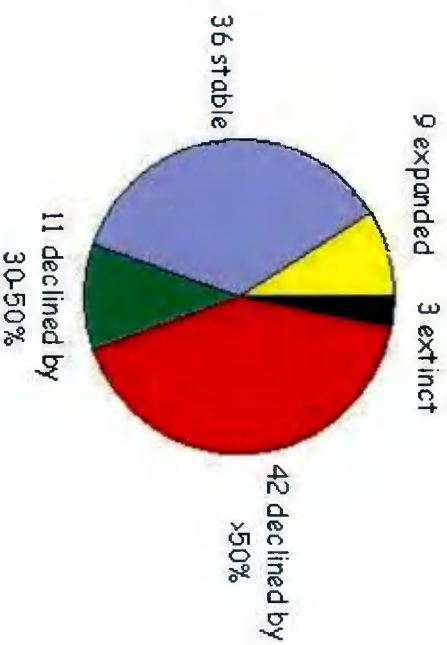


Jan Feb March April May June July Aug Sept Oct Nov Dec

To ensure pollination of Irish crops and wild plants we need:

***Healthy honeybee colonies in combination with high  
abundance and species richness in wild bee populations, as  
well as other wild pollinators***

# ARE POLLINATORS DECLINING IN IRELAND?



More than half of Ireland's bee species have undergone substantial declines in their numbers since 1980.

Two species have become extinct



**One third of our 98 wild bee species are threatened with extinction from Ireland**

**6 species are critically endangered,**  
**10 endangered**  
**14 vulnerable**



The **Great Yellow Bumblebee** is our most threatened bumblebee – it has recently been 'adopted' by Mayo County Council

# WHY ARE POLLINATORS DECLINING?

Bees are declining because we've drastically reduced the areas where they can nest and the amount of food our landscape provides for them.

We've also inadvertently introduced pests and diseases that negatively impact their health, and we subject them to levels of pesticides that make it difficult for them to complete their life cycles.

HABITAT LOSS: HOMELESSNESS

GENERAL DECLINE IN WILDFLOWERS: HUNGER

PESTS AND DISEASE: SICKNESS

PESTICIDES: POISONING

CLIMATE CHANGE: CHANGING ENVIRONMENT





# WHAT CAN WE DO?

HABITAT LOSS: HOMELESSNESS

GENERAL DECLINE IN WILDFLOWERS: HUNGER

PESTS AND DISEASE: SICKNESS


AGROCHEMICALS: POISONING

CLIMATE CHANGE: CHANGING ENVIRONMENT



John Fogarty

1. Accept that pollination is important
2. Recognise there is a problem
3. Start to build a framework for positive action



# All-Ireland Pollinator Plan 2015-2020

- Published September 2015
- Developed by a 15 member steering group
- Included a consultation phase which involved both public & stakeholder engagement
- **80+** governmental and non-governmental organisations have agreed the shared Plan
- Identifies **81** actions to make Ireland pollinator friendly
- Developed without funding

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

# 80+ governmental and non-governmental organisations have agreed the shared Plan

## Government Departments

- Department of Arts, Heritage and the Gaeltacht (ROI)
- Department of Agriculture, Food and the Marine (ROI)
- Department of Agriculture, Environment and Rural Affairs (formerly DAR)

## Charities/NGOs

- Airfield Estate\*
- An Taisce
- ARENA Network, Business in the Community NI
- Belfast Hills Partnership
- BirdWatch Ireland
- Botanical Society of Britain & Ireland\*

## National level organisations/bodies

- National Biodiversity Heritage Centre
- Bord Bia
- Agri Food and Food Enterprise
- Centre for Environmental Research
- Chartered Institute of Environmental Management
- Council for the Environment
- Fáilte Ireland
- Gas Networks Ireland
- Irish Organic Food and Drink Council
- Keep Northern Ireland Beautiful
- National Botanic Gardens
- National Parks and Wildlife Service
- Northern Ireland Environment Agency
- OPW
- Organic Trust
- Teagasc
- Tidy Towns
- Ulster Farming and Horticulture Centre
- Ulster In Biodiversity
- Waterways Ireland

## Transport Authorities

- Iarnród Éireann
- Translink
- Transport Infrastructure Ireland
- Transport NI

## Beekeeping Associations

- Federation of Irish Beekeepers' Associations
- Institute of Northern Ireland Beekeepers (INIB)
- Native Irish Honeybee Society
- Ulster Beekeepers Association

## Academic Institutions

- Athlone Institute of Technology\*
- College of Agriculture, Food and Rural Enterprise, NI (CAFRE)
- Maynooth University\*
- Open Air Laboratories (OPAL) UK
- Trinity College Dublin

## Semi-state companies

- Bord Na Mona
- Conservation Council (IPCC)

## Councils

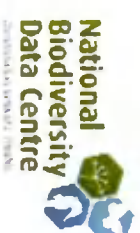
- Belfast City Council
- Lisburn & Castlereagh City Council
- Dublin City Council
- Fingal County Council
- Heritage Office of Kilkenny County Council
- Wexford County Council

## Leader Companies

- Ballyhoura Development Ltd
- Mayo North East\*
- South and East Cork Area Development (SECAD)

# All-Ireland Pollinator Plan 2015-2020

*Creating an Ireland where pollinators can survive and thrive*



Raising awareness of pollinators and how to protect them

11

Managed pollinators – supporting beekeepers & growers

7

## MAKING IRELAND POLLINATOR FRIENDLY

*Provide food and shelter across all types of land so that our pollinators can survive and thrive*

Farmland  
Public land  
Private land

42

Expanding our knowledge on pollinators and pollination service

11

Collecting evidence to track change and measure success

6

+ 4 general actions



# Steering group oversees the implementation which is coordinated by the National Biodiversity Data Centre

## Steering Group 2018

1. Una FitzPatrick (chair) – Data Centre
2. Jane Stout (deputy chair) – TCD
3. Tomás Murray – Data Centre
4. Jerome Walsh – DAFM
5. Catherine Keena – Teagasc
6. Archie Murchie – Agri Food & Biosciences Institute
7. Ken Bradley – DAERA, policy
8. Melina Quinn – DAERA, NIEA
9. Brian Nelson – NPWS
10. Sarah Jane Phelan - Transport Infrastructure Ireland
11. Gerry Clabby - Local Authorities
12. Susie Hill - Ulster Beekeepers Association
13. Mary Montaut – Federation Irish Beekeepers
14. Damian McFerran - CEDaR
15. Veronica Santorum – Limerick's Buzzing
16. Catherine Bertrand - Butterfly Conservation

Both jurisdictions are working together to share knowledge, experience and resources to address the problem



If you want to help implement the All-Ireland Pollinator

Plan it is important to think about how your site can  
provide **food, shelter & safety** for pollinators

*Your site could be any piece of land you have responsibility for e.g.,  
park, roadside verge, local area, farm, school, campus, allotment,  
business property, OPW historic property, National Trust property, golf  
course, church, garden....*

# How your site can provide **food, shelter & safety** for pollinators



**Bumblebees (20 species)**

Long grass, base of hedgerow

**Mining solitary bees (62 species)**

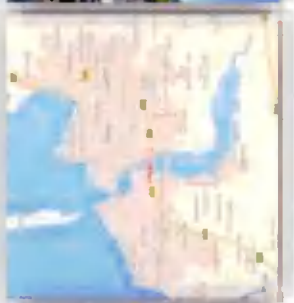
Bare ground, south/east facing banks

**Cavity nesting solitary bees (15 species)**

Hollow stems, holes in wood, bee nest boxes



Eliminate or reduce the use of pesticides





Hawthorn (5-6)  
 Ivy (9-11)  
 Bird's foot trefoil (6-9)  
 Knapweed (6-9)  
 Scabious (7-8)  
 Senecio (6-9)  
 Thistle (7-9)  
 Vetch (5-9)  
 Achillea (7-9)  
 Bluebell (4-6)  
 Brassica (4-8)  
 Butterbur (3-5)  
 Charlock (4-7)  
 Coltsfoot (3-4)  
 Daucus carota (6-8)  
 Dead-nettle (2-11)  
 Fleabane (7-8)  
 Forget-me-not (4-9)  
 Foxglove (6-9)  
 Geranium sp (5-9)  
 Goldenrod (7-10)  
 Hawksbeard (6-9)  
 Heathers (8-9)  
 Hogweed (6-9)  
 Melilotus (6-9)  
 Mignonette (5-9)  
 Mustard (5-9)  
 Radish (6-7)  
 Rape (4-6)  
 Red bartisia (6-9)  
 Rosebay willowherb (7-9)  
 Stachys (7-9)  
 Turnip (5-8)  
 Veronica (3-9)  
 Vetchling (5-8)  
 Wild marjoram (7-9)



Spring Autumn



- Food from spring through to autumn
- A range of plants – balanced diet

Horse chestnut (4-6)  
 Lime (6-7)  
 Sycamore (4-6)  
 Apple (4-5)  
 Plum (4-5)  
 Currant (4-5)  
 Cherry (4-5)  
 Raspberry (6-8)  
 Firethorn (5-6)  
 Berberis (4-5)  
 Borage (4-10)  
 Rosemary (4-6)  
 Thyme (5-8)  
 Lavender (6-8)  
 Sage (6-8)  
 Basil (7-9)  
 Oregano (6-8)  
 Aster (7-10)  
 Allium (6-8)  
 Comfrey (3-6)  
 Crocus (2-3)  
 Bellflower (6-9)  
 Calamint (5-9)  
 Catmint (5-9)  
 Coneflower (7-10)  
 Delphinium (6-7)  
 Gaillardia (6-9)  
 Globe thistle (7-8)  
 Heathers (8-9)  
 Phacelia (4-12)  
 Poppy (5-10)  
 Pulmonaria (3-5)  
 Rock rose (5-7)  
 Salvia (6-9)  
 Stonecrop (7-9)  
 Sunflower (8-10)  
 Verbena (7-10)  
 Viper's bugloss (6-7)

Brackets denote main flowering months

**NATIVE - BEST**

**HORTICULTURAL**



# Native plants are best

Native plants can be encouraged by making small changes to the management of a site to make it naturally more flower-rich



Flowering hedgerows

- Hawthorn
- Willow
- Wild Cherry
- Crab Apple
- Bramble
- Ivy

Grassy verges/banks

- Wild Carrot
- Goldenrod
- Hogweed
- Mignonette
- Rosebay willowherb
- Stachys

Meadows or areas of long grass

- Bird's foot trefoil
- Knapweed
- Scabious
- Senecio
- Thistle
- Vetch
- Achillea
- Wild marjoram
- Vetchling

Edges of tracks that are not sprayed

- Dead-nettle
- Forget-me-not
- Geranium sp
- Hawksbeard
- Veronica

Wildier corners that are not sprayed

- Bluebell
- Brassica
- Butterbur
- Coltsfoot
- Foxglove
- Radish
- Turnip
- Fleabane
- Red bartsia

# Deliberate planting



## Trees/shrubs

- Horse chestnut
- Lime
- Firethorn
- Berberis

## Fruit trees/bushes

- Apple
- plum
- Currant
- Cherry
- Raspberry

## Herb bed

- Borage
- Rosemary
- Thyme
- Lavende
- Sage
- Basil
- Oregano

## Planted beds – perennial is best

- Aster
- Allium
- Comfrey
- Crocus
- Bellflower
- Calamint
- Catmint
- Coneflower
- Delphinium
- Gaillardia
- Globe thistle
- Heathers
- Phacelia
- Poppy
- Pulmonaria
- Rock rose
- Salvia
- Stonecrop
- Sunflower
- Verbena
- Viper's bugloss

## EXAMPLES



Coming together to create networks of  
pollinator friendly habitat

Tidy Towns  
Ulster in Bloom  
Local Community Groups

Councils

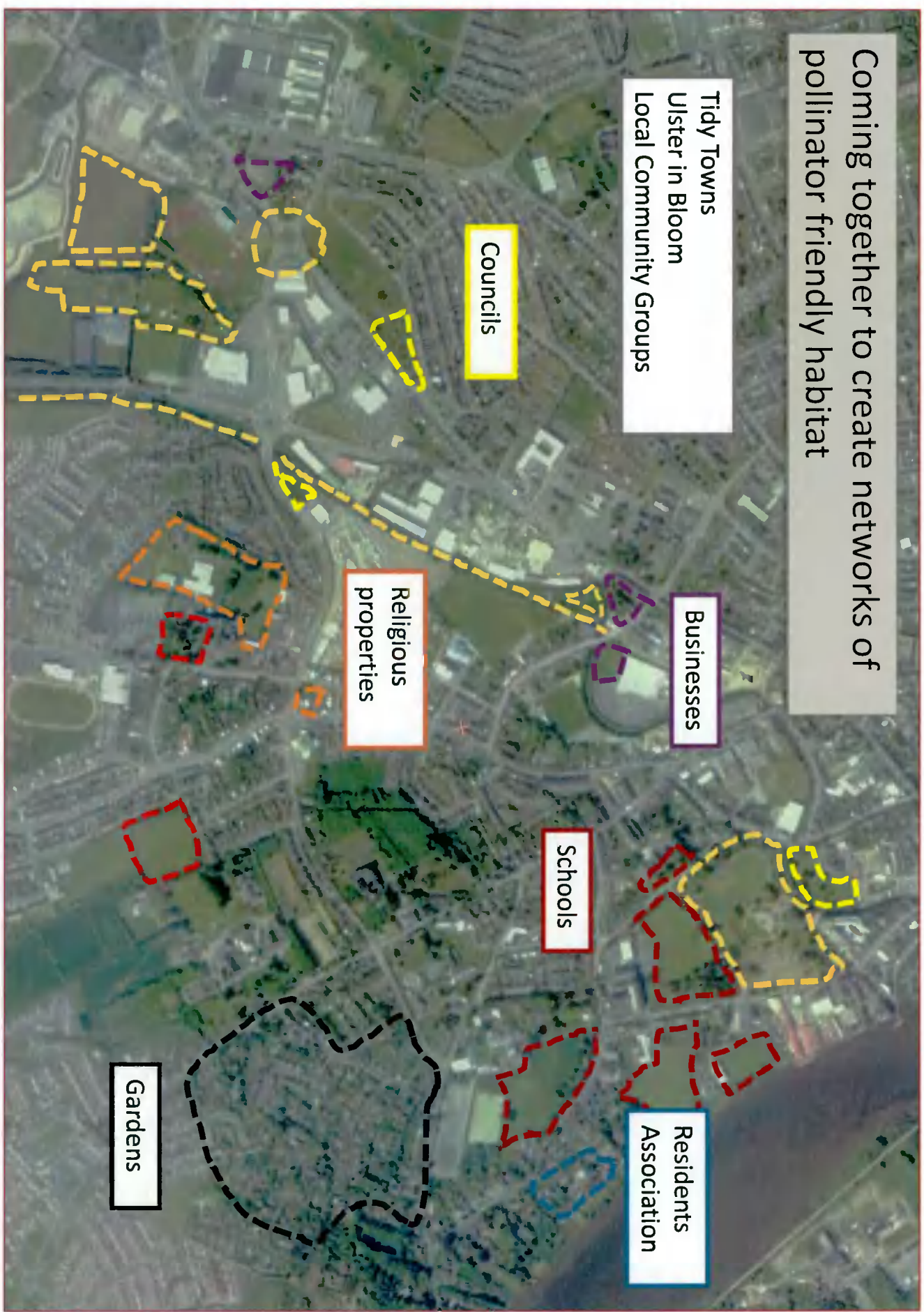
Businesses

Religious  
properties

Schools

Residents  
Association

Gardens



example map using Waterford City





# Publishing evidence based actions on how you can help

*How to provide food, shelter and safety for pollinators*



- ✓ Actions are all evidence based
- ✓ Relevant sectors feed into development
- ✓ Communication is tailored each time

## In preparation:

- ✓ Horticulture
- ✓ Transport Authorities
- ✓ Religious Properties

We have started work on a new short guideline series for pollinator-friendly management of:  
Pump Houses, Solar Farms, Wind Farms, Golf Courses, Country Hotels, Stud Farms, Quarries





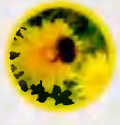
## Local Communities: actions to help pollinators

All-Ireland  
Pollinator Plan  
2015-2020

**Action 3:**  
Create a short flowering 'b-w-e-e-d' meadow  
Identify areas of grass that could be cut on a 6-week cycle  
rotation to allow Clover & Bird's-foot-trefoil to  
flower. This will provide food for pollinators where  
shortly mown grass does not. Such areas could be beside  
a wall of their by means of grass, a path or a meadow.



**Action 4:**  
Let the Devonians bloom!  
Identify areas that will be mown under existing regimes, but aim to  
carry out the first grass cut of the year in April after the first flush  
of Devonians, but before they set seed. Devonians are a vital food  
source for bees in spring.



### Pollinator friendly planting

Traditionally, a lot of pollinator friendly plants in public spaces has been with  
annuals such as Begonia, Phloxes or Busy Lizzie. Unfortunately these are not  
good sources of pollen or nectar (as they have been bred to be very 'showy')  
and do not provide food for bees and other insects. There are many other plants  
that can look similarly attractive but will also support our pollinators.

Areas where these actions might apply in a local community are community gardens,  
roundabouts, road verges, parks or squares, housing estates, areas surrounding sports  
pitches, schools, car parks, shopping centres etc.

**Action 5:**  
Chow down!  
Identify small areas where grass could be easily replaced with a permanent flower  
mix. Road and waste covers will provide colour and are a very important food source  
for bees.

**Action 6:**  
Powering yards and sheds  
Incorporate a mix of pollinator friendly grasses and shrubs into the local  
community that will flower throughout the season (list in appendix). An  
orchard can be a wonderful addition for pollinators and the community.



**Action 7:**  
Perennial flowers for pollinators  
Incorporate perennial friendly perennial plants into the local community to  
provide food for pollinators from spring through to autumn (list  
in appendix).



**Action 8:**  
Annual flowers for pollinators  
Work with local authorities to ensure a commitment of annual planting in  
parks to a mix of pollinator friendly annual plants - single rather than double  
flowers as we return (list in appendix).



**Action 9:**  
Pollinator friendly urban planters  
Identify some urban planters or hanging baskets where the standard annual bedding  
mix could be replaced by perennial pollinator friendly plants (list in appendix).



**Action 10:**  
Pollinator friendly roundabouts  
Work with local authorities to identify some roundabouts that could be  
planted in a pollinator friendly way e.g. bulb (Crocus, Allium) or pollinator  
friendly perennial plants in centres.

**Action 11:**  
Plant a native wildflower meadow  
Identify areas where it may be possible to create a native wildflower meadow using  
commercially purchased seed. This would be more flower-rich than the meadow in  
Action 2 but it is also more costly and requires careful planning and management.  
Please be aware that seed sales will be included in the [Appendix 1](#) (and there will be  
1) (and there will be...)

**Info Box:**  
All the actions in this report are aimed at  
helping bees and other pollinators. They  
are not intended to replace the current  
management of public spaces. The  
actions are intended to be added to the  
existing management of public spaces.  
The actions are intended to be added to  
the existing management of public spaces.  
The actions are intended to be added to  
the existing management of public spaces.

- ✓ Pollinator friendly actions, each very clearly explained
  - ✓ Lots of **options**
  - ✓ All actions are pragmatic & low cost
- [www.pollinators.ie](http://www.pollinators.ie)





A separate **How-to-guide series** provides additional information on more complex actions – developed in partnership with relevant organisations





Using **existing networks/partnerships** to encourage implementation and roll out within the sector

- Efficient
- Cost effective
- Beds down the actions within existing structures

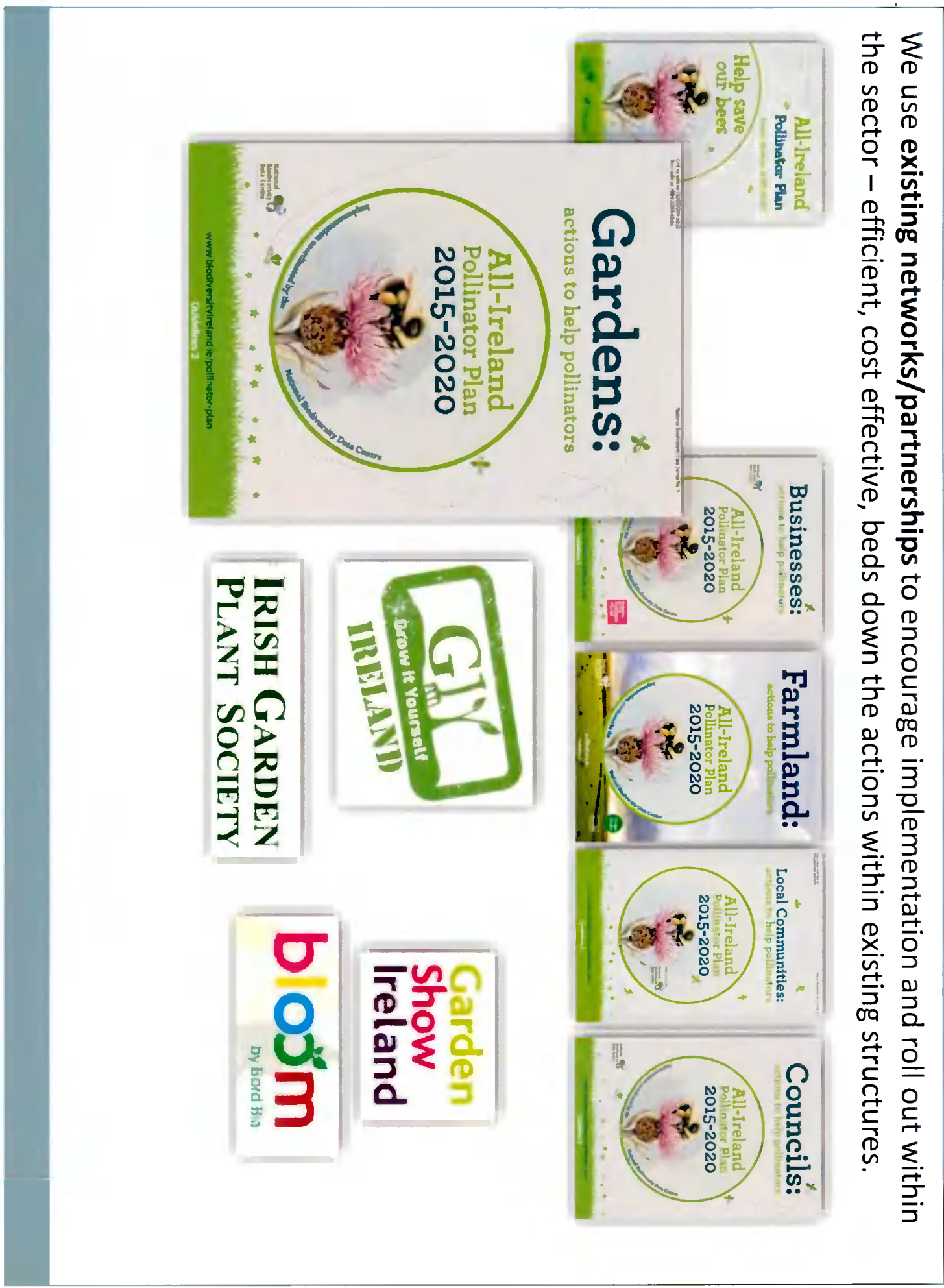
**2018 Funding:** Bord Bia and the Heritage Council have provided funding for a project officer. DAFM have provided a small budget to develop resources. There is no project budget.

We use **existing networks/partnerships** to encourage implementation and roll out within the sector – efficient, cost effective, beds down the actions within existing structures.





We use **existing networks/partnerships** to encourage implementation and roll out within the sector – efficient, cost effective, beds down the actions within existing structures.



We use **existing networks/partnerships** to encourage implementation and roll out within the sector – efficient, cost effective, beds down the actions within existing structures.



Plans to engage specifically with certain types of business:  
Garden Centre, Golf Courses, Quarries, Country Hotels etc.



We use **existing networks/partnerships** to encourage implementation and roll out within the sector – efficient, cost effective, beds down the actions within existing structures.



# Farmland:

actions to help pollinators

All-Ireland  
Pollinator Plan  
2015-2020



Department of  
**Agriculture,  
Food and the Marine**  
AN ROLLAIR  
Talmhaíochta,  
Bia agus Mara



AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY





We use **existing networks/partnerships** to encourage implementation and roll out within the sector – efficient, cost effective, beds down the actions within existing structures.



70 entries in 2017

Regional + overall winners

Tidy Towns Local Authority Pollinator Award



We use **existing networks/partnerships** to encourage implementation and roll out within the sector – efficient, cost effective, beds down the actions within existing structures.



Engagement through the Heritage & Biodiversity Officer network

Training workshops with Council staff

Special pollinator award in the ROI Green Flag for parks competition





All resources are freely available to download online

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

## Pollinator Plan Resources

The All-Ireland Pollinator Plan 2015-2020 can be downloaded here:

[All-Ireland Pollinator Plan 2015-2020 \(English\)](#)

[All-Ireland Pollinator Plan 2015-2020 \(Irish & Gaelic\)](#)

To support the All-Ireland Pollinator Plan 2015-2020 we have published a range of documents: Guidelines for different sectors and How-to-Guides for key pollinator sectors and Guidelines



The documents published to date are linked to below, along with some additional documents will be added to each sector throughout 2017 to facilitate the implementation of the Pollinator Plan. You can see what is planned and provisional delivery dates here: [developed in 2016/17](#)

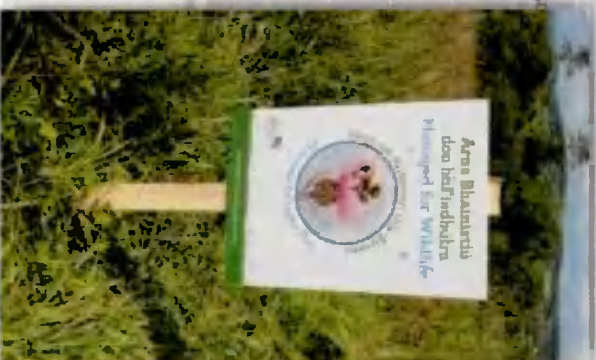
Watch 'Actions for Pollinators' our publicly available online mapping system, & more available. Find instructions in the menu below for logging your pollinator friendly actions, and visit the site here: <https://pollinators.biodiversity.ie/act/>

All-Ireland Pollinator Plan

Junior All-Ireland Pollinator Plan (English)

Junior All-Ireland Pollinator Plan (Irish)

- + Guideline documents
- + How-to-guides
- + Actions for Pollinators Resources
- + Signage templates
- + Presentations for use
- + Tracking progress
- + Other
- + Events/Conferences



Resources



# TRACKING CHANGE & MEASURING SUCCESS

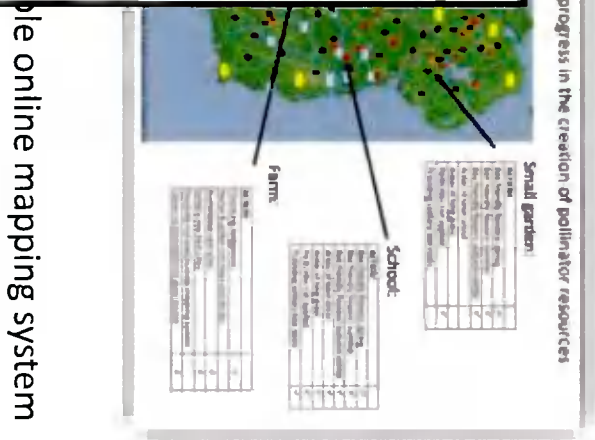
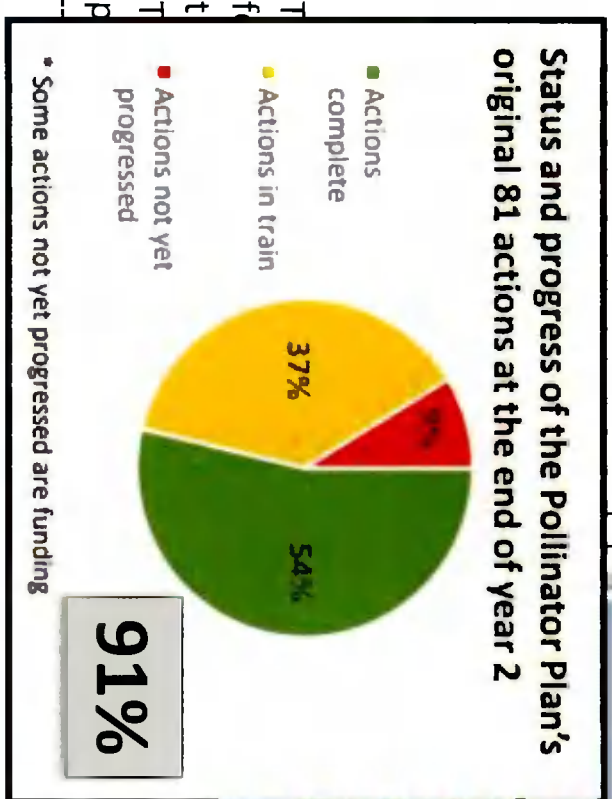


The publication of the All-Ireland Pollinator Plan isn't a box-ticking exercise  
 – measuring success is a crucial part of the Plan

**1. Track** implementation of the 81 actions in the Plan

**2. Track** creation of pollinator habitat/resources

**3. Track** changes in pollinators within the landscape



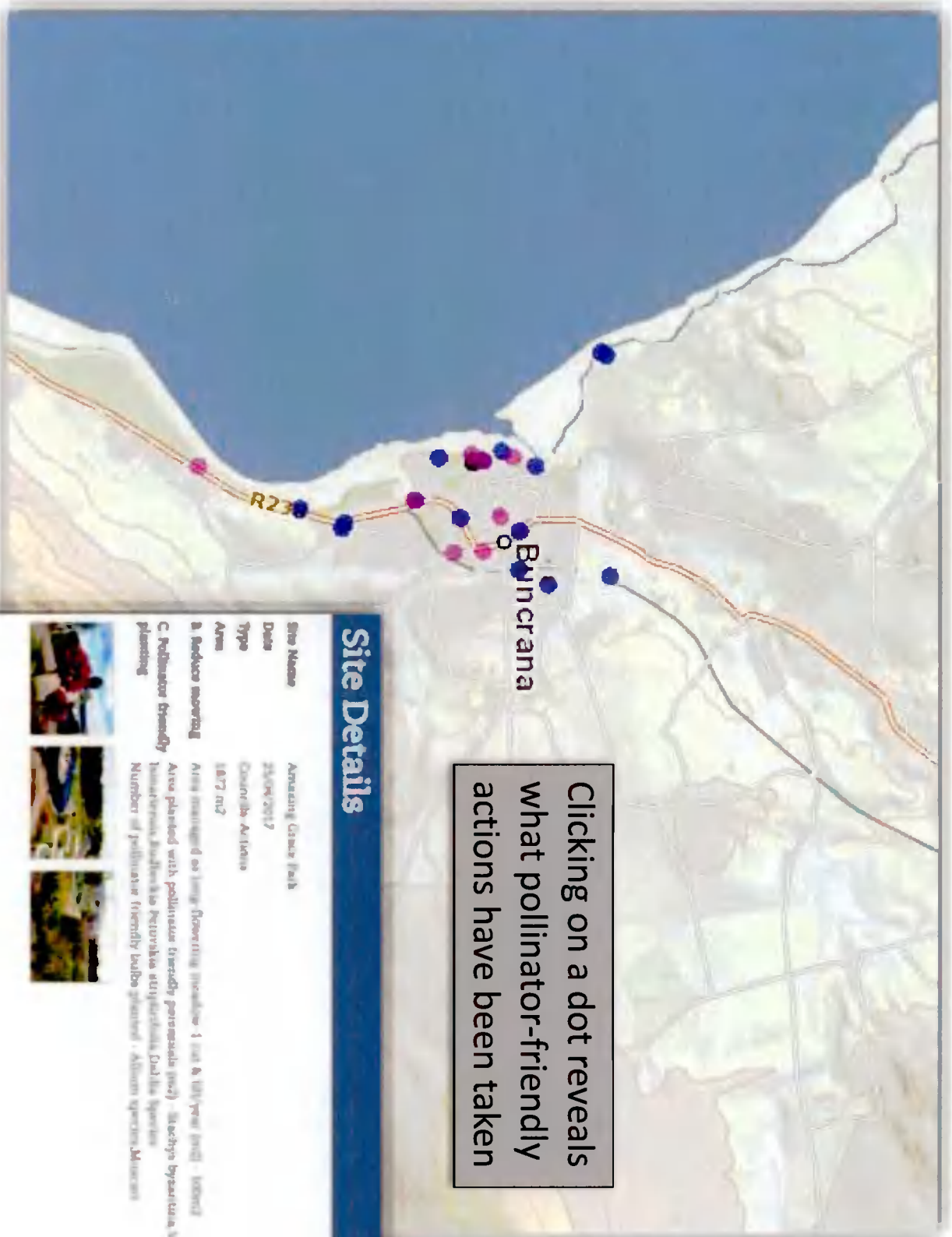
## 2. Track resources going into the landscape - publicly available online mapping system

# 'Actions for Pollinators'

Provides recognition and also facilitates local coordination

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

The screenshot displays the 'Actions for Pollinators' web application. At the top left, a circular logo features a bee and the text 'All-Ireland Pollinator Plan 2015-2020'. The main heading is 'Actions for Pollinators'. Below this, a search bar contains the text 'Total polygon area: 1.91 km<sup>2</sup>'. A dropdown menu for 'Polygon type' is open, listing categories such as 'Biodiversity', 'Climate Action', 'Climate Policy changes', 'Gardens', 'Heritage and Landmarks', and 'Local Communities (including 'Bdy Towns)'. To the right, there are fields for 'Name' and 'Attribute name', and a 'Show All' button. The main area shows a map of Ireland with numerous colored dots representing pollinator actions. An inset map provides a detailed view of the Dublin region, showing major roads (M1, M2, M3, N1, N3, N4, N7, N82, M50, R31, R27) and various locations like Trim, Summerhill, Dunshaughlin Ashbourne, Malahide, Donabate, Maynooth, Celbridge, Newcastle, Blessington, and Greystones.



Clicking on a dot reveals what pollinator-friendly actions have been taken

## Site Details

**Site Name** Anasrigg Grass Park  
**Date** 25/06/2017  
**Type** Coastal Area  
**Area** 1872 m<sup>2</sup>  
**Actions** Area managed as long flowering meadow - 1 cut & 10/yr mow - 10000  
Aire planted with pollinator friendly perennials (red) - 10000  
C Pollinator friendly  
Number of pollinator friendly bulbs planted - 10000  
Number of pollinator friendly perennials planted - 10000  
Number of pollinator friendly trees planted - 10000  
Number of pollinator friendly shrubs planted - 10000  
Number of pollinator friendly grasses planted - 10000  
Number of pollinator friendly herbs planted - 10000  
Number of pollinator friendly flowers planted - 10000  
Number of pollinator friendly plants planted - 10000  
Number of pollinator friendly seeds planted - 10000  
Number of pollinator friendly fruits planted - 10000  
Number of pollinator friendly vegetables planted - 10000  
Number of pollinator friendly mushrooms planted - 10000  
Number of pollinator friendly fungi planted - 10000  
Number of pollinator friendly lichens planted - 10000  
Number of pollinator friendly algae planted - 10000  
Number of pollinator friendly bacteria planted - 10000  
Number of pollinator friendly viruses planted - 10000  
Number of pollinator friendly protozoa planted - 10000  
Number of pollinator friendly invertebrates planted - 10000  
Number of pollinator friendly vertebrates planted - 10000  
Number of pollinator friendly plants planted - 10000  
Number of pollinator friendly animals planted - 10000  
Number of pollinator friendly fungi planted - 10000  
Number of pollinator friendly lichens planted - 10000  
Number of pollinator friendly algae planted - 10000  
Number of pollinator friendly bacteria planted - 10000  
Number of pollinator friendly viruses planted - 10000  
Number of pollinator friendly protozoa planted - 10000  
Number of pollinator friendly invertebrates planted - 10000  
Number of pollinator friendly vertebrates planted - 10000





# Manage my sites

[+ Add Site](#)

**Edit site**

## Site Information

Site Name

Type

Date

When you select 'type' options will appear in line with the relevant guideline document

To add a site you simply draw a polygon around it – it can be large or small

A. Protect existing pollinator habitats  Length of existing flowering hedgerow protected (m)   Area of existing earth banks or bare soil protected (m<sup>2</sup>)  Length of existing dry stone walls protected (m)  Other pollinator friendly habitats protected  type

B. Reduce mowing  Area where Dandelions are allowed to bloom - first grass cut delayed till mid April (m<sup>2</sup>)   Area mown every 6 weeks to allow Clover to bloom (m<sup>2</sup>)   Area managed as long flowering meadow- 1 grass cut & lift/year (m<sup>2</sup>)

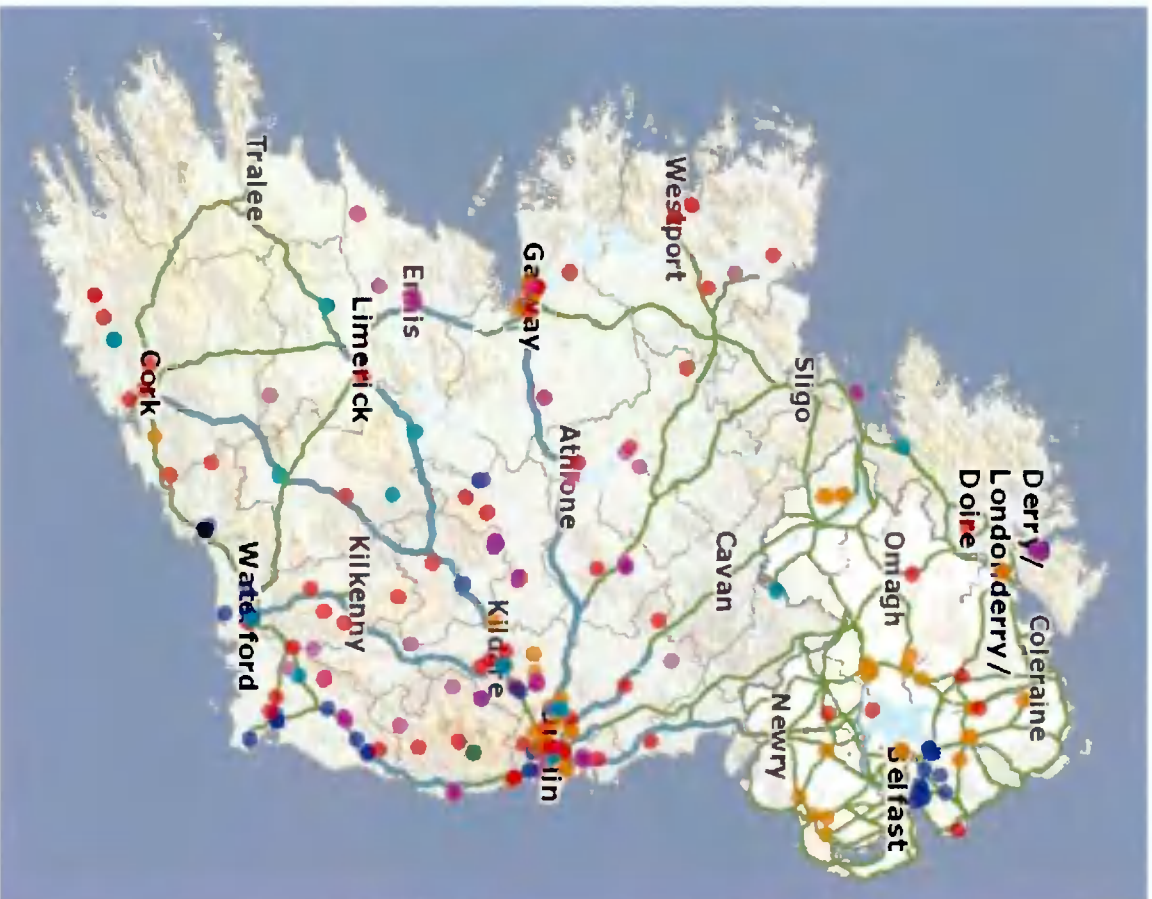
C. Pollinator friendly planting  SPRING flowering pollinator friendly plants/trees/shrubs  main species  main species  main species

D. Provide nesting habitats  Area of earth bank or bare soil created for nesting bees (m<sup>2</sup>)   plant stems left standing (type)  Raspberry Number of holes drilled in wood   Number of bee hotels installed

[Cancel](#) [Confirm](#)



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



✓ If used it can clearly capture progress

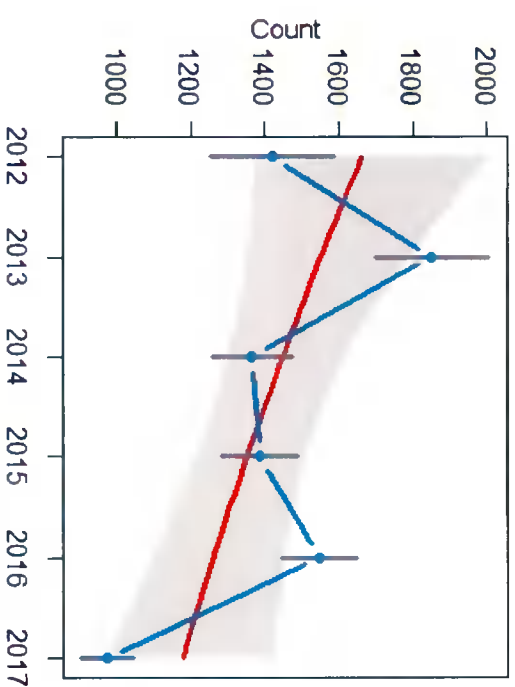
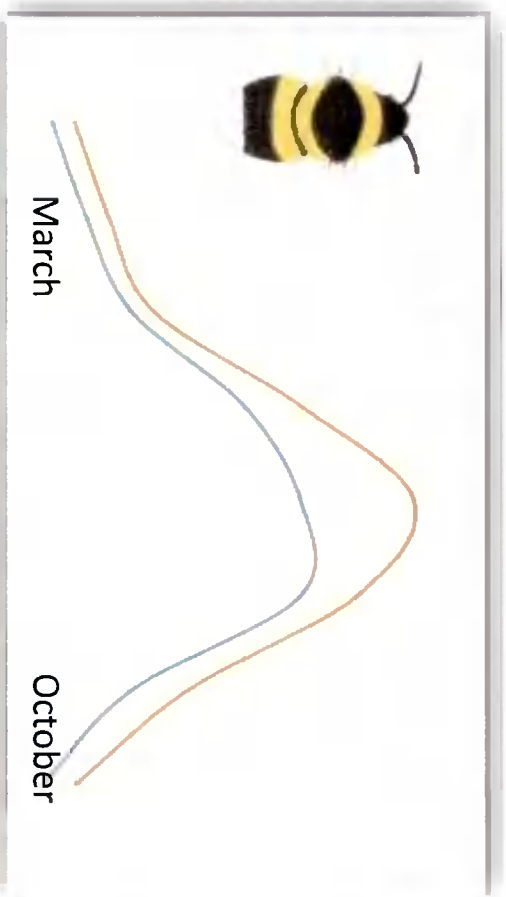
**We do need people to use it**

These are the only gardens logged so far, yet we know many, many more people are taking action to help

### 3. Tracking changes in the pollinators themselves



### All-Ireland Bumblebee Monitoring Scheme

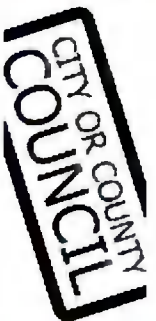


**More volunteers required!**

Contact project coordinator: Dr Tomas Murray [tmurray@biodiversityireland.ie](mailto:tmurray@biodiversityireland.ie)



# How can you help?



## MAKING IRELAND POLLINATOR FRIENDLY

*Provide food and shelter across all types of land so that our pollinators can survive and thrive*

**Farmland**

**Public land**

**Private land**

Raising awareness of pollinators and how to protect them

Managed pollinators – supporting beekeepers

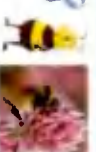
Expanding our knowledge on pollinators

Collecting evidence to track change and measure success



Bumblebee Monitoring Scheme

National Biodiversity Data Centre





We want to express our  
enormous thanks to the  
many people across all  
sectors who have been  
championing the All-Ireland  
Pollinator Plan

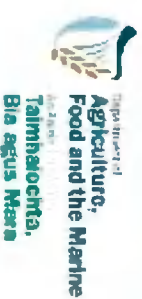
# CALL TO ACTION

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



[pollinators@biodiversityireland.ie](mailto:pollinators@biodiversityireland.ie)

## Thank You



Many thanks to all those who have donated images to the All-Ireland Pollinator Plan