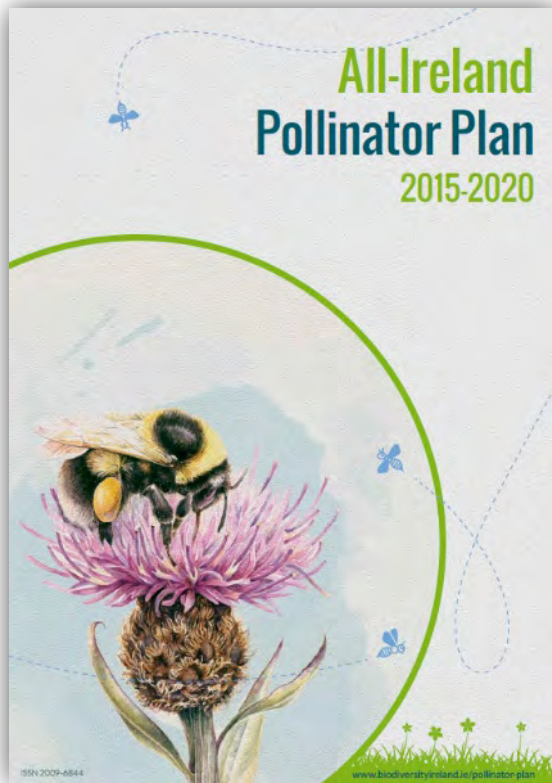
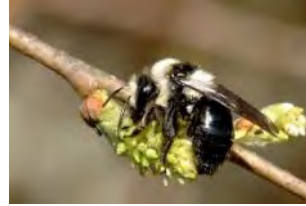


# The All-Ireland Pollinator Plan



Juanita Browne  
Project officer: All-Ireland Pollinator Plan

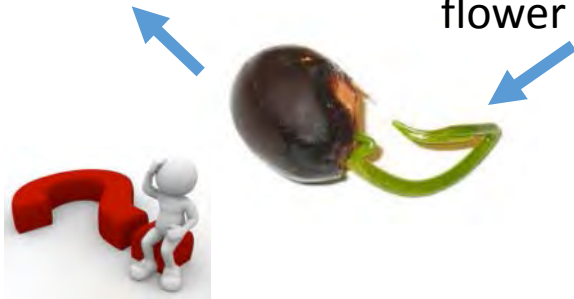


# Why are bees so important?



Grows into a new plant

To make a seed they have to move pollen from one flower to another



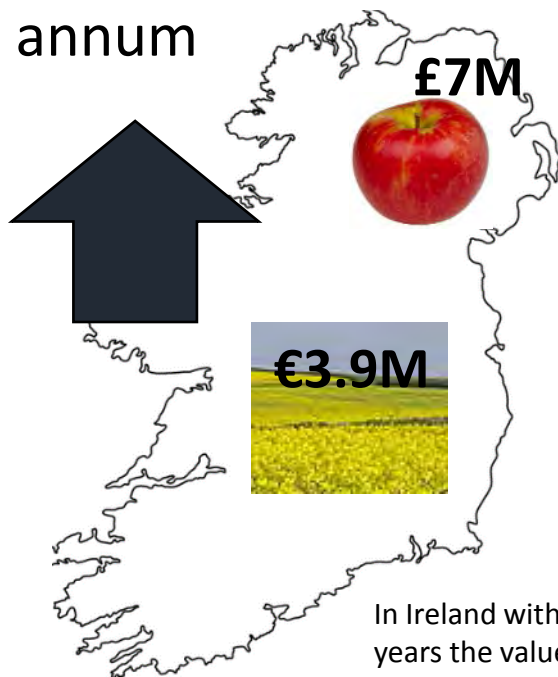
**Info Box:**  
Baby bees eat only pollen.  
It is very important that there are lots of different flowers in the countryside so that the adult bees can bring them back different types of pollen to eat.

# WHY IS POLLINATION IMPORTANT?

## Economy & Wealth



€53million/  
annum



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



## Health & Wellbeing



Without bees they'll  
all be **off the menu**

manukahoneyusa.com

## Wildlife & Landscape

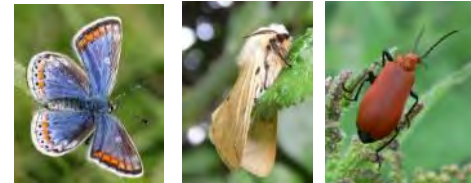
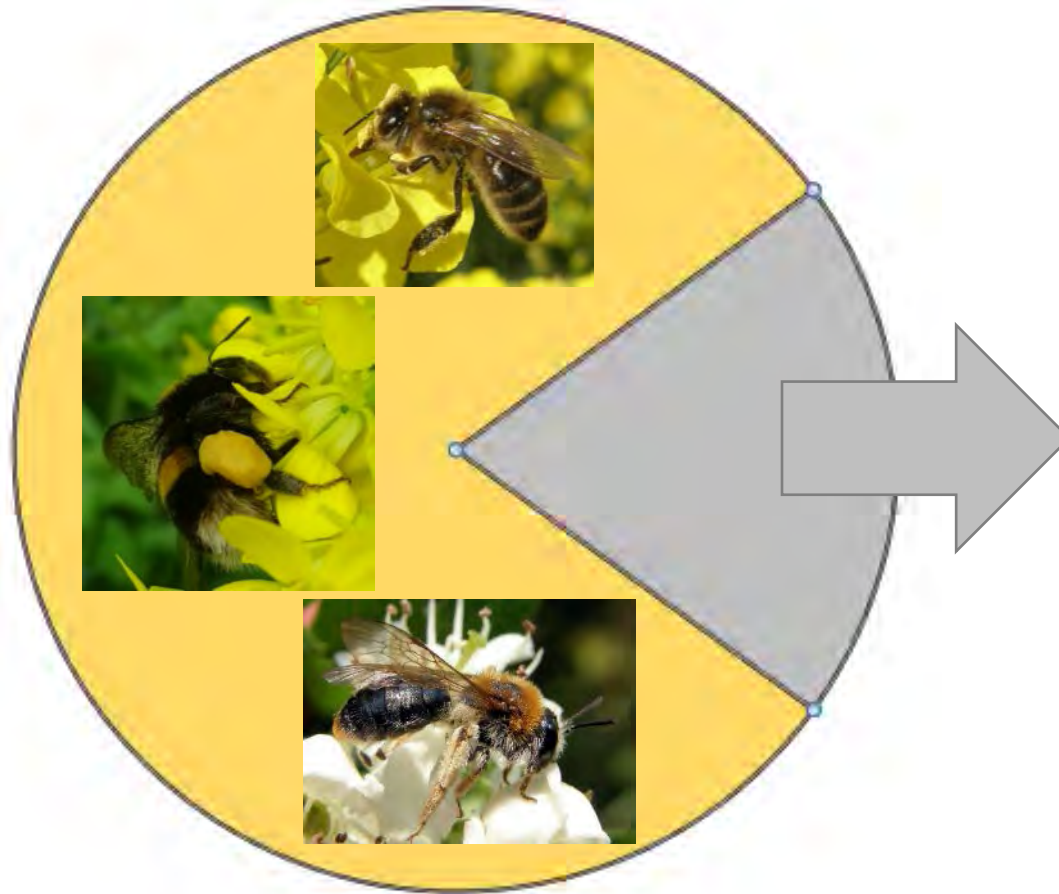






Your produce choices  
*without bees*

# 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



Bumblebees



Solitary bees



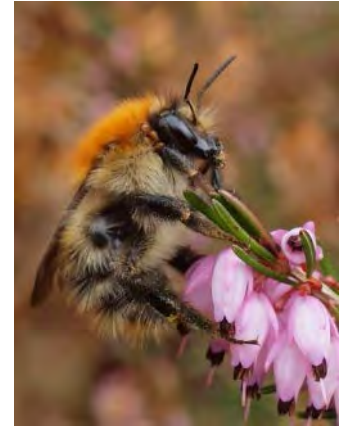
**WILD POLLINATORS**

# POLLINATION SERVICE CANNOT BE PROVIDED BY HONEYBEES ALONE

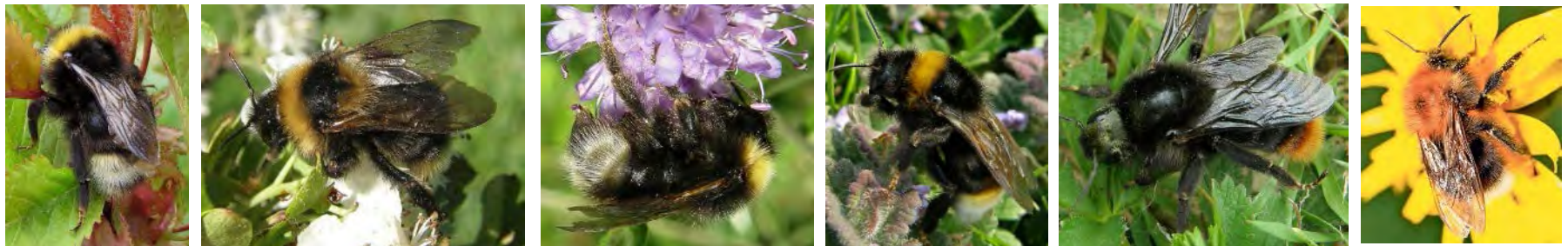
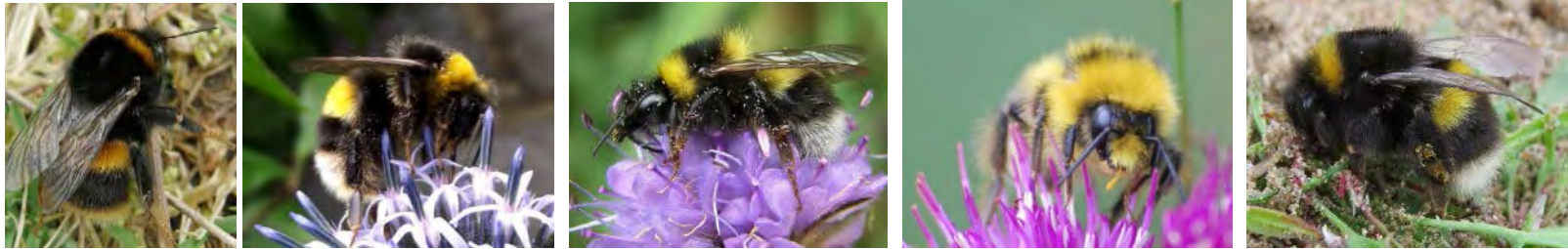
**UK** - if all honeybee hives were used for crop pollination, they could only provide about **one third** of the service required by crops. The rest is provided free of charge by wild pollinators.

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 pollinators**



# BUMBLEBEES – 21 DIFFERENT TYPES IN IRELAND







# INTERESTING FACTS

## FAVOURITE COLOURS

The colours bees see are blue-green, blue, violet, and ultraviolet  
Research has shown that our purple followed by our violet then our blue are their favourites

## STINGS



Only females can sting!  
Bumblebees are not at all aggressive

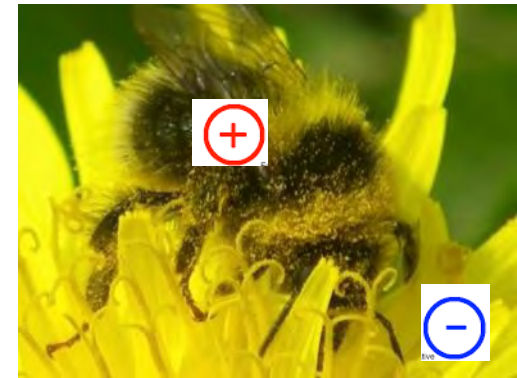
## HONEY



## MITES

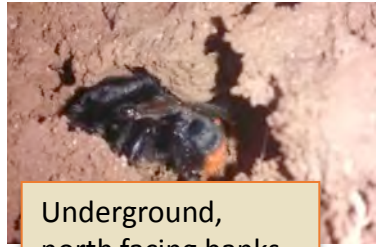


## ELECTRICAL CHARGES



100 second warning to next bee!

# BUMBLEBEES - LIFECYCLE



Underground,  
north facing banks

Food  
source

Nest site



Long grass, hedgerows

Feeds &  
finds a nest

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

Queen remains in  
the nest laying eggs

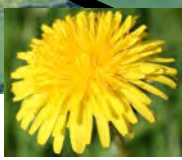
In mid-late summer the  
queen lays unfertilised eggs  
which will become males.  
She also allows some new  
queens to develop

Food  
source





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



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

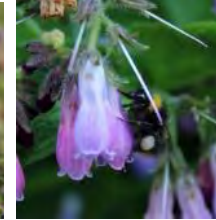
# BUMBLEBEES NEED FOOD SOURCES THROUGHOUT THE YEAR

## 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.

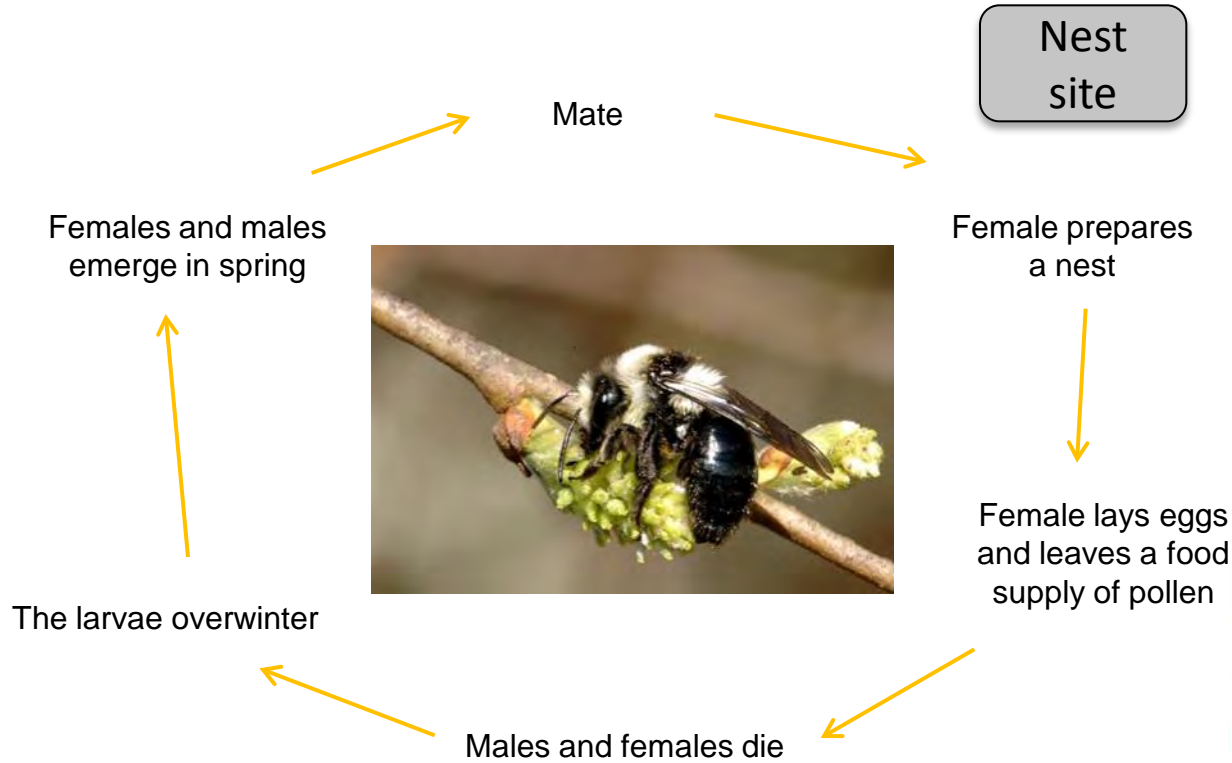
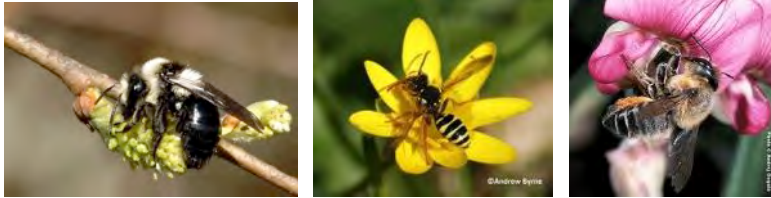




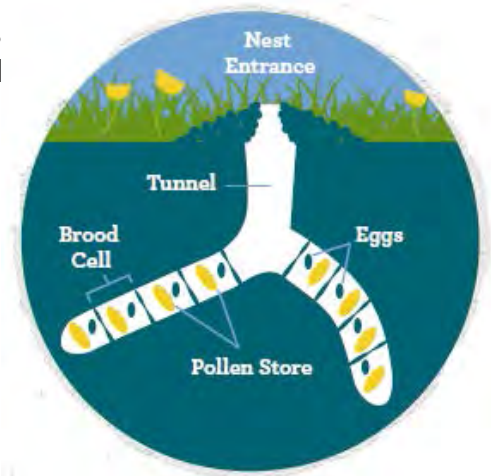
# SOLITARY BEES – 77 DIFFERENT TYPES IN IRELAND



# SOLITARY BEES - LIFECYCLE



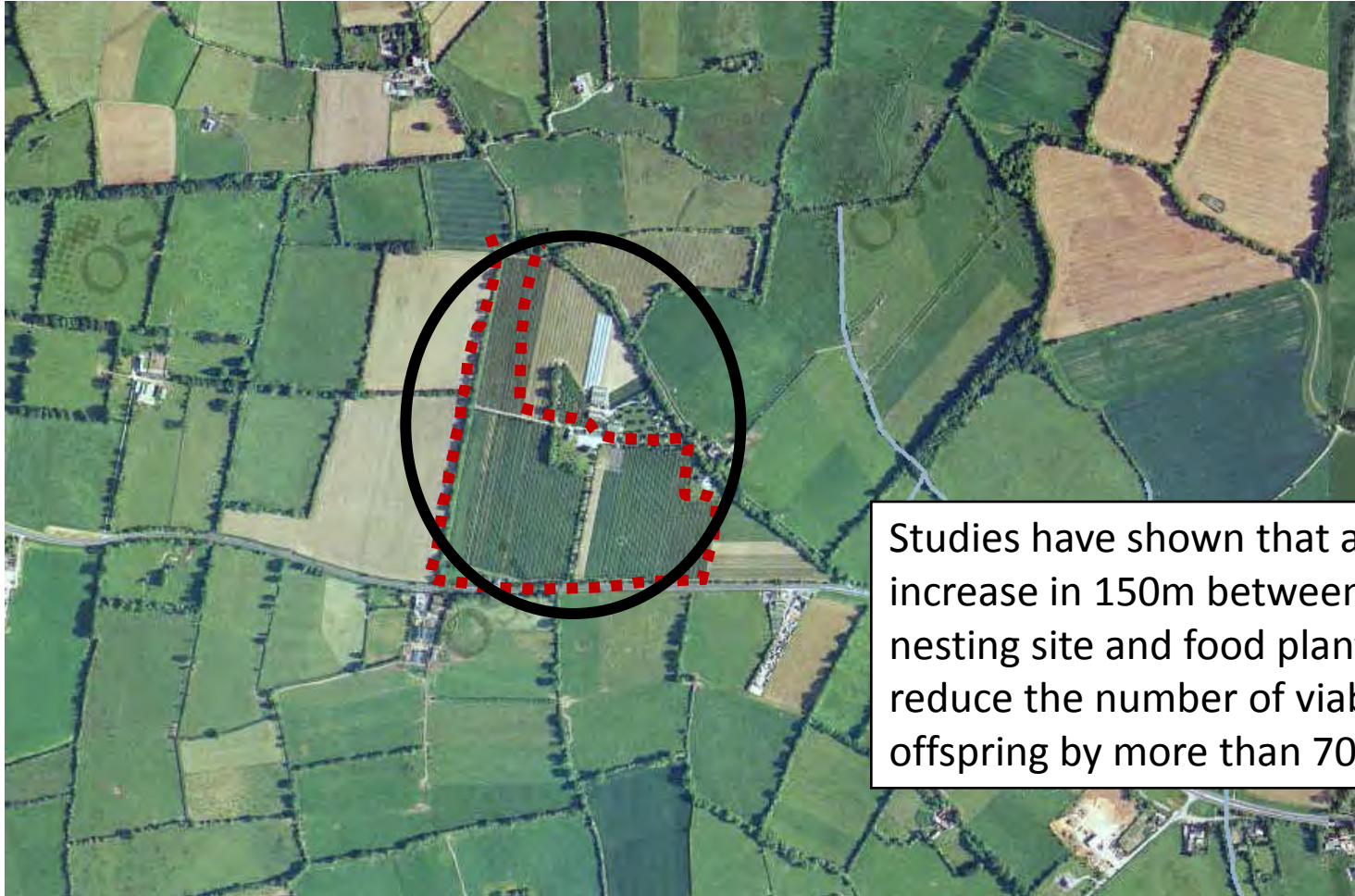
Food source







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



Studies have shown that an increase in 150m between the nesting site and food plants can reduce the number of viable offspring by more than 70%

# SOLITARY BEES ARE OFTEN VERY EFFICIENT POLLINATORS



Research has shown that one female Red mason bee (*Osmia bicornis*) does the pollination work of between 120 and 160 honeybees



Honeybee & bumblebees – moist/condensed pollen pellet stored on hind leg



Most solitary bees – dry/loose pollen pellet stored on hind leg



Mason & leafcutter solitary bees – store pollen on underside of abdomen. Extremely inefficient, requiring on average nearly ten times as many trips!



## WHERE DO SOLITARY BEES NEST?

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

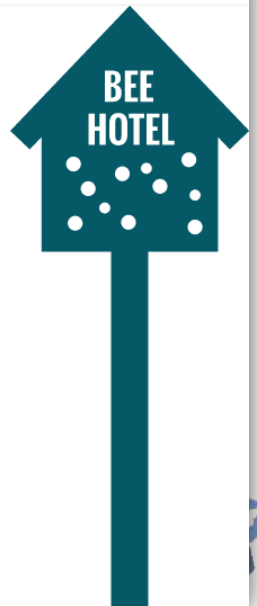


15 species are cavity nesting bees who nest in south facing stone wooden structures or commercially available nest boxes



of the 77 solitary  
bee species, only

**10** are  
likely  
to use a  
garden nest box



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 99 bee species are threatened with extinction from Ireland**

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



# 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**

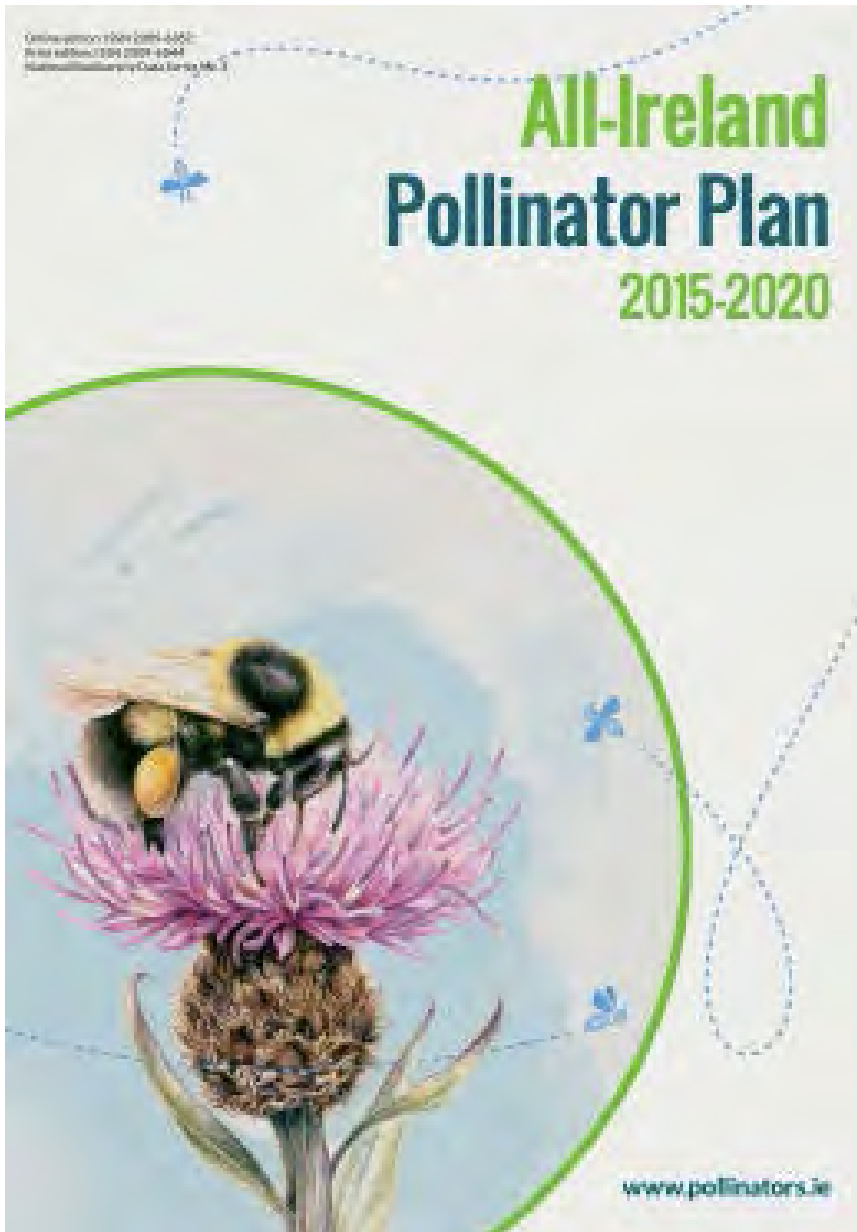
PESTS AND DISEASE: **SICKNESS**

AGROCHEMICALS: **POISONING**

CLIMATE CHANGE: **CHANGING ENVIRONMENT**



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



- Published on 17<sup>th</sup> 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

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



The Steering Group oversees the implementation which is coordinated by the National Biodiversity Data Centre in Waterford

## Steering Group 2019

1. Úna FitzPatrick (chair) – Data Centre
2. Jane Stout (deputy chair) – TCD
3. Tomás Murray – Data Centre
4. Hannah Denniston – Department Agriculture
5. Catherine Keena – Teagasc
6. Archie Murchie – Agri Food & Biosciences Institute
7. Ken Bradley - DOE Environmental Policy
8. Melina Quinn – National Trust UK
9. Brian Nelson – National Parks and Wildlife Service
10. Eimear Fox – Transport Infrastructure Ireland
11. Anne Murray - 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





# 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

## 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

Managed pollinators –  
supporting beekeepers  
& growers

7

Collecting evidence to  
track change and measure  
success

6

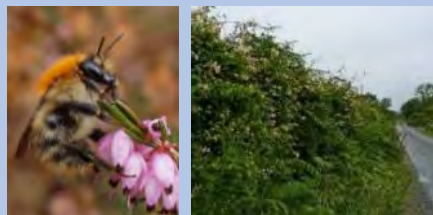
+ 4 general actions



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

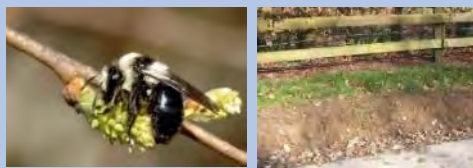


### Bumblebees (21 species)



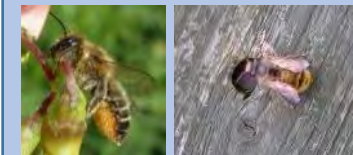
Long grass, base of hedgerow

### 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





# Coming together to create networks of pollinator friendly habitat

Tidy Towns  
Ulster in Bloom  
Local Community Groups

Businesses

Residents Association

Schools

Local Authorities

Religious properties

Gardens



By providing more food, shelter and safety in our towns and villages, along our transport routes and in farmland we can create an Ireland where pollinators can survive and thrive



example map

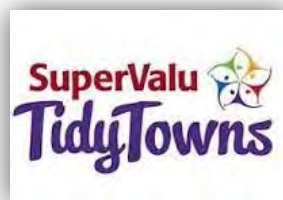
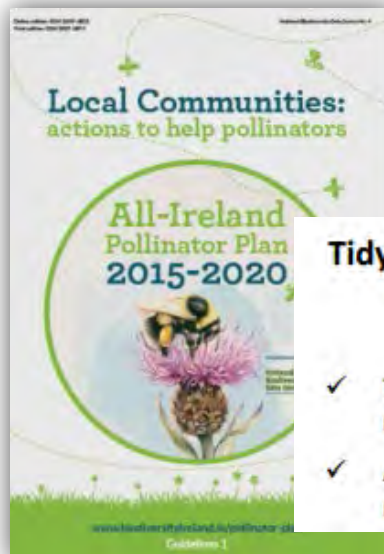


The Pollinator Plan is producing a series of guidelines with actions on how you can help provide **food, shelter and safety** for pollinators:



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

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



**Tidy Towns Local Authority Pollinator Award**

- ✓ Total number of applications received in first year: **59**
- ✓ At least one application was received from every ROI county







**Action 3:**  
**Create a short flowering '6-week meadow'**  
 Identify areas of grass that could be cut on a 6-weekly rotation to allow Clovers and Bird's-foot-trefoil to flower. This will provide food for pollinators where shortly mown grass does not. Such areas could be beside areas of short mown grass, a path or a meadow.



**Action 4:**  
**Let the Dandelions 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 Dandelions, but before they set seed. Dandelions are a vital food source for bees in spring.



**C** **Pollinator friendly planting**  
 Traditionally, a lot of deliberate planting in public spaces has been with annuals such as Begonia, Primula 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:**  
**Clover lawn**  
 Identify small areas where grass could be entirely replaced with a permanent clover mix. Red and white clovers will provide colour, and are a very important food source for bees.

**Action 6:**  
**Flowering trees and shrubs**  
 Incorporate a mix of pollinator friendly trees 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 pollinator 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 component of annual planting in parks is with pollinator friendly annual plants - single rather than double flowered varieties (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., bulbs (Crocus, Alliums) or pollinator friendly perennial plants in centre.



**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 **most sites will be unsuited to the immediate wildflower meadow due to high mowing** (and therefore...)

**Info Box:**

At the Biodiversity Ireland branch of the Inland Waters Association of Ireland, waterbirds represented an irreplaceable Minsiperry's Loch (Co. Armagh) for lots of very little cost by growing their own pollinator friendly plants from seeds, cuttings and root divisions.



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



The guidelines suggest actions to provide **food, shelter and safety** for pollinators

*They all follow a standard format of A-G – specific actions are tailored to the sector*

**A Protect what you have**  
The easiest and most important thing you can do is identify and protect existing areas that are already good for pollinators

**1** Manage and restore semi-natural habitats and their native plants

**2** Identify and protect existing sources of food and shelter for pollinators on general council land

**B Alter the frequency of mowing**  
Changing the frequency of mowing allows wildflowers (food) to flower among the longer grass. This is the most cost-effective way to provide food for pollinators

**3** Identify at least 10 locations that are mown under a pollinator friendly regime (5 cut & lifts per year)

**4** Aim to create at least 5 meadows (one cut & lift per year)

**5** Identify at least 10 flagship roadside verges that are managed to be pollinator friendly (one cut & lift per year)

**6** Introduce a layered mowing approach to other roadside verges

**C Pollinator friendly planting**  
Take the actions below to ensure you have flowers blooming that can provide food for pollinators from March-October

**7** Plant a native perennial wildflower meadow

**8** Plant a native hedgerow

**9** Replace grass with a dense clover sward

**10** For future ornamental tree planting select from pollinator friendly species

**D Provide nesting habitats**  
In addition to food, wild pollinators need safe places to live.

**15** Manage hedgerows for pollinators

**16** Bare earth/sand banks for wild pollinator nesting

**E Reduce use of pesticides**  
Pesticides include insecticides, fungicides and herbicides, all of which can be harmful to pollinators.

**19** Reduce or eliminate the use of pesticides (herbicides, insecticides & fungicides)

**20** Adopt the pollinator friendly pesticide code

**F Raise awareness**

**21** Build actions on pollinators into existing frameworks and initiatives

**22** Fund pollinator projects on council land to demonstrate best practise to other sectors (reference sites)

**23** Put up signage to identify pollinator friendly habitats on council land

**G Tracking progress**

**29** Log your 'Actions for Pollinators' on the mapping system to ensure your efforts are recognised

**30** Take part in the Bumblebee Monitoring Scheme to help track changes in wild pollinator numbers on council land

**Standard format makes it easier to track progress across the island**

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 bartsia (6-9)  
 Rosebay willowherb (7-9)  
 Stachys (7-9)  
 Turnip (5-8)  
 Veronica (3-9)  
 Vetchling (5-8)  
 Wild marjoram (7-9)



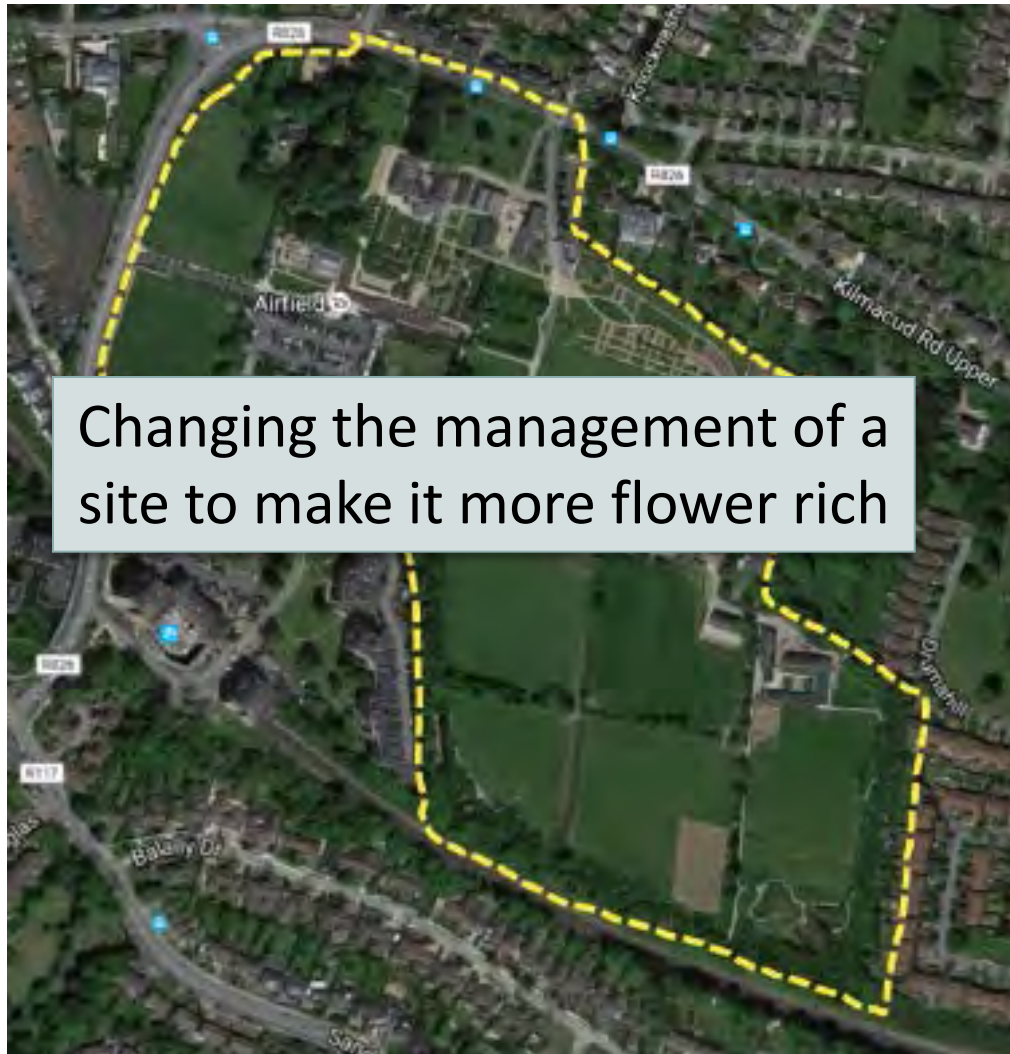
- Food from spring through to autumn
- A range of plants – balanced diet

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)

**NATIVE - BEST**

**HORTICULTURAL**

# Native plants



Hedgerows, grassy verges/banks

Meadows or areas of long grass

Edges of tracks that are not sprayed

Wilder corners that are not sprayed

Hawthorn (5-6)  
Ivy (9-11)  
Daucus carota (6-8)  
Goldenrod (7-10)  
Hogweed (6-9)  
Melilotus (6-9)  
Mignonette (5-9)  
Rosebay willowherb (7-9)  
Stachys (7-9)

Bird's foot trefoil (6-9)  
Knapweed (6-9)  
Scabious (7-8)  
Senecio (6-9)  
Thistle (7-9)  
Vetch (5-9)  
Achillea (7-9)  
Wild marjoram (7-9)  
Vetchling (5-8)

Dead-nettle (2-11)  
Forget-me-not (4-9)  
Geranium sp (5-9)  
Hawksbeard (6-9)  
Veronica (3-9)

Bluebell (4-6)  
Brassica (4-8)  
Butterbur (3-5)  
Coltsfoot (3-4)  
Foxglove (6-9)  
Mustard (5-9)  
Radish (6-7)  
Rape (4-6)  
Turnip (5-8)  
Fleabane (7-8)  
Charlock (4-7)  
Red bartsia (6-9)

Good for all bees, or particularly important for honeybees, bumblebees or solitary bees



# Deliberate planting

## Trees/shrubs

Horse chestnut (4-6)  
Lime (6-7)  
Sycamore (4-6)  
Firethorn (5-6)  
Berberis (4-5)

## Fruit trees/bushes

Apple (4-5)  
Plum (4-5)  
Currant (4-5)  
Cherry (4-5)  
Raspberry (6-8)

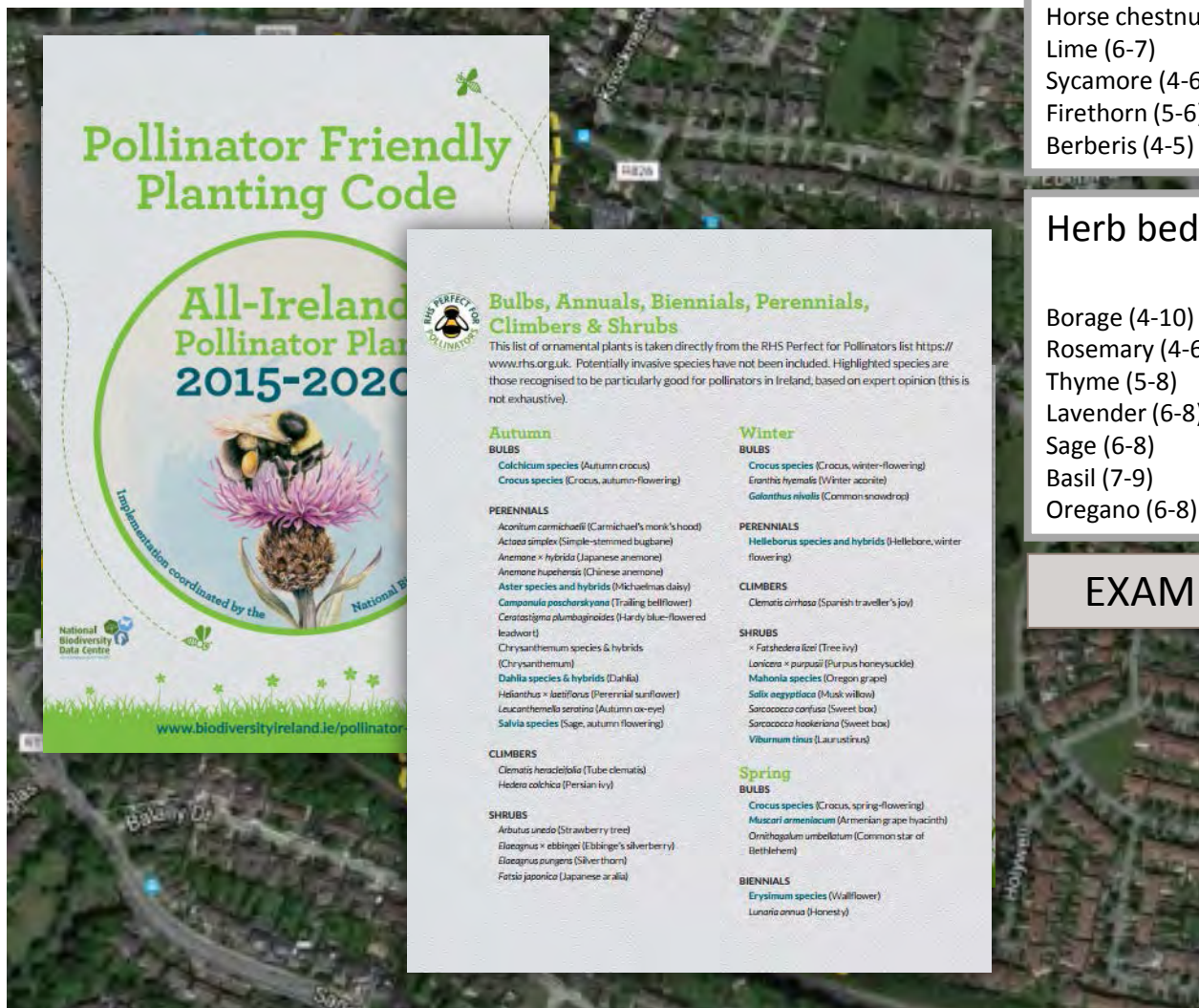
## Herb bed

Borage (4-10)  
Rosemary (4-6)  
Thyme (5-8)  
Lavender (6-8)  
Sage (6-8)  
Basil (7-9)  
Oregano (6-8)

## Planted beds – perennial is best

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)

## EXAMPLES



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





# 2018 publications

Online edition: ISSN 2009-4852  
Print edition: ISSN 2009-4844

National Biodiversity Data Series No. 34

Pollinator-friendly management of

## Group Water Scheme Sites

www.pollinators.ie

# How-to-guide

## Develop a Pollinator Plan for your school

National Biodiversity Data Centre

All-Ireland Pollinator Plan 2015-2020

An Chomhairle Ombudsmaí The Heritage Council

www.pollinators.ie

## Food for pollinators on the farm

Pollinators need flowers to feed on from spring through to autumn

Native trees & shrubs – allow hedgerows to flower

Native wildflowers – allow for grass to seed naturally

www.pollinators.ie

## Pollinator-friendly plants for YOUR GARDEN

Our pollinating insects are in decline. One third of our 99 bee species are at risk of extinction. By choosing pollen-rich flowers needed food our bumblebees and other pollinating insects as well as creating a beautiful colourful garden. There are lots of pollinator-friendly plants to choose from.

To learn more about the All-Ireland Pollinator Plan, see [www.pollinators.ie](http://www.pollinators.ie)

All-Ireland Pollinator Plan 2015-2020

Spring

Summer

# Faith Communities

## Actions to help pollinators

All-Ireland Pollinator Plan 2015-2020

pollinators.ie

National Biodiversity Data Centre

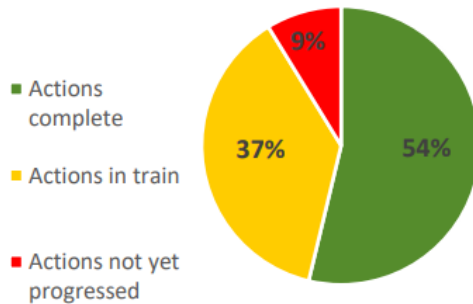
# TRACKING CHANGE & MEASURING SUCCESS

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



Status and progress of the Pollinator Plan's original 81 actions at the end of year 2



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

Create a system to track progress in the creation of pollinator resources

**Small garden:**

ACTION	
Bee friendly flowers: spring	✓
Bee friendly flowers: summer	✓
Bee friendly flowers: autumn/winter	✓
Areas of lawn uncut	✓
Areas of long grass	✓
Pesticides not applied	✓
Providing solitary bee nests	✓

**School:**

ACTION	
Bee friendly flowers: spring	✓
Bee friendly flowers: summer	✓
Bee friendly flowers: autumn/winter	✓
Areas of lawn uncut	✓
Areas of long grass	✓
Pesticides not applied	✓
Providing solitary bee nests	✓

**Farm:**

ACTION	
Flowering hedge/road	✓
Number 8 pollen rich trees and shrubs	✓
Bumblebee nest sites	✓
Solitary bee nest sites	✓
Pesticide not used outside cropping system	✓
Clover incorporated into grass swards	✓

Publicly available online mapping system

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





## 2. Track resources going into the landscape - publicly available online mapping system called 'Actions for Pollinators'

This tracks actions on the ground across sectors. It has a rigid structure linked to the published guideline documents. Provides recognition and also facilitates local coordination.

The image shows two overlapping screenshots of a web application. The left screenshot, titled 'Manage my sites', displays a table of site entries. The right screenshot, titled 'Edit site', shows a detailed form for editing a site named 'Maypark Garden'.

### Manage my sites

--- P  
+ Add Site  
Show 10 entries Search:

Date	Name	Type	Area
15/03/2017	Craigadick Garden	Gardens	335 m2
09/02/2017	Maypark Garden	Gardens	258 m2

Showing 1 to 2 of 2 entries

### Edit site

#### Site Information

Site Name:

Type:

Date:

**A. Protect existing pollinator habitats**

Length of existing flowering hedgerow protected (m)

Area of existing earth banks or bare soil protected (m2)

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 (m2)

Area mown every 6 weeks to allow Clover to bloom (m2)

Area managed as long-flowering meadow-1 grass cut & lift/year (m2)

**C. Pollinator friendly planting**

SPRING-flowering pollinator friendly plants/trees/shrubs  main species   
SUMMER-flowering pollinator friendly plants/trees/shrubs  main species   
AUTUMN-flowering pollinator friendly plants/trees/shrubs  main species

**D. Provide nesting habitats**

Area of earth bank or bare soil created for mining bees (m2)

Plant stems left standing (type)

Number of holes drilled in wood

Number of bee hotels installed



## Site Details

**Site Name** ABP Rathkeale

**Date** 01/08/2017

**Type** Businesses

**Area** 50981 m<sup>2</sup>

**A. Protect existing pollinator habitats**  
Length of existing flowering hedgerow protected (m) - 780  
Length of existing dry stone walls protected (m) - 150  
Other pollinator friendly habitats protected - Long Grass

**B. Reduce mowing**  
Area managed as long-flowering meadow-1 grass cut & lift/year (m<sup>2</sup>) - 27000

**D. Provide nesting habitats**  
Number of bee hotels installed - 1

**E. Reduce pesticide use**  
Area where herbicide use has been eliminated (m<sup>2</sup>) - 51000

**F. Raising awareness of pollinators**  
Pollinator signage printed or sponsored (number signs) - 1

**H. Other**  
Species of note: Common Frog, unknown shrew species and notable various hoverfly species abundance. Single digit leafcutter occupancy in Bee hotel. The site also contains a 21,000 sqm wetland which has been preserved in tact in order to protect a very strong local population of common frog.



Total polygon area: 3.81 km<sup>2</sup>

--- Polygon type ---



CLOGHATRIDA



Orthophoto

KNOCKA

Close



# All resources are freely available to download online

<http://www.pollinators.ie>



## Pollinator Plan Resources

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

[All Ireland Pollinator Plan 2015-2020 \(18MB\)](#)

[All Ireland Pollinator Plan 2015-2020 \(Black & White - 13MB\)](#)

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

### Sectoral Guidelines

### How-to-Guides



The documents published to date are linked to below, along with some additional documents will be added to each series 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](#)

\*Note\* **Actions for Pollinators**, our publicly available online mapping system, is now available. Find instructions in the menu below for logging your pollinator friendly actions, and visit the site here: <https://pollinators.biodiversityireland.ie/>

[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](#)



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National Biodiversity Data Centre No. 4

# Local Communities: actions to help pollinators

## All-Ireland Pollinator Plan 2015-2020



supported by  
National  
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Data Centre

[www.biodiversityireland.ie/pollinator-plan](http://www.biodiversityireland.ie/pollinator-plan)

Guidelines 1

23 Actions to provide  
**food, shelter and safety**  
for pollinators



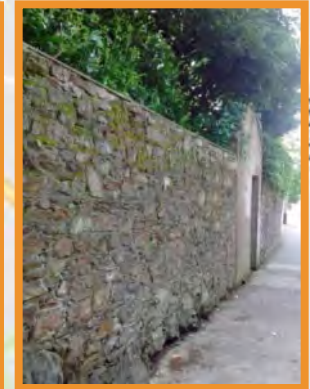
## A. Identify and protect existing areas that are good for pollinators

**FOOD & SHELTER**

**Action 1:** Protect existing sources of food and shelter for pollinators

- ✓ Flowering hedgerows (food)
- ✓ Patches of wildflowers on waste ground (food)
- ✓ Small wild areas with bramble/ivy (food)
- ✓ Existing earth banks (shelter)
- ✓ Dry stone walls (shelter)

**DON'T REPLACE  
SOMETHING GOOD  
WITH SOMETHING THAT  
IS ONLY OK...**



# Native flowering hedgerows provide vital food sources in spring



*Current management of hedgerows is often not pollinator friendly. If hedgerows are not in flower in April-May, they are not good for pollinators and other wildlife.*



**FOOD**

**Native flowering hedgerow plants that are good for pollinators:**





## B. Reduce the frequency of mowing of grassy areas

FOOD



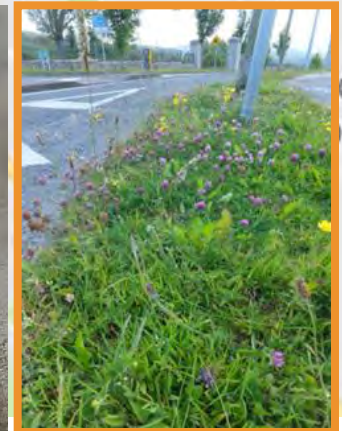
**Action 2:** Reduce mowing and aim to create a wildflower meadow

Cut once a year in September

If you remove cuttings each time it will gradually become less grassy and more flower rich



**Action 3:** Create a short flowering '6-week meadow'



## B. Reduce the frequency of mowing of grassy areas

FOOD



**Action 2:** Reduce mowing and aim to create a wildflower meadow



**Action 3:** Create a short flowering '6-week meadow'



**Action 4:** Let the Dandelions bloom!

Cut as normal, but first cut is not before April. This allows Dandelions to flower but not set seed





# Don't Mow Let it Grow - not cutting grass so often is the best and cheapest way to provide more food for pollinators



Cut once a year – food and shelter

Cut regularly

Cut on a 6-weekly rotation  
from mid April - food

Liam Scott







## C. Pollinator-friendly planting

FOOD



**Action 5:** Clover lawn. Areas where grass is replaced with a permanent clover mix



**Action 6:** Plant a mix of pollinator friendly trees & shrubs to flower from spring-autumn

## C. Pollinator-friendly planting



Andrena McDonagh

**Action 7:** Plant a mix of pollinator friendly perennial plants to flower from spring-autumn



Peter Cuthbert

**Action 8:** Annual flowers for pollinators

Ensure a component of annual planting is pollinator friendly– single not double flowered varieties



**Action 9:** Some urban planters or hanging baskets with perennial pollinator friendly plants

FOOD

NOT GOOD FOR POLLINATORS



Very brightly coloured annuals like Geranium, Begonia, Busy Lizzy, Primula, Daffodil, Salvia splendens don't provide food



# C. Pollinator-friendly planting

FOOD

**Info box:** Pollinator friendly perennial planting versus annual bedding

Planting regime	Approximate cost m <sup>2</sup> (2016)
Pollinator friendly perennials	€10-13 (\$)
	€17-19 (€)
Annual bedding	€10-29

Based on prices from a large Irish Council in ROI.





Waterford set to be blooming marvellous, as "City in Bloom" blossoms!



Might look good but doesn't provide any food for pollinators or other wildlife





## C. Pollinator-friendly planting

FOOD



**Action 10:** Pollinator friendly roundabouts. Some roundabouts planted in a pollinator friendly way with bulbs or pollinator friendly perennials



## C. Pollinator friendly planting

FOOD

**Action 11:** Plant a native wildflower meadow.

Source native seed from Ireland and ensure that you plant pollinator friendly species.

This is difficult and can be costly



Bees will be happier with natural regeneration



Institute of  
Technology  
Carlow





D: Provide wild pollinator nesting habitat:  
hedgerows, earth banks and hotels

SHELTER

Bumblebees (20 species)

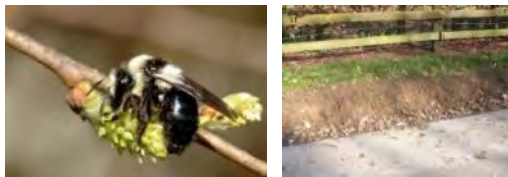


Cavity nesting solitary bees (15 species)

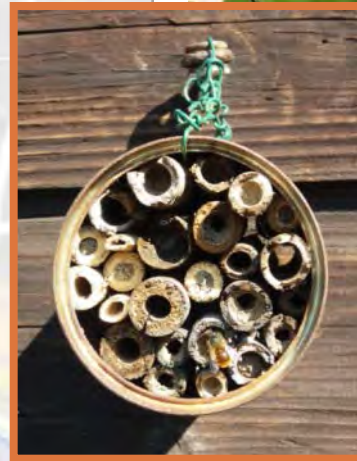


Action 12: Hedgerows and long grass for bumblebee nesting

Mining solitary bees (62 species)



Action 13: Earth banks and drystone walls for solitary bee nesting



BIG ISN'T BETTER!

## E. Reduce the use of pesticides

SAFETY

**Action 16:** Eliminate the use of pesticides

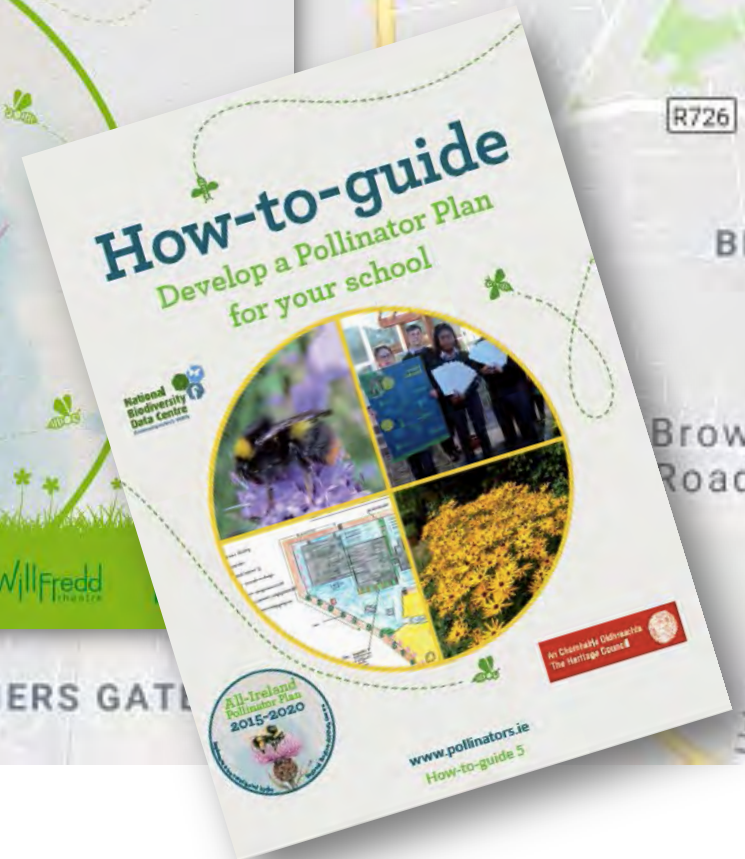
**Action 17:** Ensure best practise where the use of pesticides cannot be avoided





## F. Raise public awareness of pollinators within the local area

**Action 18:** Promote the Junior All-Ireland Pollinator Plan 2015-2020 to local schools or youth groups



## F. Raise public awareness of pollinators within the local area

**Action 19:** Promote the Pollinator Plan to local businesses & encourage actions/sponsorship



Kildare County Council & Wicklow County Council supported animation



**Action 20:** Put up signage explaining importance of pollinators and what is being done locally to support the Pollinator Plan

**Action 21:** Facilitate or deliver training workshops on pollinators and how to protect them





# Tracking progress and recognition for efforts

**Action 22:** Log any actions you have taken through the publicly available online mapping system called 'Actions for Pollinators'.

<https://pollinators.biodiversityireland.ie>

--- Polygon type ---  
Businesses  
Councils-Actions  
Councils-Policy changes  
Gardens  
Headquarters/Campuses  
Local Communities (includ  
Schools

--- Attribute name ---  
A. Protect existing pollinator habitats  
B. Reduce mowing  
C. Pollinator friendly planting  
D. Provide nesting habitats  
E. Reduce pesticide use  
F. Raising awareness of pollinators  
G. Tracking progress  
H. Other  
I. Other actions taken for general biodiversity

Full screen Switch to NI basemap

Orthophoto Orthophoto

OSI



Home

Sign up

Sign in

## Actions for Pollinators

### Site Details

Site Name	Hegarty's Field Verge
Date	20/05/2017
Type	Local Communities (including Tidy Towns)
Area	451 m2
B. Reduce mowing	Area mown every 6 weeks to allow Clover to bloom (m2) - 400 Area where Dandelions are allowed to bloom- first grass cut delayed till mid-April (m2) - 400
D. Provide nesting habitats	Number of holes drilled in wood - 75 Number of bee hotels installed - 3
E. Reduce pesticide use	Area where herbicide use has been eliminated (m2) - Not used in this area
F. Raising awareness of pollinators	Signage used (number) - 1
G. Tracking progress	Tidy Towns special pollinator award entered (name of Tidy Towns group) - Buncrana Tidy Towns

**RECOGNITION FOR EFFORTS**

Close



# Tracking progress and recognition for efforts

**Action 23:** Identify an interested person and set up a bumblebee monitoring scheme walk

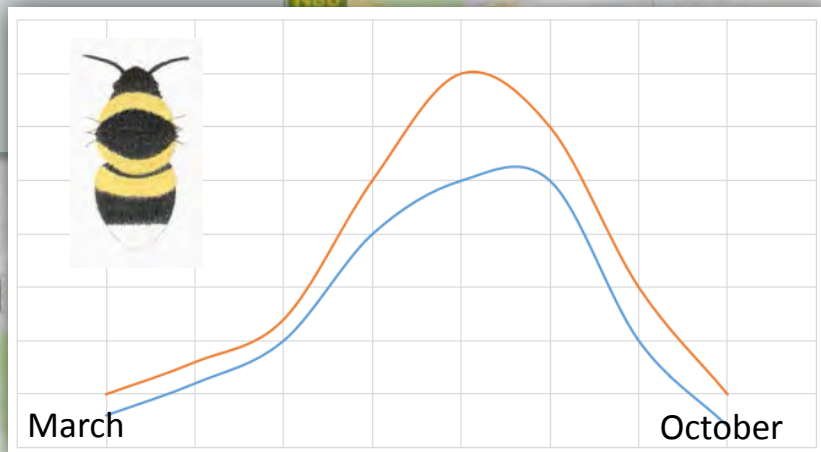
<http://www.biodiversityireland.ie>

## Bumblebee Monitoring Scheme

National  
Biodiversity  
Data Centre  
Documenting Ireland's Wildlife



Record bumblebees along a 1-2km fixed route walk once a month from March until October



Training and support provided.  
Managed by **Dr Tomás Murray**,  
[tmurray@biodiversityireland.ie](mailto:tmurray@biodiversityireland.ie)



# Action 24: Enter the Local Authority pollinator award in the Tidy Towns competition



Total prize of **€9,000** up for grabs. Judged by how many of the actions you take.



# Get involved in your local Tidy Towns and enter the Pollinator Award





# SuperValu Tidy Towns

## EXAMPLES FROM 2017

Maynooth



Kilbeg



Tarbert



Arklow



Ballintubber



Ferns



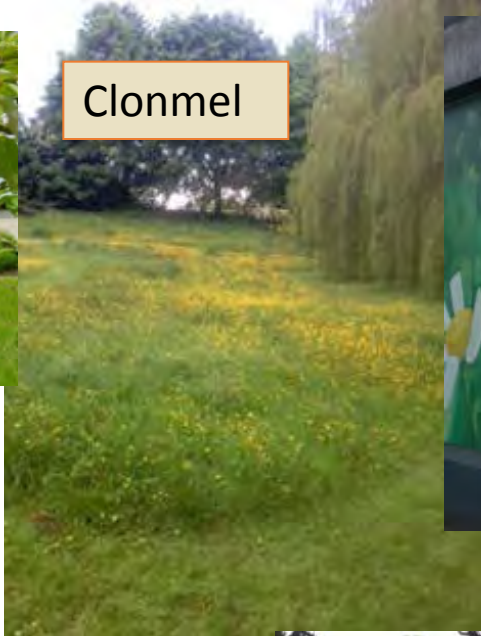




# EXAMPLES FROM 2017



Clonmel



Mountmellick

Community orchards help bees and people!



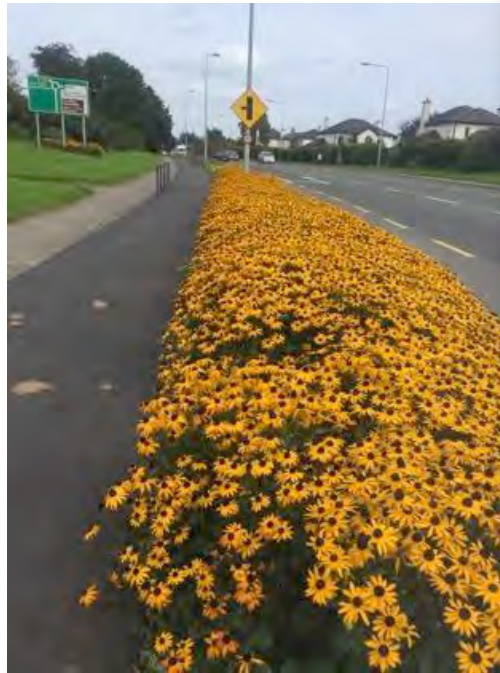
Buncrana



Mullingar







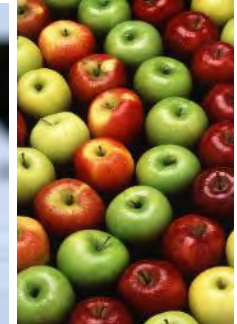
Tidy Towns groups are working with their Local Authorities to encourage planting of more pollinator-friendly beds; reduce pesticide use, and to reduce mowing





# CALL TO ACTION

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



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



An initiative by



An Chomhairle Oidhreachta  
The Heritage Council



# Thank you