

Enhancing biodiversity in existing homes



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BIODIVERSITY LOSS IS A HUGE PROBLEM



Ireland has ~31,500 species living within 117 habitats

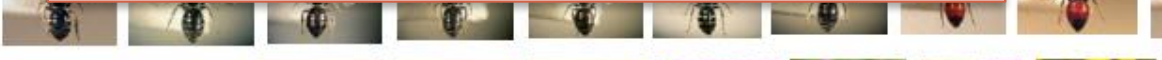
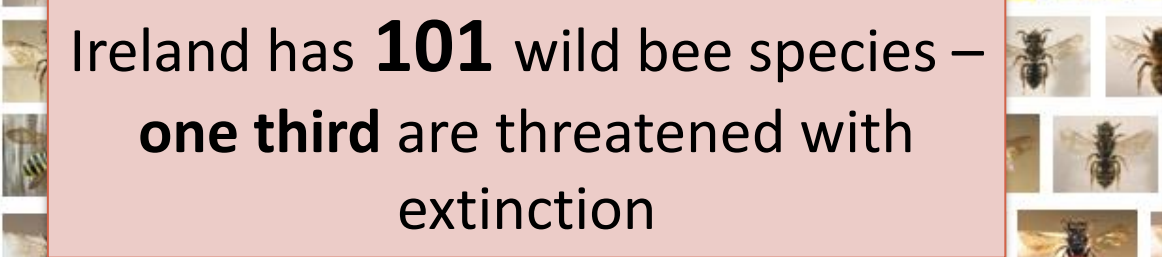
- Of those habitats assessed only **15%** are in a good state
- Of those species assessed **17%** are threatened with extinction from Ireland



*In Ireland, we have been using **pollinators** as a vehicle to communicate about biodiversity to wide audiences*



Ireland has **101** wild bee species – **one third** are threatened with extinction



- ✓ Need interconnected networks of semi-natural habitats
- ✓ Need farmland to be managed in a way that allows nature to coexist with the farming business
- ✓ Need urban areas to be managed in a way that is biodiversity friendly

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Need biodiversity actions, not just urban greening

Need interconnected networks of habitats and we need to seriously look at pesticide use

- ✓ Requires transformative change
- ✓ Need to take evidence-based actions for biodiversity, not the ones humans like best
- ✓ Need to avoid spending money where the positive impact would have been greater by doing less
- ✓ Not about gardening nature – need to get to a landscape where biodiversity can coexist with minimal human support

The benefits to biodiversity, climate, human health & well-being, and to tourism would be huge

TWO KEY ACTIONS FOR BIODIVERSITY

Returning habitats – sustainable and long-term biodiversity actions

Flowering native hedgerows & trees



Native meadows and verges – don't sow, let it grow

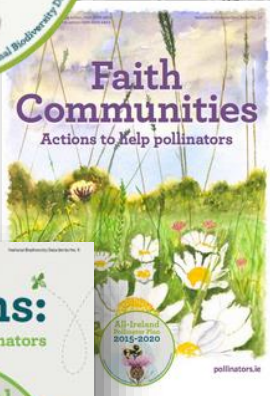


In urban areas we need widescale interconnected networks of these semi-natural habitats



Coming together to make a difference

www.pollinators.ie



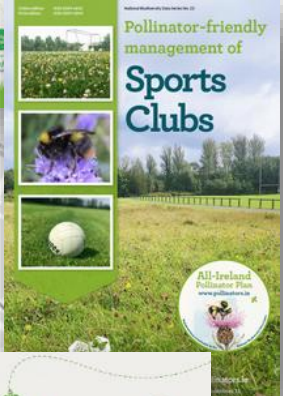
Faith Communities

Campus

Businesses



Sports Clubs



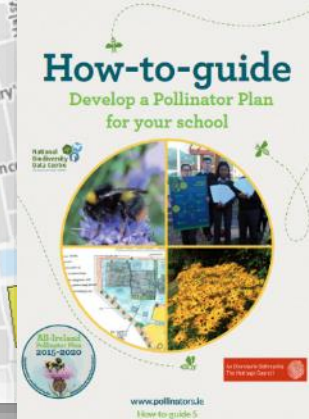
Schools

Gardens



Local community groups

Residents Associations



2023: Worked with Clúid on a **Landscape & Biodiversity Guidance for New Developments**



We need to make sure to take the best actions for biodiversity – not the easiest ones, or the ones that humans prefer

Decline in wild bee species richness associated with honey bee (*Apis mellifera* L.) abundance in an urban ecosystem

Research article

Biodiversity

Conservation Biology

Ecology

Entomology

Zoology

Gail MacInnis¹, Etienne Normandin², Carly D. Ziter¹

Published February 3, 2023

Why we don't recommend wildflower seed mixes



At the All-Ireland Pollinator Plan, we are often asked, "should I plant wildflower seed?" Our answer is always that pollinators themselves would say "no".

Wildflower seed mixes often contain non-native species

Our pollinators need the native wildflowers they have evolved alongside. Studies have shown that the seeds in many wildflower seed mixes are imported from other

invasive species

Journal of Applied Ecology



RESEARCH ARTICLE | Open Access |

The disproportionate value of 'weeds' to pollinators and biodiversity

Nicholas J. Balfour Francis L. W. Ratnieks

First published: 07 March 2022 | <https://doi.org/10.1111/1365-2664.14132> | Citations: 1

Residential developments and gardens can be incredibly important for biodiversity



Science of The Total Environment

Volume 647, 10 January 2019, Pages 420-430



Domestic gardens as favorable pollinator habitats in impervious landscapes

Marine Levé^{a, b}

Show more

Conservation Biology



Essay | [Open Access](#) |

The city as a refuge for insect pollinators

Damon M. Hall , Gerardo R. Camilo, Rebecca K. Tonietto, Jeff Ollerton, Karin Ahrné, Mike A. John S. Ascher, Katherine C. R. Baldock, Robert Fowler, Gordon Frankie, Dave Goulson, Bengt Gunnarsson, Mick E. Hanley, Janet I. Jackson, Gail Langellotto, David Lowenstein, Emily Stacy M. Philpott, Simon G. Potts, Muzafar H. Sirohi, Edward M. Spevak, Graham N. Stone, Caragh G. Threlfall

First published: 14 September 2016 | <https://doi.org/10.1111/cobi.12840> | Citations: 266



Urban Forestry & Urban Greening

Volume 80, February 2023, 127820

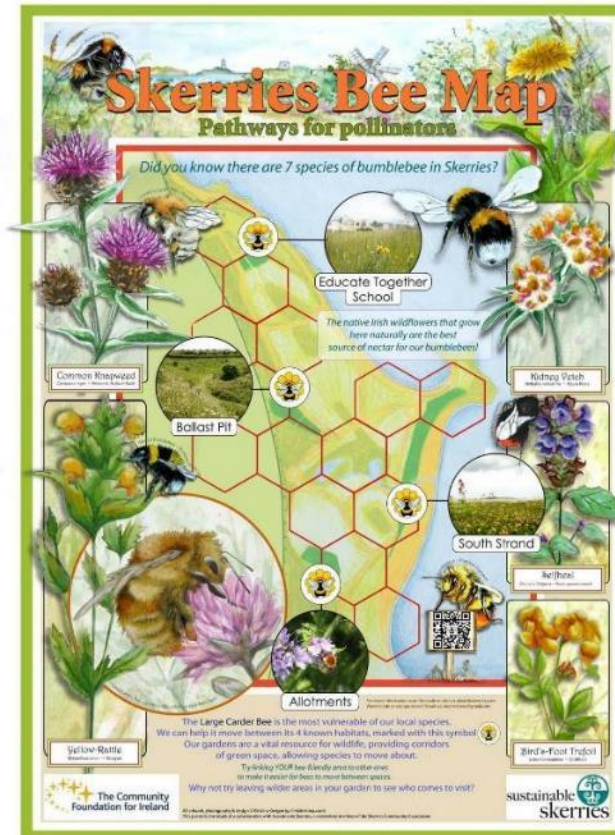


Short communication

“Do we need to see gardens in a new light?” Recommendations for policy and practice to improve the ecosystem services derived from domestic gardens

[Ross Cameron](#)¹

Their impact is enhanced when they are part of interconnected ecological corridors



“We are a group of residents in Blarney St that would like to incentivise our neighbours to join a pollinator pathway. If all agree, it has the potential to be a 2km pollinator path”



What actions will enhance biodiversity in existing homes?



No chemical use

Ornamental flowering trees/shrubs

No Mow May

Soft fruits, strawberries, tomatoes, courgettes, peas



Mini Orchard – dwarf fruit trees

Native trees and shrubs

Native meadows – Don't Mow Let it Grow

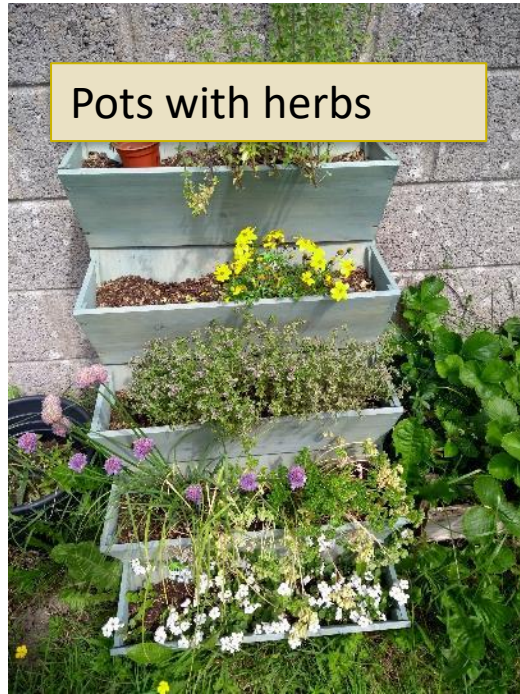


Undisturbed areas for nesting





Early flowering bulbs



Pots with herbs



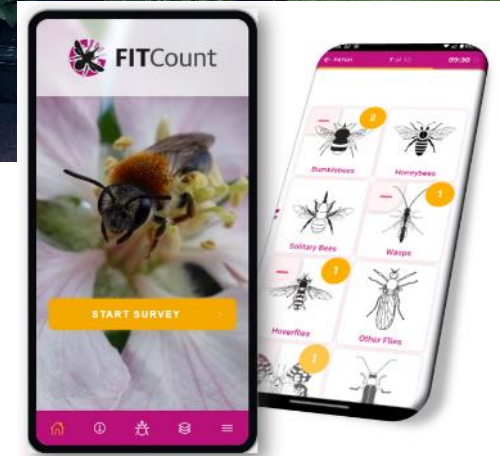
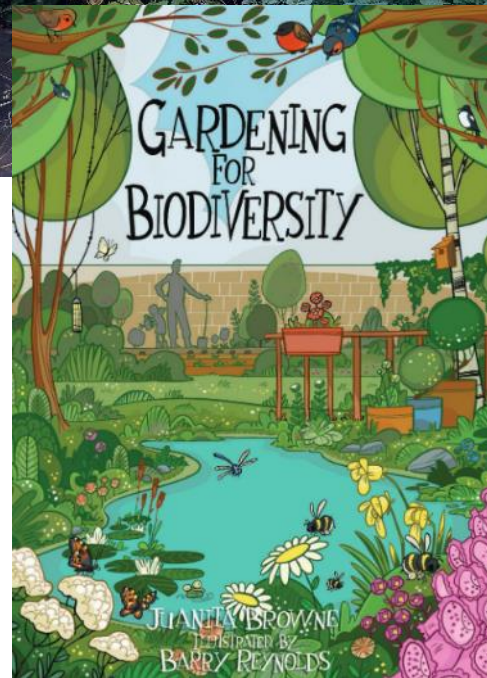
Mix of pollinator-friendly ornamental shrubs and perennials that flower from spring to autumn – no hunger gaps



Food/shelter/
water for birds

Fencing to allow movement
of small mammals

Wildlife ponds



Tracking change

<https://laois.ie/wp-content/uploads/Garden-Wildlife-Booklet-WEB-17MB.pdf>

<https://biodiversityireland.ie/surveys/fit-counts/>

18 different wild bee species have used that garden as a pit stop in the past few years



Photos © Steven Falk

<https://pollinators.ie/the-joy-of-making-your-garden-pollinator-friendly/>

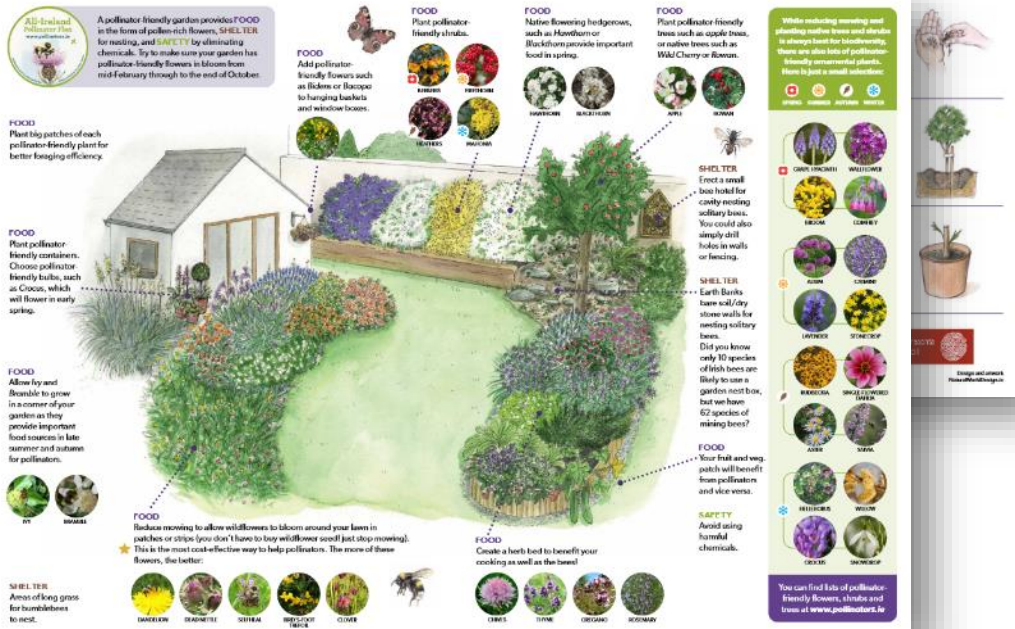
Pledge your Garden for Pollinators

Here are just some ideas for ways you can help pollinators each month:

<p>January</p> <p>Make a pollinator plan for your garden While pollinators are hibernating now and don't need our help just yet, but you can use this time to get prepared. Look through all our tips, videos and plant lists at some pollinators to add to your 'pollinator plan' for your garden.</p> 	<p>February</p> <p>Create solitary bee nesting sites Expose a south/east-facing bank by removing vegetation for nesting bees. Or create a small bee hotel for cavity-nesting bees. See 'Choosing Wild Pollinator Nesting Habitats' guide at pollinators.ie/gardens</p> 
<p>March</p> <p>Let Dandelions Be! The humble Dandelion is a super food for pollinators. If you can avoid cutting your lawn while Dandelions are flowering in March and April, you will be helping to provide much-needed food for early pollinators.</p> 	<p>April</p> <p>Patience for Pollinators If you only have a very small garden or none at all, you can still help. Plant a few 'pollinators' to flower on your patio, balcony or window sill throughout the season. See instruction guide at pollinators.ie/gardens</p> 
<p>May</p> <p>No Mow May Could you leave your lawn mowed in the garage during May? This will allow Red and White Clover to bloom in your lawn to feed the hungry bees. <i>(Don't be tempted to cut grass just once in a while - in the end of May, June and August - or you will be cutting all summer.)</i></p> 	<p>June</p> <p>Ask your garden centre for pollinator-friendly plants Unfortunately Digipalis, Tallies and traditional bedding plants, such as Begonias or Petunias, are of little value to pollinators. But there are lots of pollinator-friendly options to choose from. See pollinators.ie/resources</p> 

All-Ireland Pollinator Friendly Garden

A pollinator-friendly garden provides **FOOD** in the form of pollen-rich flowers, **SHELTER** for nesting, and **SAFETY** by eliminating chemical. Try to make sure your garden has pollinator-friendly flowers in bloom from mid-February through to the end of October.



FOOD Plant big patches of each pollinator-friendly plant for better foraging efficiency.

FOOD Plant pollinator-friendly containers. Choose pollinator-friendly bulbs, such as Crocus, which will flower in early spring.

FOOD Allow Ivy and Bracken to grow in a corner of your garden as they provide important food sources in late summer and autumn for pollinators.

FOOD Reduce mowing to allow wildflowers to bloom around your lawn in patches or strips (you don't have to try wildflower seed) just after mowing. This is the most cost-effective way to help pollinators. The more of these flowers, the better!

SHELTER Areas of long grass for bumblebees to nest.

FOOD Plant pollinator-friendly shrubs.

FOOD Native flowering hedgerows, such as Hawthorn or Blackthorn provide important food in spring.

FOOD Plant pollinator-friendly trees such as apple trees, or native trees such as Wych Elm or flowers.

SHELTER Erect a small bee hotel for cavity nesting solitary bees. You could also simply drill holes in walls or fencing.

SHELTER Earth Banks have soil/dry stone walls for nesting solitary bees. Did you know only 10 species of Irish bees are likely to use a garden nest box, but we have 62 species of nesting bees?

FOOD Your back and veg patch will benefit from pollinators and vice versa.

SAFETY Avoid using harmful chemicals.

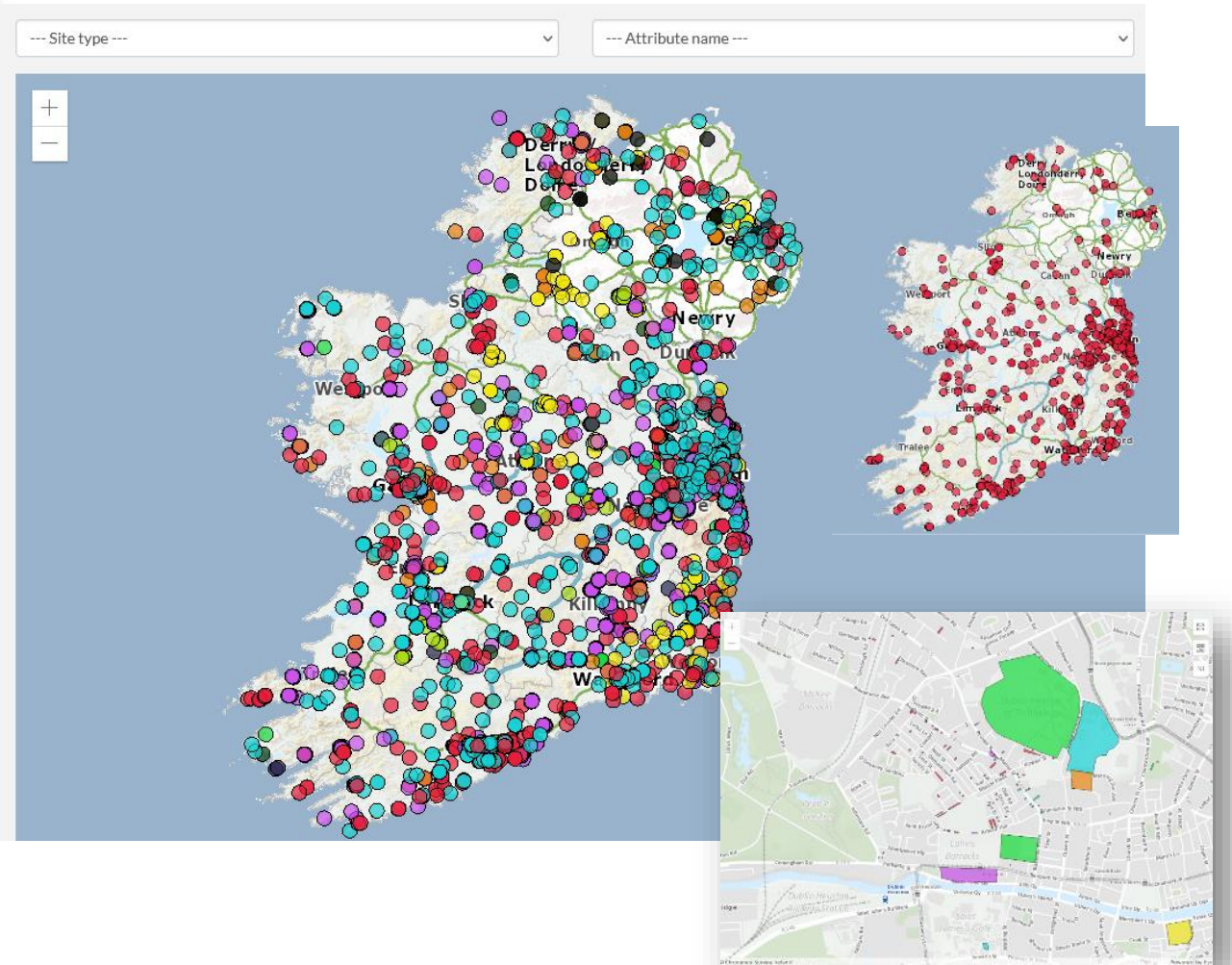
FOOD Create a herb bed to benefit your cooking as well as the bees!

While reducing mowing and creating native trees and shrubs to nest for bumblebees, there are also lots of pollinator-friendly essential plants. Here is just a small selection:

- Campanula
- Malva
- Erigeron
- Claytonia
- Asperula
- Campanula
- Lythrum
- Stachys
- Brickellia
- Small leaved clematis
- Asperula
- Sedum
- Malva
- Wolfe
- Orchid
- Sedum

You can find lots of pollinator-friendly flowers, shrubs and trees at www.pollinator.ie

Add it to the interactive map: **Actions for Pollinators**
<https://pollinators.biodiversityireland.ie/>



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



Just released a new short guideline for Resident's Associations

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

Top Ten Ways Residents' Associations can help Pollinators

- 1 **Don't mow, let it grow**
Pick some areas to cut and lift every 4-6 weeks, or once a year. Even verges or small strips will help.
- 2 **Manage native hedgerows**
Flowers in wood, so three years of annual
- 3 **Plant pollinator-friendly trees**
Plant a young native tree such as Willow, Rowan or Holly, or grow them from seed.
- 4 **Pesticide-free Zone**
Avoid pesticides. Try many instead, and Dandelion they are food source.
- 5 **Create nesting habitats**
Scrape back some bare earth, or drill holes 10cm deep in unvarnished wood for solitary bees.
- 6 **Choose pollen-rich plants**
Add pollinator species in planters and baskets.
- 7 **Don't get Honey Bees to help biodiversity**
They can compete for food with the wild pollinators who are already struggling.
- 8 **Be careful with wildflowers**
They can non-native like poppy mowing native wildflowers.
- 9 **Keep insect hotels small**
No bigger than a bird box. This prevents predators and disease.
- 10 **Spread the word**
Tell your community about the you are doing. You are doing putting up running water nature walk.

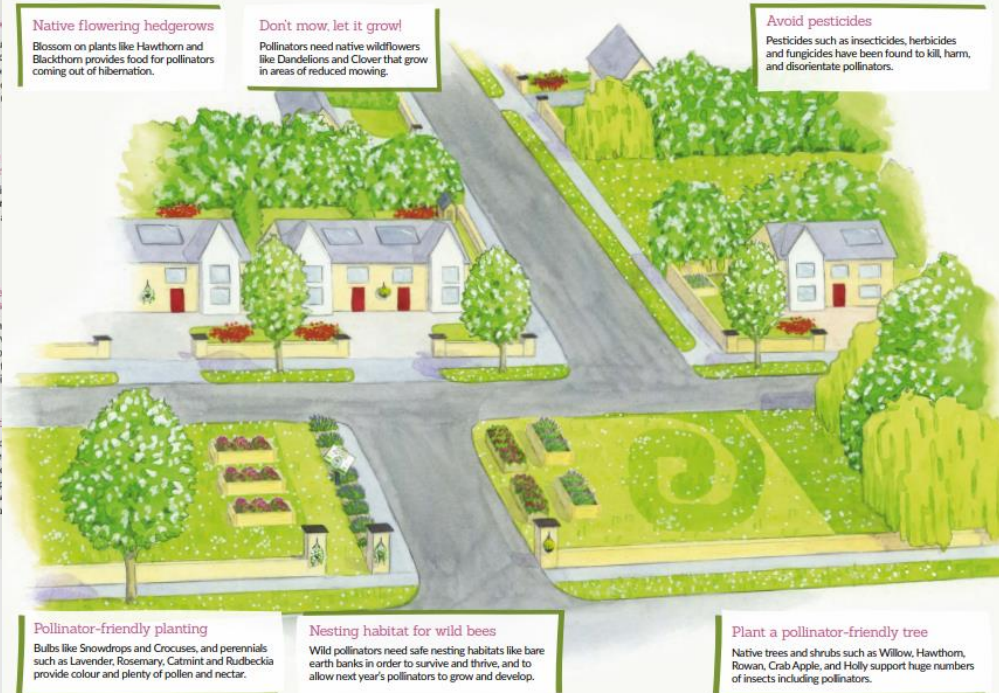
Residents' Associations Actions for Pollinators



Most plants on the island of Ireland are pollinated by wild bees. We have over 100 species

A pollinator-friendly community provides FOOD in the form of pollen-rich flowers, SHELTER for nesting and SAFETY by reducing or eliminating chemicals.

Try to make sure your community has pollinator-friendly flowers in bloom throughout the year.



The 3-30-300 Rule for Healthier and Greener Cities

- 3 trees from every home
- 30 percent tree canopy cover in every neighbourhood
- 300 metres from the nearest public park or green space



**Lots of small actions, taken together,
can begin to solve big problems**

National
Biodiversity
Data Centre



A Heritage Council Programme

<https://biodiversityireland.ie/>

www.pollinators.ie

ufitzpatrick@biodiversityireland.ie

THANK YOU



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An Roinn Talmhaíochta,
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