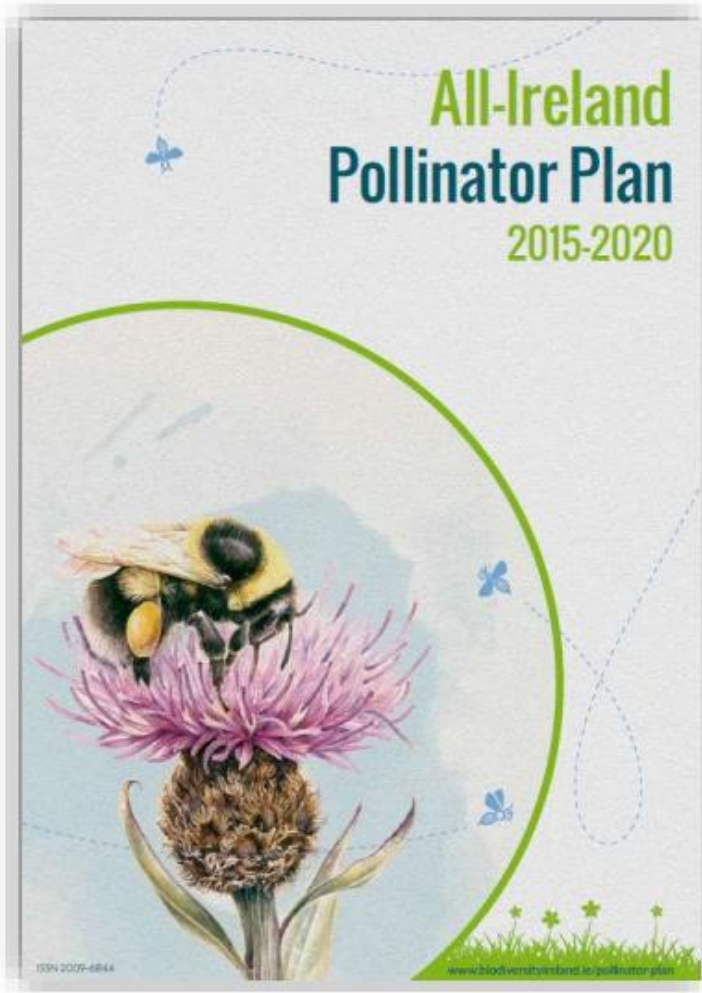


# ALL-IRELAND POLLINATOR PLAN

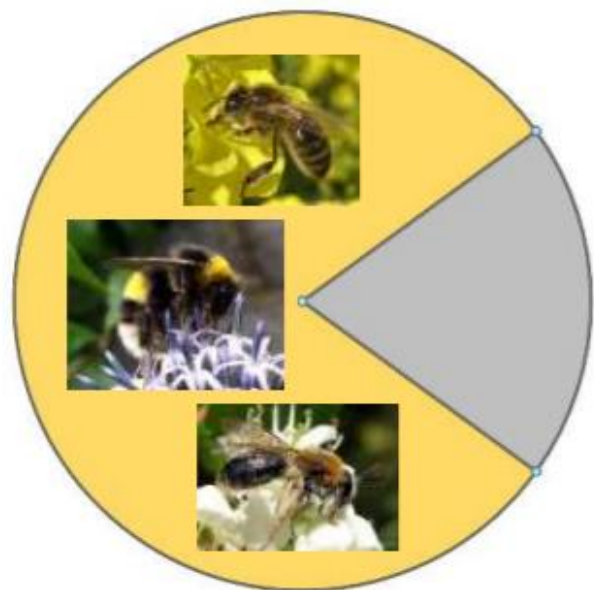


Dr Úna FitzPatrick  
Steering Group Chair; Project co-ordinator

Juanita Browne  
Project officer

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

WHO ARE THE POLLINATORS IN IRELAND?

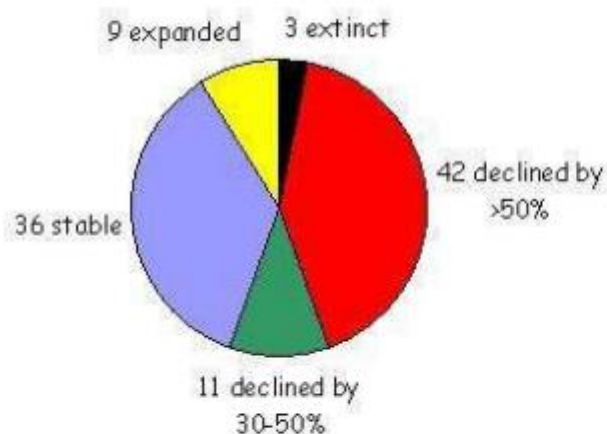


Most pollination of crops and wild plants is carried out by bees



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

# 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

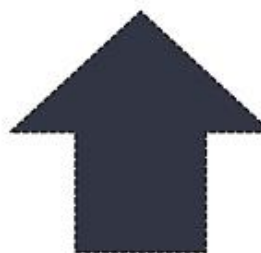
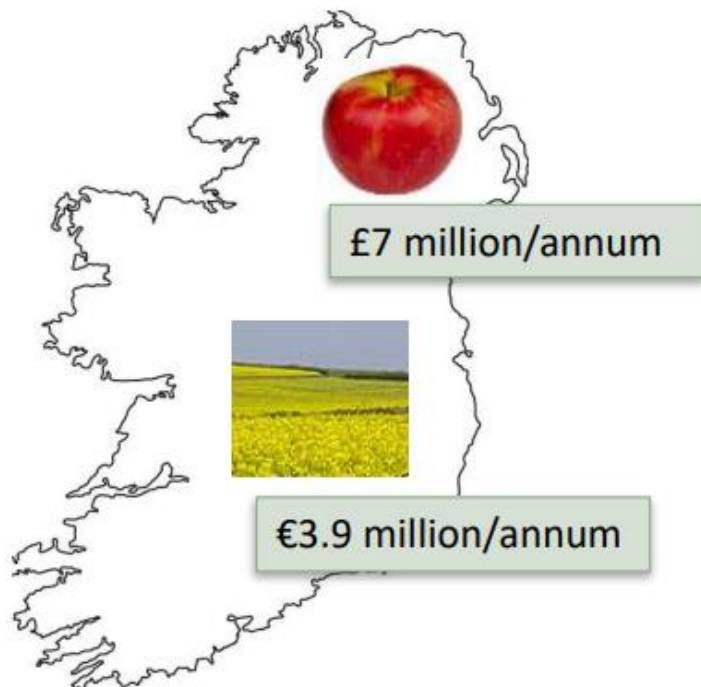
# WHY IS POLLINATION IMPORTANT?

**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



# Health & Wellbeing

Wildlife & Landscape



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

# BEES IN IRELAND

Ireland has **99** bee species:

Honeybee



Bumblebees



Solitary bees



**WILD POLLINATORS**

# BUMBLEBEES – 21 DIFFERENT TYPES IN IRELAND



## 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.





# 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**



If you want to help implement the All-Ireland Pollinator Plan it is important to think about providing:

## **food, shelter & safety**



## 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)



## 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

## C. Pollinator friendly planting

FOOD



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



Peter Cuthbert

**Action 8:** Annual flowers for pollinators. Ensure a component of annual planting is with pollinator friendly annual plants



Tom Cuffe

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



Andrena McDonagh

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



Dara Stanley

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

## How do you know if a plant is pollinator friendly?

- Do you see pollinators visiting? When choosing plants at a garden centre, you will quickly spot which flowers insects visit most.
- Choose **single-flowered** varieties or **perennials** (double-flowered or annuals are generally poor sources of pollen and nectar).

See our website for more actions you can take to help pollinators in your garden, business, farm, school or local community.



Rudbeckia



Aster



Mahonia



Crocus



Heathers



Salvia



Willow



Snowdrop



Eupatorium



Single flowered Dahlia



Viburnum



Helleborus

Autumn

Winter

Daffodils, Tulips, and traditional bedding plants like Geraniums, Begonias, busy Lizzy, Petunias, Polyanthus or Salvia splendens have virtually no pollen and nectar and are of little value to pollinators.



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

National Biodiversity Data Centre  
Documenting Ireland's Wildlife

# 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 for your garden, you will help provide much-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)



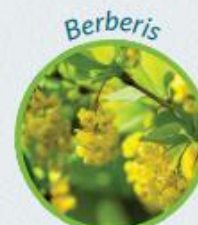
Grape hyacinth



Wallflower



Lungwort



Berberis



Broom



Rosemary



Borage



Comfrey



Allium



Foxglove



Catmint



Calamint



Bellflower



Scabious



Lamb's-ear



Globe thistle



Stonecrop



Verbena



Lavender



Sneezeweed

Spring

Summer



# Native plants are best



Flowering  
hedgerows

Grassy  
verges/banks

Meadows or areas  
of long grass

Edges of tracks  
that are not  
sprayed

Wilder corners  
that are not  
sprayed

Hawthorn  
Willow  
Wild Cherry  
Crab Apple  
Bramble  
Ivy

Wild Carrot  
Goldenrod  
Hogweed  
Mignonette  
Rosebay willowherb  
Stachys

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

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

Bluebell  
Brassica  
Butterbur  
Coltsfoot  
Foxglove  
Radish  
Turnip  
Fleabane  
Red bartsia



An aerial photograph of a residential area with a lake and a road. The image shows a mix of green spaces, buildings, and paved areas. A road runs along the edge of a lake on the right side of the image. The overall scene is a typical suburban or urban landscape.

## E. Reduce the use of pesticides

**SAFETY**

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

- ✓ Identify streets/areas where your group is willing to take responsibility for manual weed control
- ✓ Most pesticide use is along edging or tree bases that mowers can't access. Identify small areas of south facing edging that could not be sprayed to provide solitary bee nesting habitat

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

- ✓ Follow manufacturer guidelines exactly
- ✓ Spot treat rather than blanket spray
- ✓ Spray in dry conditions with low wind speed to prevent drifting
- ✓ Spray after sunset to avoid direct contact of pollinators with chemicals

## 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

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

**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



Arna bhainistiú ar son an fhiadhúlra  
Managed for Wildlife



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

Managed for  
Wildlife



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

Ná lom é (fós)



Arna bhainistiú ar son an fhiadhúlra  
Managed for Wildlife

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

Pollinator  
Friendly Zone



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

Arna bhainistiú ar son an fhiadhúlra  
Managed for Wildlife

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



Managed for the Great  
Yellow Bumblebee



All-Ireland  
Pollinator Plan  
[www.pollinators.ie](http://www.pollinators.ie)

Managed for the  
Great Yellow Bumblebee  
Arna bhainistiú ar son an  
Bhumbóg Mhór Bhui



All-Ireland Pollinator Plan  
Plean Uile-Éireann um Pollinoir  
[www.pollinators.ie](http://www.pollinators.ie)



Managed for the  
rare Large Carder Bee  
Arna bhainistiú ar son an  
Chaonacháin



All-Ireland Pollinator Plan  
Plean Uile-Éireann um Pollinoir  
[www.pollinators.ie](http://www.pollinators.ie)

Coming together to create networks of pollinator friendly habitat

Tidy Towns

Businesses

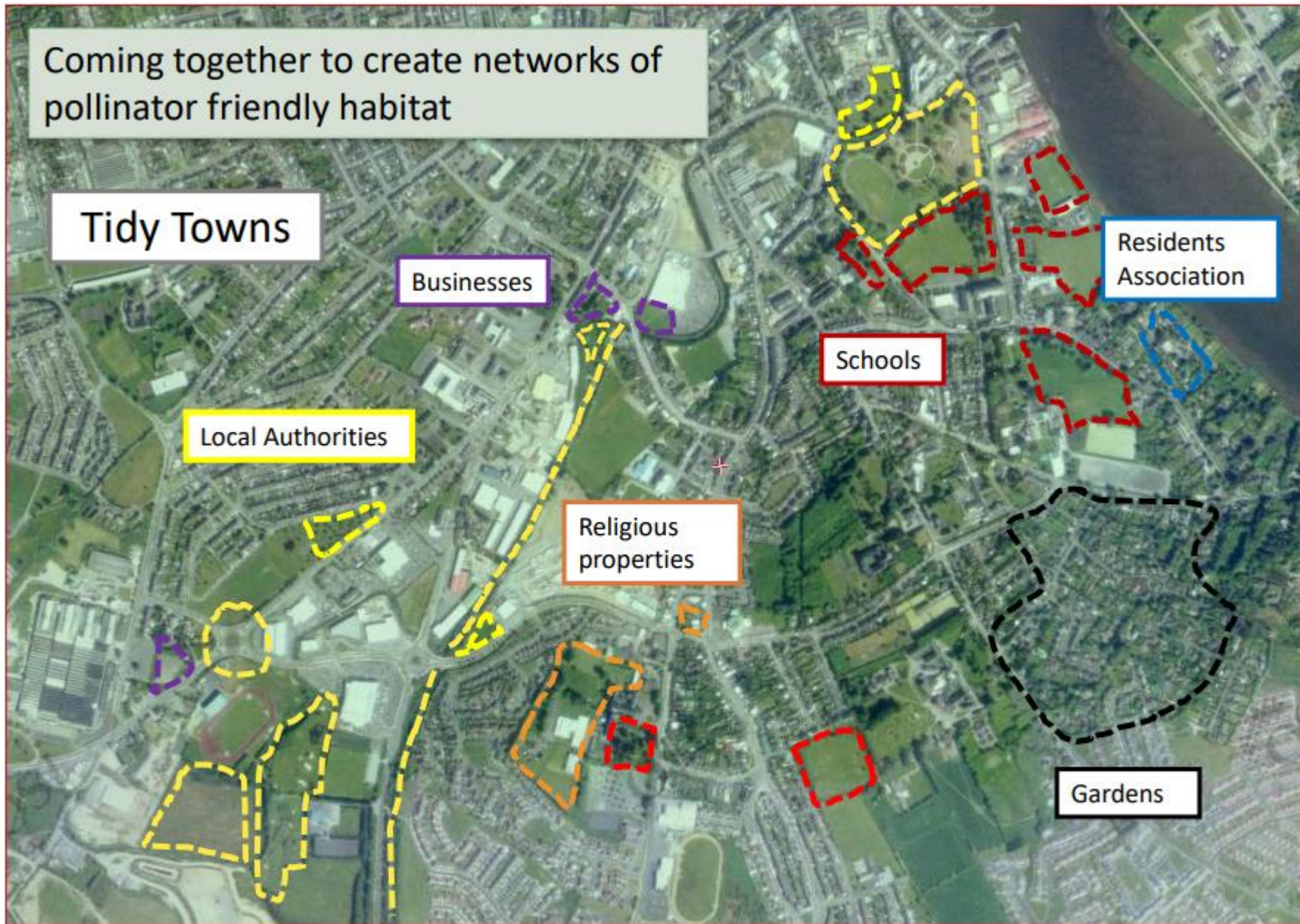
Local Authorities

Religious properties

Schools

Residents Association

Gardens





Bush Vetch  
Vici: Sepium

Leaving nature alone



Dandelion  
(Taraxacum officinale)



Ground-Ivy  
(Glechoma hederacea)

Don't mow, let it grow



Arna Bhainistiú  
don bhFiadhúlra  
Managed for Wildlife  
[www.biodiversityireland.ie/pollinator-plan](http://www.biodiversityireland.ie/pollinator-plan)  
Plean na Pailneoirí Uile-Éireann  
National Biodiversity Data Centre  
All-Ireland Pollinator Plan  
SuperVets  
Tidy Towns



Planting from seed



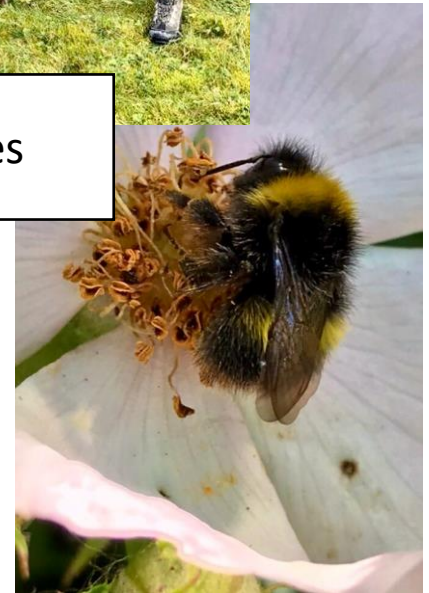
Wildflower meadow  
(For seed –  
[www.wildflowers.ie](http://www.wildflowers.ie))



Perennial Flower beds



Trees and hedges



# CALL TO ACTION

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



## Thank You

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