



# Gardening for wildlife. Castleknock Community College



## PLANT SALE

CASTLEKNOCK COMMUNITY COLLEGE  
CARPENTERSTOWN ROAD.

Summer Bedding Plants	Coffee & Tea Shop
Hanging Baskets	New for 2023 -
Window Boxes	Delicious BBQ'd Hot Food
Tubs & Shrubs	& Cake Competition
Fruit & Vegetable Plants	
Garden Accessories	

**SAT 6 MAY  
& SUN 7 MAY  
10AM TO 5PM.**

[pacastleknockcc@gmail.com](mailto:pacastleknockcc@gmail.com)  
[@cccpPlantSale](https://www.instagram.com/cccpPlantSale)

Debit & Credit Card Facility



Coláiste Pobail Caisleán Crucha  
Castleknock Community College  
Carpenterstown Road, Castleknock, Dublin 15 | Est. 1995





Green Connections in Carpenterstown. Let's fill those gaps for wildlife connectivity.





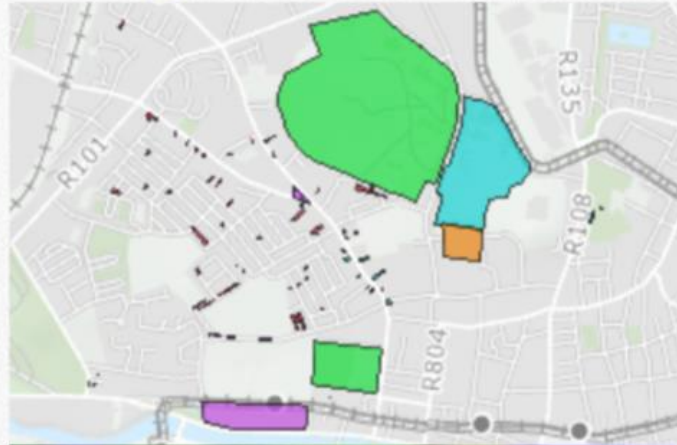
X is CCC. Old 1800s 6" map: fields, treelines. Important wildlife corridors now gone. We have to bridge those gaps.

# Let's start with connecting up corridors for pollinators

Example of an  
Urban Wildlife  
Corridor:

An urban 'Bee  
Route'

## Stoneybatter: Ireland's first pollinator-friendly community



The Stoneybatter community, in Dublin city, have done an amazing job working with all sectors in their community to create pollinator-friendly actions:

So far 70 sites have signed up to help pollinators in Stoneybatter:

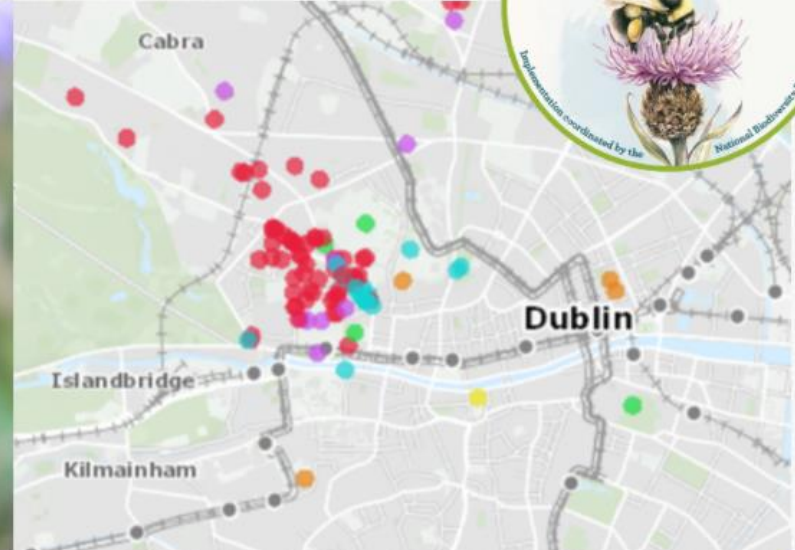
- 54 gardens
- 10 businesses
- 2 Headquarters/ Campuses inc. TU Dublin
- 1 school
- 3 local community sites

All actions can be seen on the Actions for Pollinators mapping system:

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



© Steven Falk





Let's start at the very beginning....



## What is Pollination?



- Movement of pollen from one flower to the next
- Powder-like substance that forms seeds of plant



## Some Pollinators in Ireland:

Hoverflies, Bumblebees, Solitary bees, Wasps, Butterflies

How to tell one from the other:



A Hoverfly (*Heliophilus* species)  
180 Hoverfly species in Ireland  
Bulging eyes, short antennae  
20% under threat.



A butterfly (Orange tip)  
33 species in Ireland



A wasp (Social wasp)  
6 species in Ireland (not verified)



A bumblebee (*Bombus lucorum*)  
21 Bumblebee species in Ireland  
30% under threat.



A Solitary bee (*Andrena cineraria*)  
77 Solitary bee species in Ireland  
30% under threat



# So what's the big deal?

From flowers come fruit....



Apple



Strawberry



Pumpkin



Cotton





Where are all our bees gone?

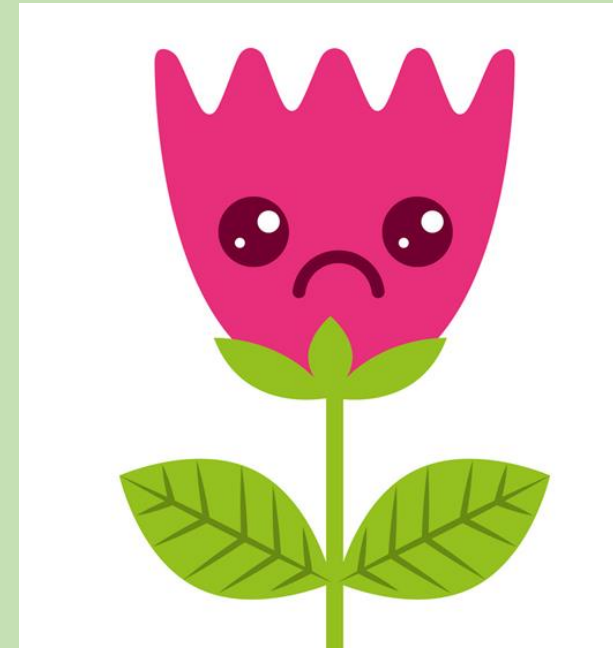




We're too tidy.  
Need to leave some long grass.







Too much Pesticides and Weed killers

We're spraying everything.





# What can we do???



- Stop spraying!
- Don't mow, let it grow!
- Grow perennial pollinator friendly flowers

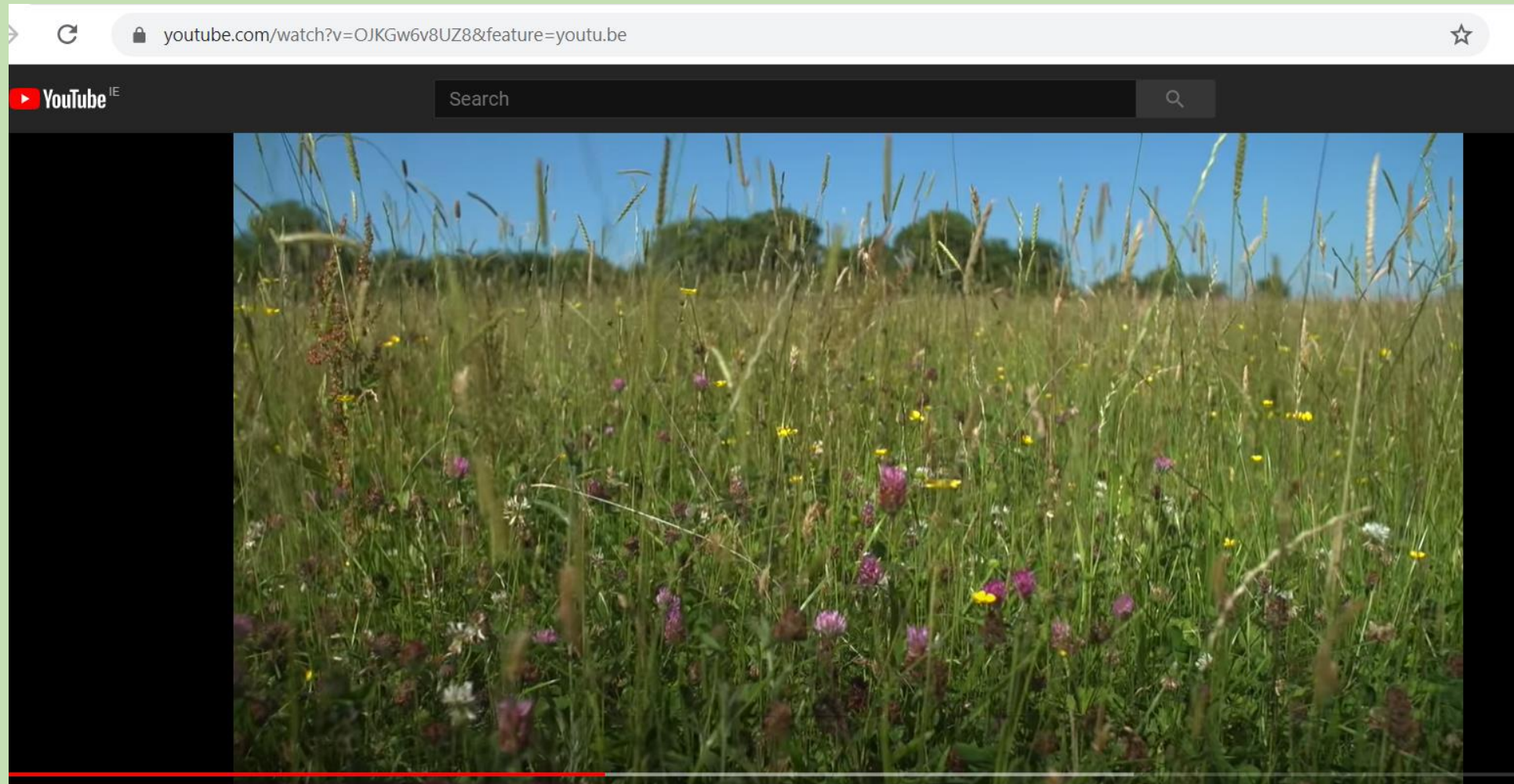


**DON'T MOW,** let it  
**grow**



Leave an uncut area. Put a nice shape on it.





**How a community in Geashill, Co. Offaly achieved great results**

<https://www.youtube.com/watch?v=OJKGw6v8UZ8&feature=youtu.be>



# Some Pollinator friendly flowers per Season

Try to have a pollinator flower growing throughout the year.



Crocus: Early Spring



Primrose: Late Winter Early Spring



Aubretia: From Early Spring



Dandelion: Spring/Summer



Cosmos: Late Autumn



Lavender: Summer



Rosemary: Spring



Forget me Not: From Late Spring



Clover: Summer



Gorse: Winter



## Solitary Cavity Bee nesting habitat:

- Dead stems (e.g. raspberry, bamboo, bramble, reeds)
- Beetle-riddled tree trunks
- Cavities in stone walls
- Bee hotels
- Holes in Wood blocks
  - 10cm depth/4-8mm diameter
  - At least 2m off ground
  - South and East facing



Beetle eaten tree wood



Blocks with holes



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

<https://pollinators.ie/aipp-2021-2025/>

Huge array of Guides. E.g....

# Gardens: actions to help pollinators

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



National Biodiversity Data Centre  
A Heritage Council Programme

## Pollinator friendly garden plants

Aim to have 3-5 different types of these plants flowering in your garden each season. These suggestions are **not** exhaustive; many other flowers are also good for pollinators. For more planting suggestions visit [www.rhs.org.uk/perfectforpollinators](http://www.rhs.org.uk/perfectforpollinators).

	SPRING March-May	SUMMER June-Aug	AUTUMN Sept-Oct
<b>Wildflowers in long grass</b> These are examples of plants that will grow naturally in long grass; you do not need to buy seed or plants!	Chandelion Dead-nettle Vetch	Bird's foot trefoil Brassicas Clovers Geranium Knapsweed Oxeye daisy Self-heal Speedwell Thistle Vetch Yarrow	Autumn Hawkbit Clovers Hawkbear Vetch
<b>Ornamental plants and herbs</b>	Comfrey Hellebores Lungwort Spring/winter Heather	Borage Calamint Calaminth Columbine Delphinium Globe thistle Lavender Oregano Penstemon Poppy Scabiosa Stachys Sweetwillow Thyme Viper's bugloss	Aster Button Snakeroot Coneflower Eupatorium Heathers Single Sunflowers Stonewort
<b>Flowering trees/shrubs</b>	Barberry (Berberis) Broom Crab apple Forsythia Hawthorn Mahonia Rowan Viburnum Wild cherry Willow	Bramble Cotoneaster Deutzia Fuchsia Laburnum Rosa Viburnum	Hibiscus Ivy Russian Sage (sub-shrub)
<b>Fruit and Veg</b> Many of the fruits and vegetables you grow in your garden need pollinators to produce seeds and fruit!	Apples Blueberries Cherry plum Currants	Blackberries Courgettes Fieldrunner beans Pumpkins Raspberries Strawberries Tomatoes	

**Info Box:**  
Letting a small portion of Brassica plants (e.g. Cabbage, Kale, Brussel sprouts) flower can help provide food for pollinators in your garden

# ALL-IRELAND POLLINATOR PLAN 2021-2025



# How-to-guide Develop a Pollinator Plan for your school

National Biodiversity Data Centre  
A Heritage Council Programme



An Chomhairle Oidhreachta  
The Heritage Council

[www.pollinators.ie](http://www.pollinators.ie)  
How-to-guide 5

# How-to-guide Collecting and using pollinator friendly wildflower seed

National Biodiversity Data Centre  
A Heritage Council Programme



TRUE  
HARVEST  
SEEDS

[www.pollinators.ie](http://www.pollinators.ie)  
How-to-guide 2

# How-to-guide Creating wild pollinator nesting habitat

National Biodiversity Data Centre  
A Heritage Council Programme

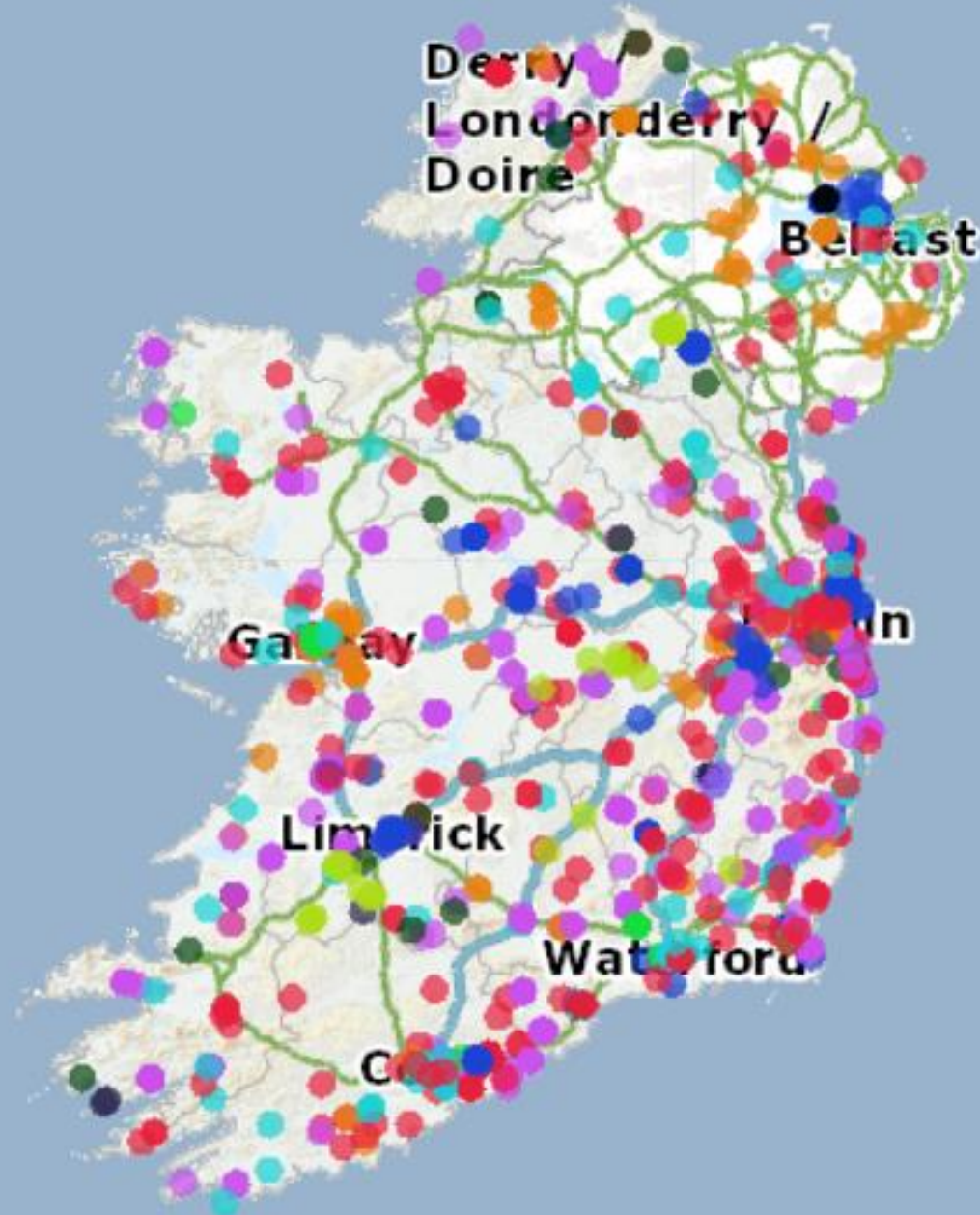


[www.pollinators.ie](http://www.pollinators.ie)  
How-to-guide 1



Pollinator sites mapped  
across the country.

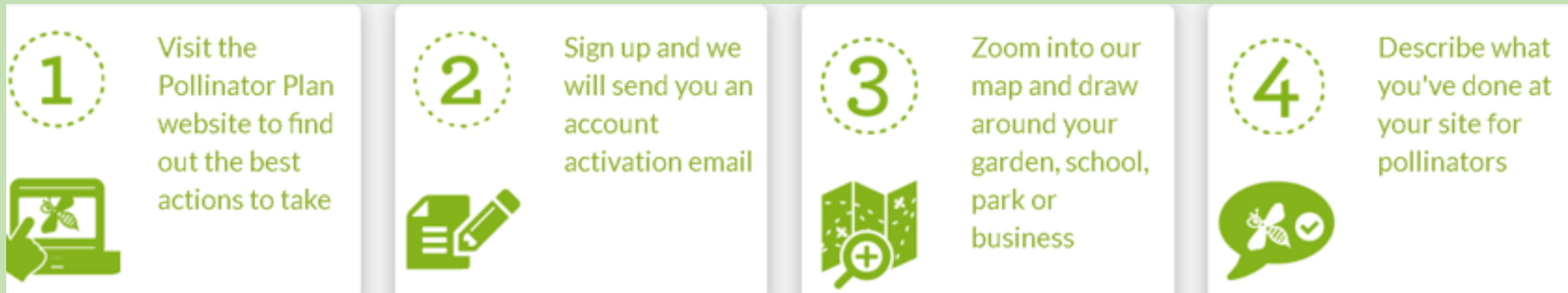
Let's add ours to this  
map.





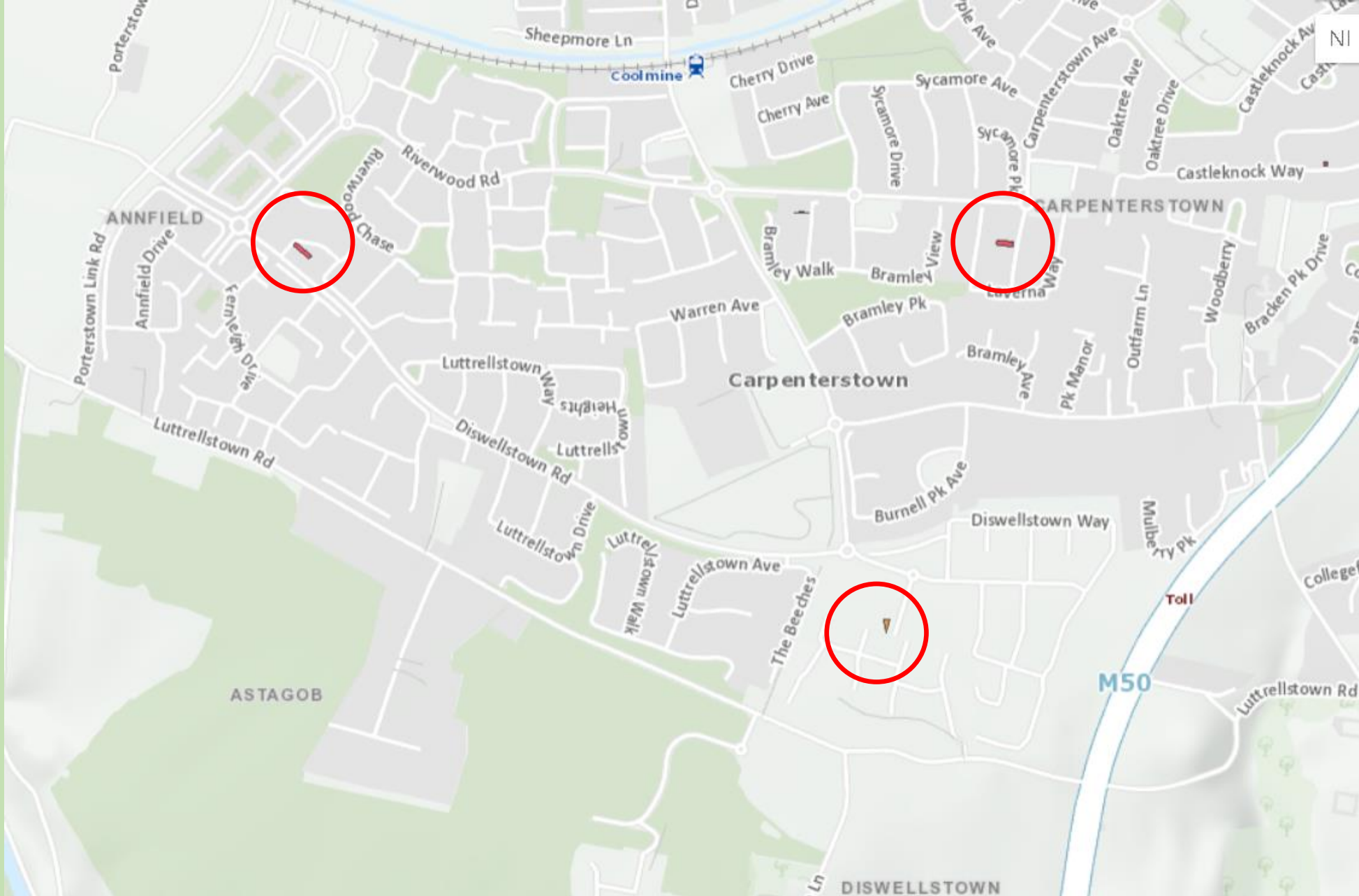


<https://pollinators.biodiversityireland.ie/Account/Register>



Record and map your actions

<https://pollinators.ie/record-your-actions/>



Only 3 recorded  
pollinator sites in  
Carpenterstown!

Let's change  
this!





Hedgehog (An Gráinneog)

**What about these??**



Bat (Íaltóg)



Fox (Sionnach or Madra Rua)



Badger (An Broc)



Video playful badgers

[https://www.youtube.com/watch?v=f\\_WW83XPQxg](https://www.youtube.com/watch?v=f_WW83XPQxg)





Frog (frog)

Or these?



Collared dove (Fearán baicdhubh)



Goldfinch (Greadóg órga)



Common lizard (laghairt coitianta)





SAFE SLUG PELLETS ONLY E.G. SLUGGO

In winter make piles with leaves, cut branches

# Hedgehogs

Why do we want them?  
They eat slugs and snails

Leaf piles  
Compost piles  
Gaps under fences







Video of Leisler's Bat 'swarming' at roost at dawn



Integrated building bat brick

10 species of bat in Ireland, 9 in Dublin.

They are not related to rats!

They do not fly into your hair!

Irish bats only eat insects!

One tiny bat eats 3000 midges in one night!

They are mammals like us!

They are very vulnerable to loss; they rear all their young in one single roost.

Highly protected under European law

# Bats:

Why do we want them? One can eat 3000 insects a night including mosquitos and midges



How to attract bats to your garden:

- Insect prey: long grass, water, pollinator flowers, night scented flowers
- Moths at night: night scented flowers
- Pond
- Linear features: treelines/hedgerow to help navigate
- Low lights. Bright yard lights deter bats.

Some night scented flowers:



Jasmine



Honeysuckle



Evening primrose



Pale flowers attract insects at dusk e.g. Holly



Type of compost:



Why:



Or



Sundew and sphagnum moss in bog pool



Bog pools



Sphagnum moss hummock





Peanuts: most birds

## Different birds eat different food:



Seeds:  
Blue tit, Long tailed tit, finches



Mealworms:  
Robin, Blackbird



Suet balls: most birds



Apples and different fruit: Thrush & Blackbird



## Bird Boxes:

Different sized openings for different species of bird.

Holes: Bluetit, Coal tit, Tree Sparrow

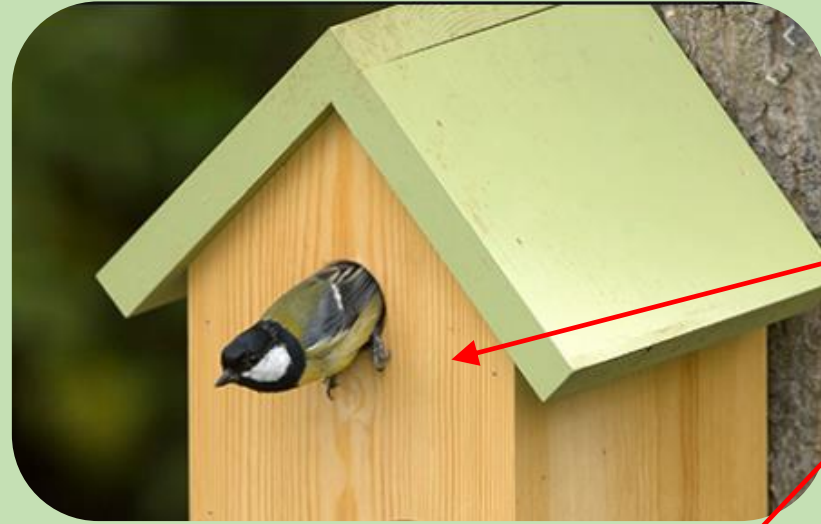
Open front: Blackbird, Wren, Robin

Place 2-4m off ground, not higher.

Open fronted lower than 2m but in dense vegetation

Leave for 1-2 years before moving if not used, as often used at night in winter

Never move in breeding season



## Specialist boxes:







Common Lizard

Reptiles and Amphibians!



Frog



Smooth Newt



# What we can do for frogs:



Rocks



Logpile

Ponds



Compost bins



# What about a bog garden?

No open water, lots of wetland plants, good for waterlogged area of garden



A miniature bog garden in a tin bath



Marsh marigold



Water forget me not



Lesser spearwort

Video



<https://www.youtube.com/watch?v=VRN1sp78jHk>



# Common Lizard



Put down a piece of carpet or corrugated iron as a winter shelter.



## Where do they shelter?

- Under rocks
- Under log piles
- Holes in walls



Video on Common Lizard on Bull Island:

<https://www.youtube.com/watch?v=HQdn10Ug2ME>



Video on Common Lizard on Bull Island:

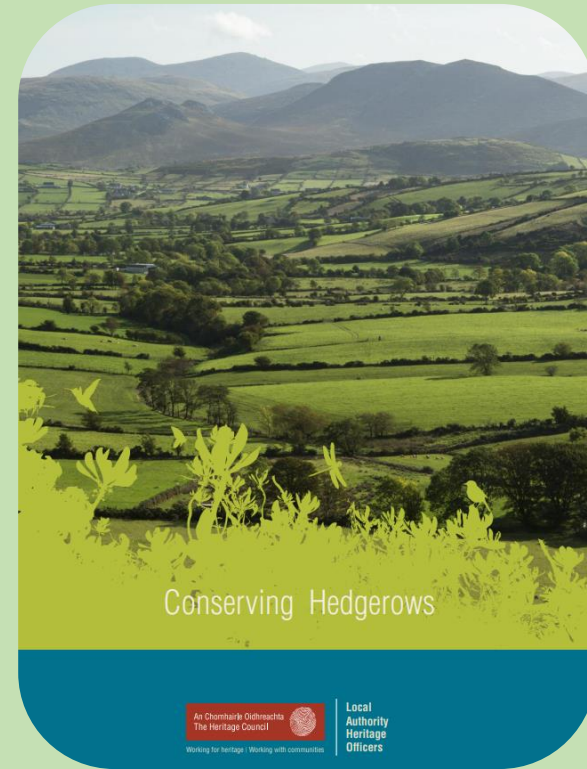


# Plant Native Irish Trees and hedgerows

List of species and  
info here:



Riverwood  
Mini Forest,  
April 2023



[https://www.heritagecouncil.ie/content/files/conserving\\_enhancing\\_wildlife\\_guide\\_2005\\_480kb.pdf](https://www.heritagecouncil.ie/content/files/conserving_enhancing_wildlife_guide_2005_480kb.pdf)

[https://www.heritagecouncil.ie/content/files/conserving\\_hedgerows\\_2mb.pdf](https://www.heritagecouncil.ie/content/files/conserving_hedgerows_2mb.pdf)



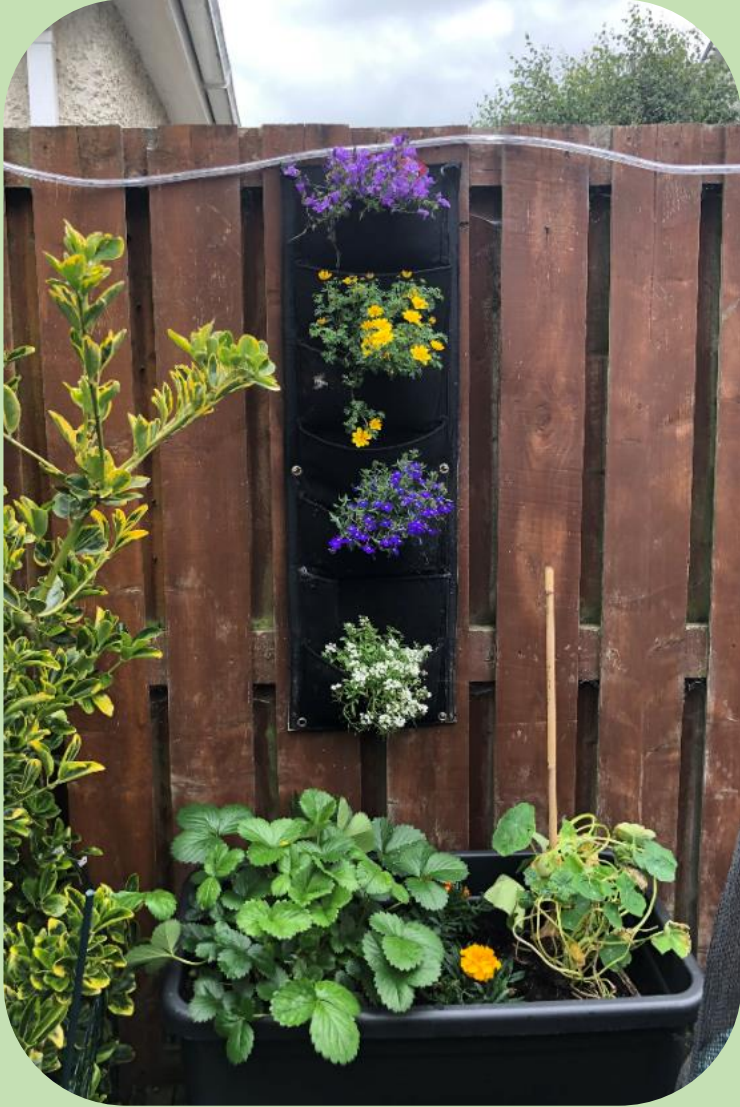
But I've no space since I got my extension!

Not a problem.....





Vertical space



You don't need much space!

Narrow areas



Pots of colour



Small meadow  
and nectar patch

You can have it all!

Put a shape on it!





# Case study of developing a new Pollinator Friendly space

St. Patrick's N.S.,  
Diswellstown, D15





# St. Patrick's N.S.



1<sup>st</sup> there was nothing!







Rocks arrived







Getting free supplies!





Logs for logpile!





Free Rowan and Hawthorn trees planted, bug bricks put in place



## Free Stuff!!

Tiles, pipes and  
blocks for insects  
and wildlife like  
hedgehogs

Gutter pipes as  
wildlife refuges and  
shelter







First plants planted and pathway created



Just 4 months later.....







New insect house and  
Tom the builder from  
Mulhuddhart Men's  
Shed!



Brendan, School caretaker made path



Children brought in and made insect  
hibernation habitats in the hotel



# Wildflower area sown with native Irish wildflower seed....15 species in just 3 months.....



Willowherb



Scarlet  
pimpernel



Cornflower



Chamomile



Common fumitory

Black medick





## Shape on wildflower area and walkway





## Spring Bulbs along margins:



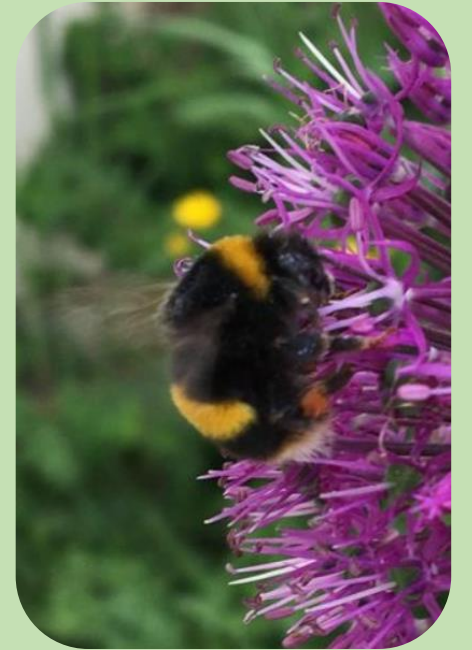


## Signage: Educate, Sense of Ownership...





Success!!





# I want to get involved: Citizen Science projects

- What is Citizen Science?:

- Research carried out by general public who volunteer to collect scientific data.



- Very beneficial; citizens working collectively can gather more data than few scientists



# Some Citizen Survey Co-ordinators:

- National Biodiversity Data Centre (NBDC)
- Irish Wildlife Trust
- BirdWatch Ireland
- Bat Conservation Ireland



# National Biodiversity Data Centre (NBDC).

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



## Citizen Science Initiatives:

- Bumblebee
- Ladybird
- Backyard Biodiversity
- Explore your Shore
- Butterfly Bash
- Dragonfly Dash
- Squirrel & Pine Marten Survey
- Dragonfly Spotter
- Spring Flowering Plants
- Etc.!!!



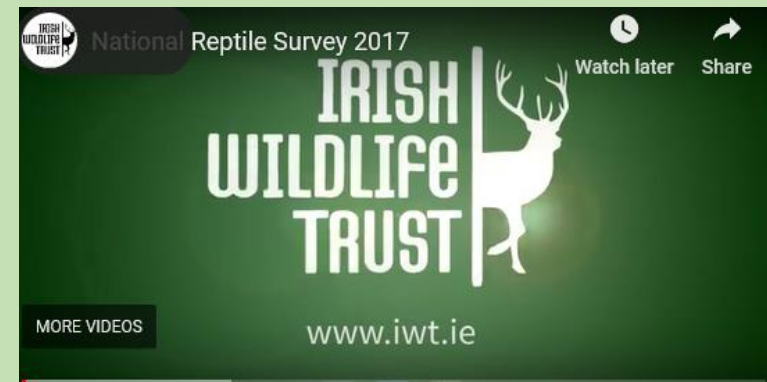
# Irish Wildlife Trust

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



- People for Bees
- National Reptile Survey
- Ladybird Survey
- Waterways for Wildlife

Video clip from IWT on National Reptile Survey: National Reptile Survey  
[https://youtu.be/AMR\\_MuJT-4k](https://youtu.be/AMR_MuJT-4k)





# Bat Conservation Ireland

[www.batconservationireland.org](http://www.batconservationireland.org)

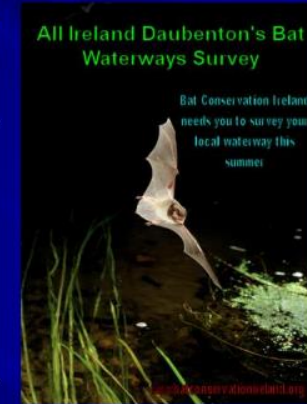
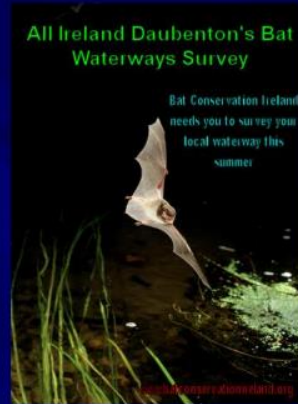
- All Ireland Daubenton Bat Survey
- Car-based bat monitoring project
- Brown long-eared bat roost monitoring project
- BATLAS



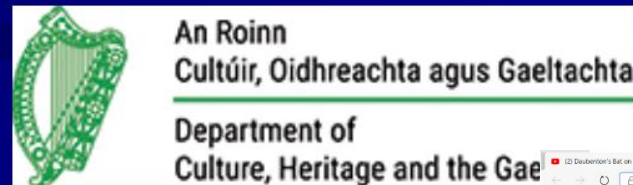


- 2 visits in August
- 1km stretch of visible waterway
- 10 sections
- Record # of bat passes
- Send in paper form
- Training given

# All Ireland Daubenton's Bat Waterway Survey



All-Ireland Bat Monitoring Programme is funded by



Video clip on surveying Daubentons Bats:

Video clip: <https://www.youtube.com/watch?v=v4GDb2IWVJE>





# How do I know which bat it is?



Use a bat detector.

## IDENTIFICATION KEY

Follow the key below until you come across a statement that holds true for your situation and the bat you can see:

- The bat is flying low over water.  
**Yes – Go to 2**  
**No – Go to 3**
- The bat is flying close to the surface of the water, perhaps occasionally touching the surface, and when tuned in at 35kHz sounds like regularly firing machine gun (regular repetition rate). Then, when the bat is still in range i.e. (visible and audible) and you move the dial up to 55kHz – 70kHz, the sound remains more or less the same.

**Yes – Daubenton's Bat**



**No – Go to 4**

- The bat is flying at a height of 20m or higher, is clearly visible and could potentially be mistaken for a swift if there is still some available light, and/or echolocation sounds like a series of chi – chi – chi – chop – chop sounds when tuned to 25kHz on the detector (note much slower repetition rate compared with all other Irish species). You may be in an urban or rural area.

**Yes – Leisler's Bat**



**No – Go to 4**

- The bat is flying around hedgerows, treelines, walls or along a river bank, typically at a height of around 2-6m but not sticking to that height. You may be in an urban or rural area. Very agile bat with many twists and turns in flight. When tuned to 45kHz the echolocation calls sound like they are at a lower pitch than if you tune in at 55kHz, or 35kHz, for example. Echolocation calls have an irregular but fast repetition rate (compared with Leisler's bat above).

**Yes – Common Pipistrelle**



**No – Go to 5**

- The bat is flying in a similar situation to 4 above, with a similar flight style but when tuned in to 45kHz the sounds are at a higher pitch than when tuned in at 55kHz. At 55kHz the sounds are lower pitched. Echolocation calls have a fast but irregular repetition rate similar to 4 above.

**Yes – Soprano Pipistrelle**



**No – Go to 6**

	34-42	BLE				
39-47	Leis					
	LHB					
	Wh/Br					
	Natt					
	Daub					
	NP					
	CP					
	SP					
Habitats	Open grassland					
	Treelines / hedges					
	Woodland rides/edge					
	Woodland					
	Waterways					



*Irish Bats  
in Flight*



**IDENTIFICATION CARD**



Comhshaol, Oidhreacht agus Rialtas Áitiúil  
Environment, Heritage and Local Government

Irish Bats in Flight Identification Card



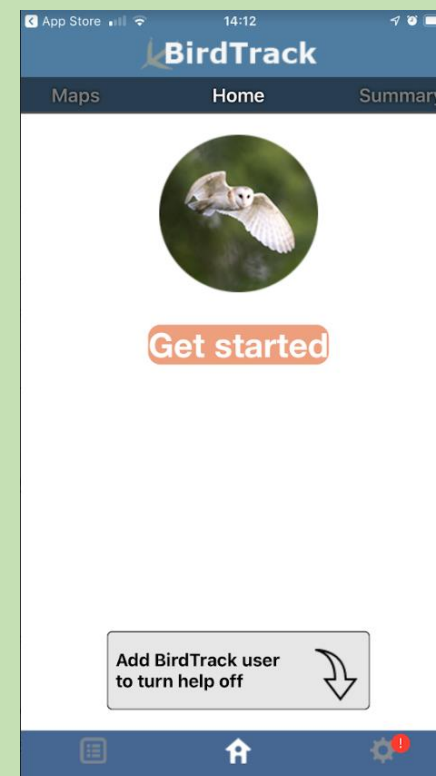


# BirdWatch Ireland

<https://www.birdwatchireland.ie/>

**Many Volunteer Projects. See Resource Pack.**

- Irish Garden Bird Survey
  - Very little experience needed
  - Dec-Feb
- BirdTrack App
  - Very little experience needed
  - Year-round
- Countryside Bird Survey
  - Bird I.D. Sight/sound skills
  - April-June; 2 visits
- Swift Bird Survey
  - Ability to i.d. by sight/flight
  - June and July



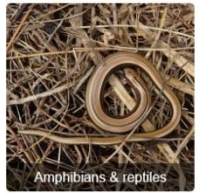


Garden Bird Survey  
Riverwood Heath:  
15<sup>th</sup> January, 2021:  
20 Goldfinches,  
2 Collared Doves,  
2 Chaffinches,  
1 Bluetit,  
1 Robin,  
2 Tree sparrows,  
1 Blackbird!





Start recording



Amphibians & reptiles



Birds



BirdWatch Ireland's Late Nesters Survey



Bumblebees



Butterflies



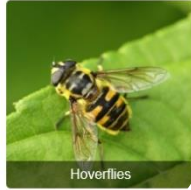
Dragonflies



Freshwater fish



Grasshoppers & crickets



Hoverflies



Jellyfish



Ladybirds



Leaf miners



Lichens

# Record Record Record!!!!

## Record all sightings on the NBDC website.

<https://records.biodiversityireland.ie/start-recording>

### Sample details

Recorder name

The name of the recorder

Recorder email

someone@somewhere.com

Record date

2018-11-14

County

Select county

Location name

Townland or nearest village

Spatial reference

S123456 or 51.12345,-9.12345

Click on map to generate spatial reference.

### Observation details

Species name

Swift (Apus apus)

Species picture

Browse...

Type of sighting

Type of sighting

No. of Birds Flying

No. of Birds Flying

No. of occupied nests

No. of occupied nests

Name of Building

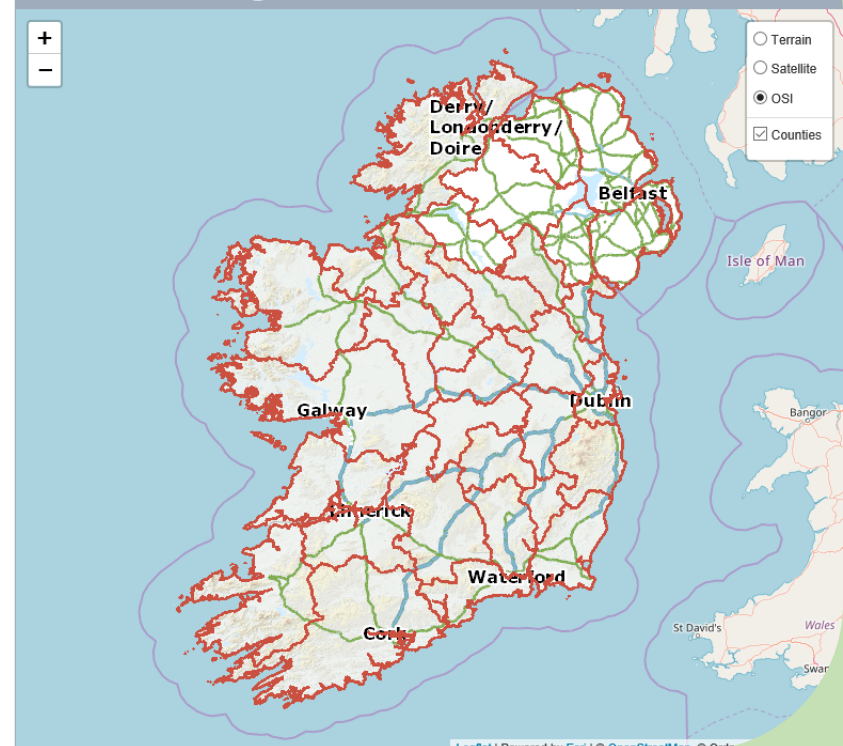
Name of Building

e.g St. Anne's Church

Is site protected?

Nest site report

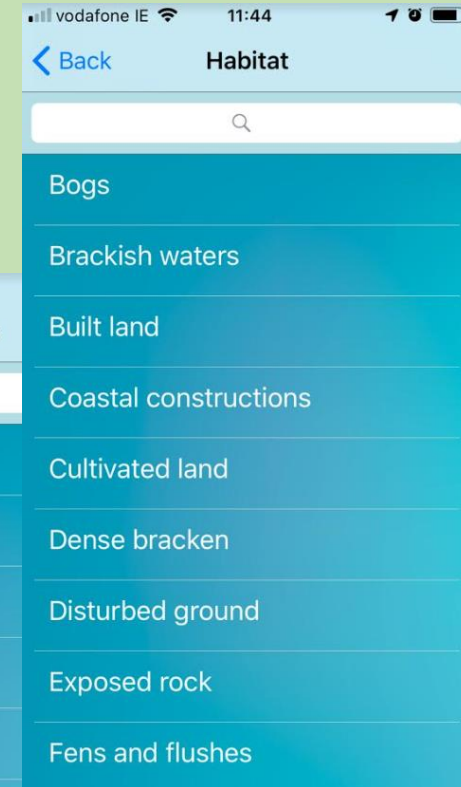
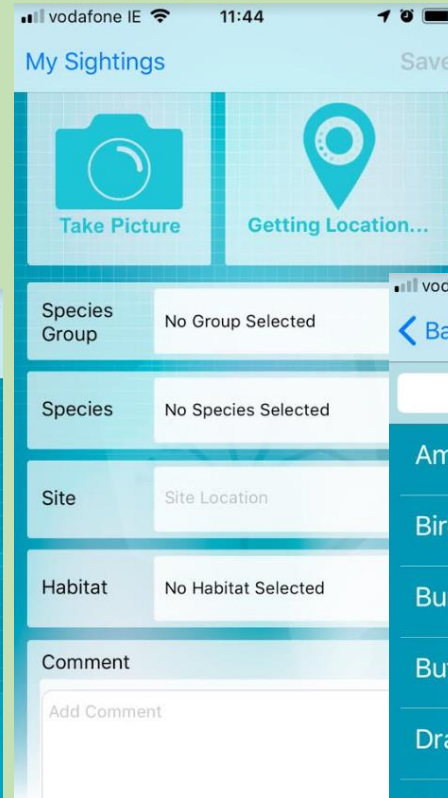
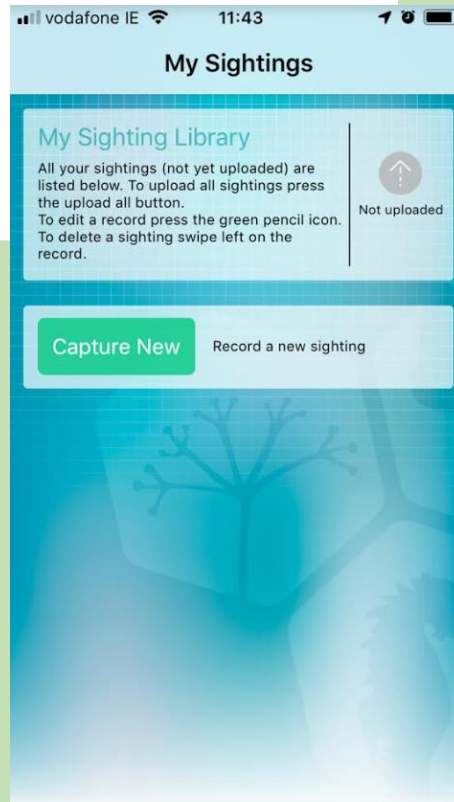
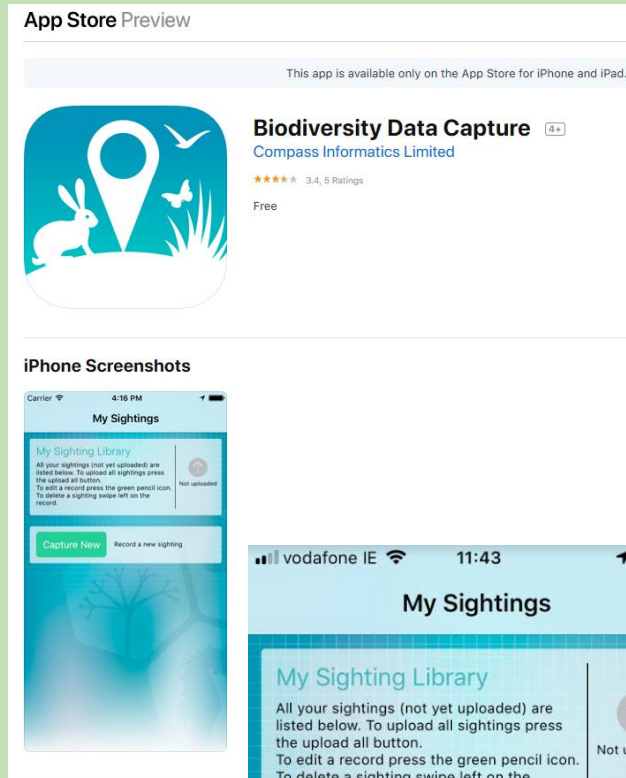
### Click map for grid reference





# NBDC App. For all its Citizen Science Surveys:

## "Biodiversity Data Capture"





# Some very useful insect Identification tools:

## 1. National Biodiversity Data Centre Swatches

NBDC: <https://www.biodiversityireland.ie/shop/>





Excellent Guides to use:

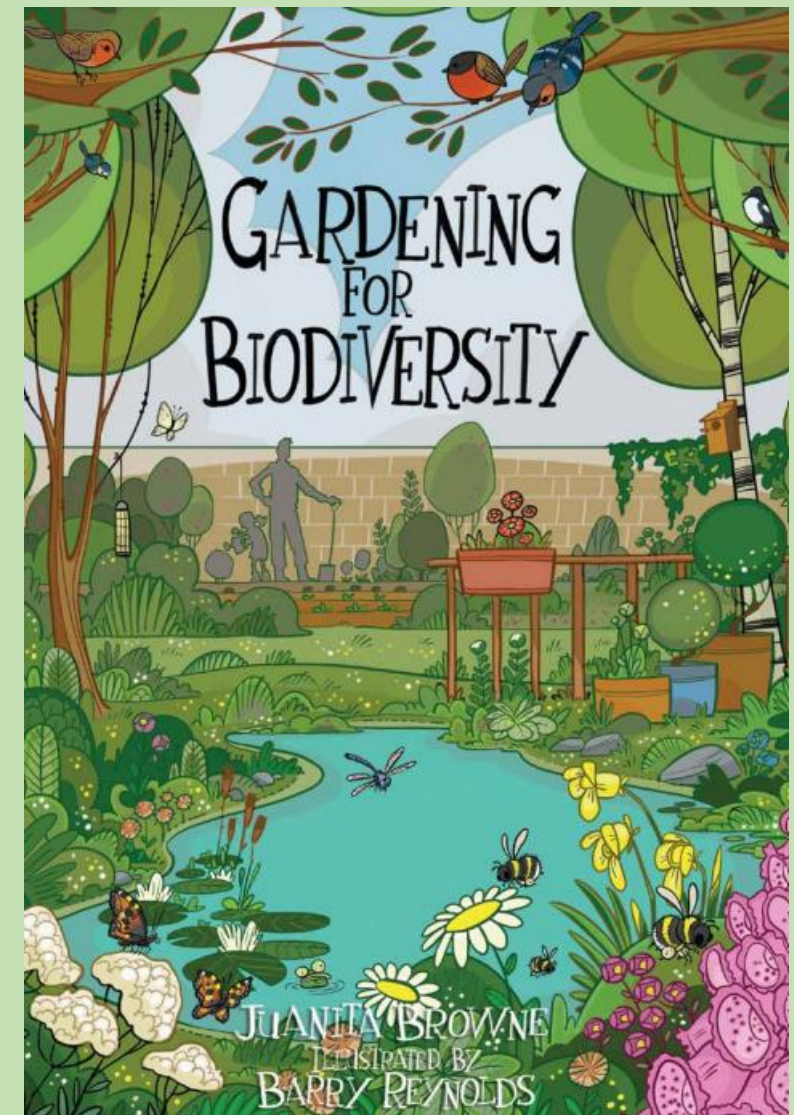


Wildlife in Buildings Booklet: Part One



Wildlife in Buildings Booklet: Part Two

<https://birdwatchireland.ie/wildlife-in-buildings/>

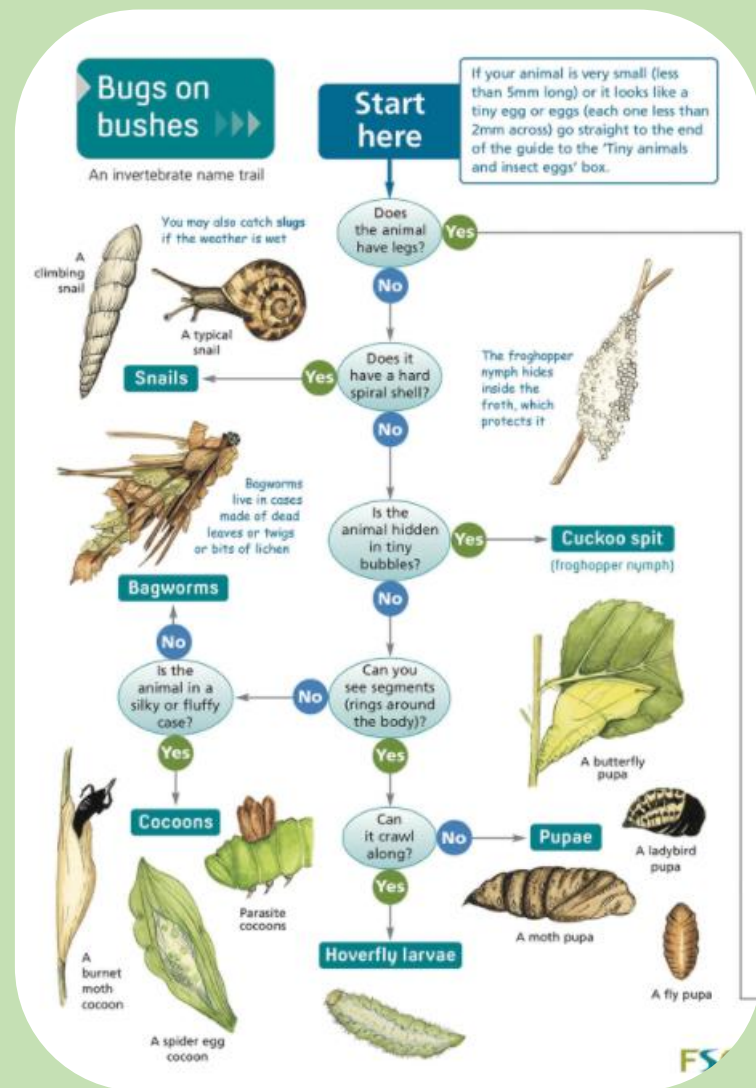
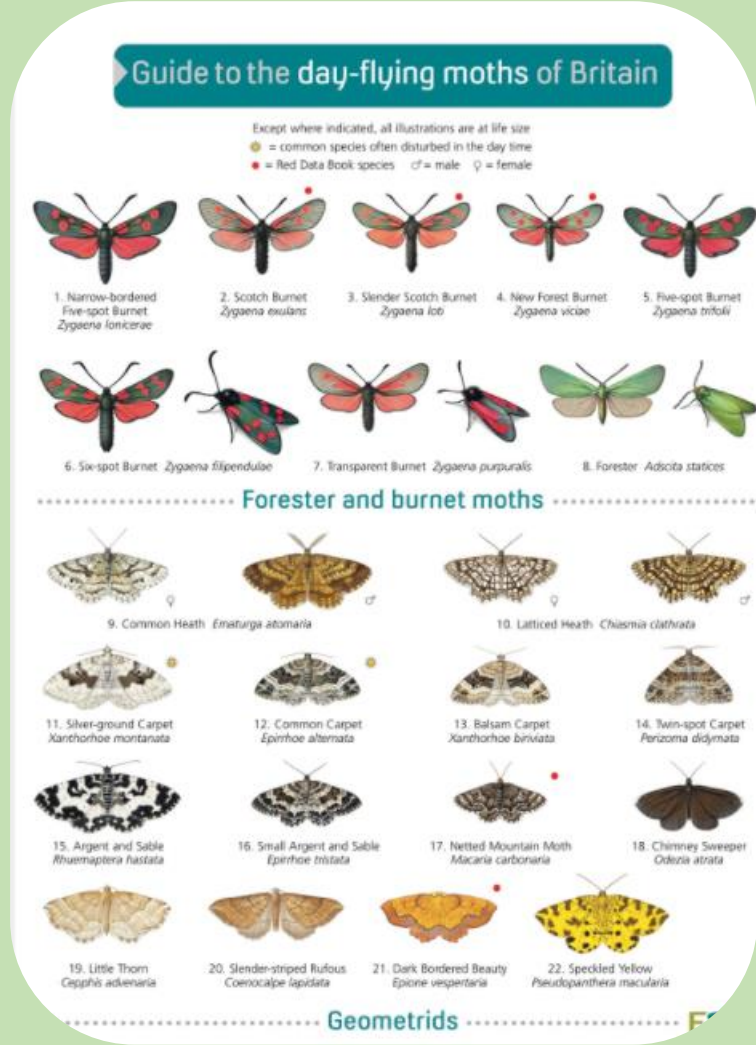
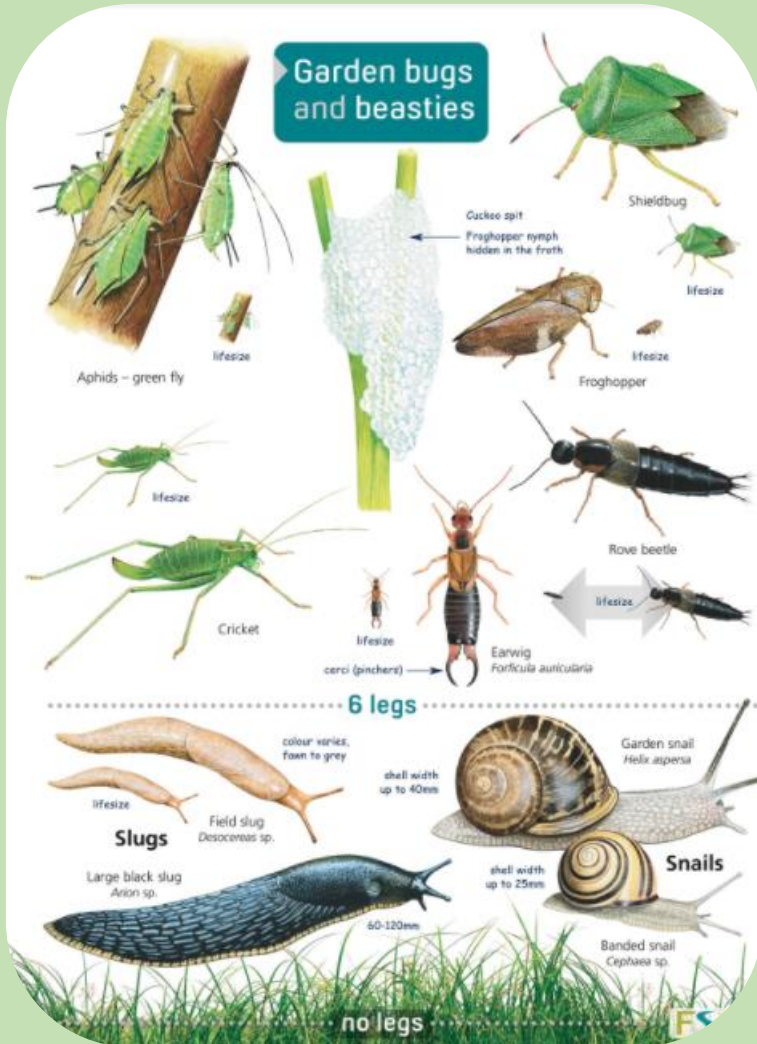


<https://www.fingal.ie/sites/default/files/2020-04/gardening-for-biodiversity-booklet.pdf>



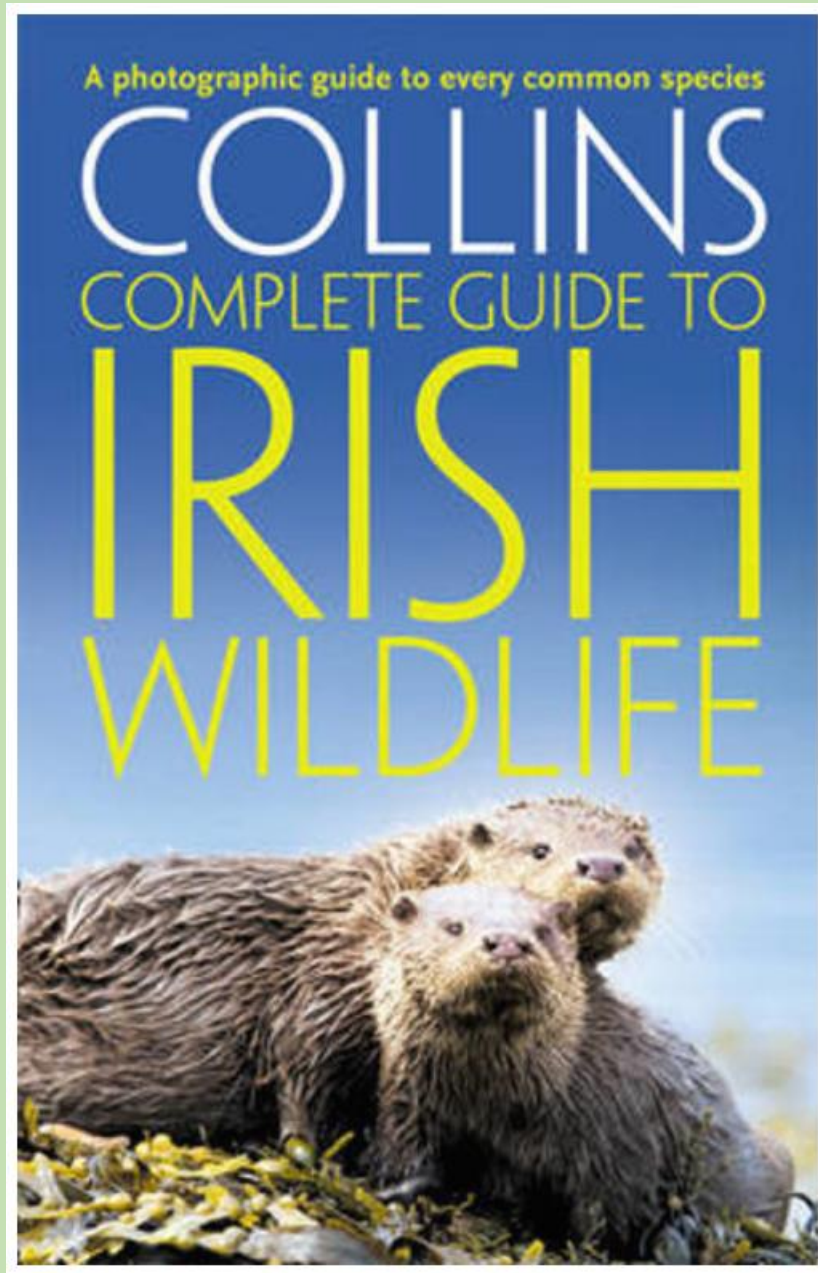
# 2.0) Field Studies Council Guides:

[https://www.field-studies-council.org/product-category/publications/?fwp\\_publication\\_type=fold-out-guide](https://www.field-studies-council.org/product-category/publications/?fwp_publication_type=fold-out-guide)

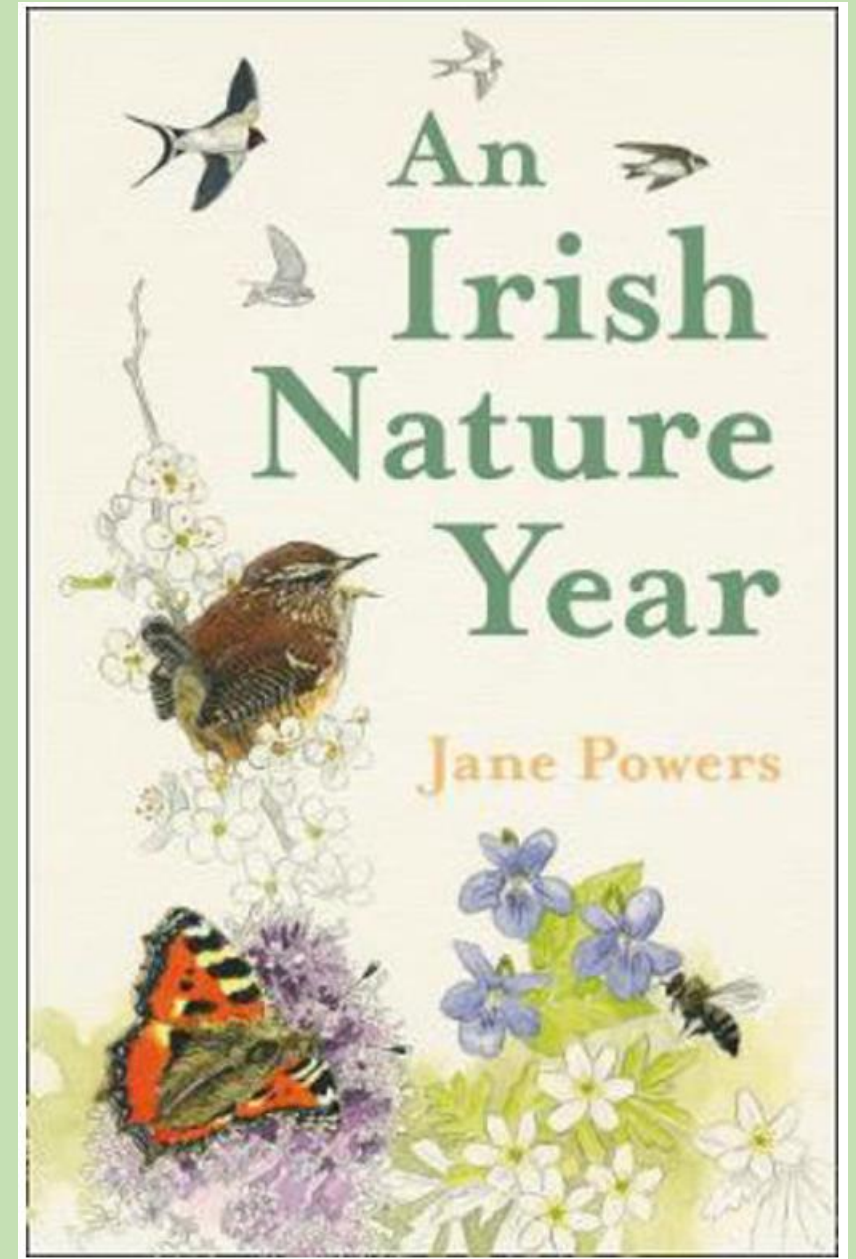




### 3. Irish books



Flowers, insects, birds, trees, mammals.....



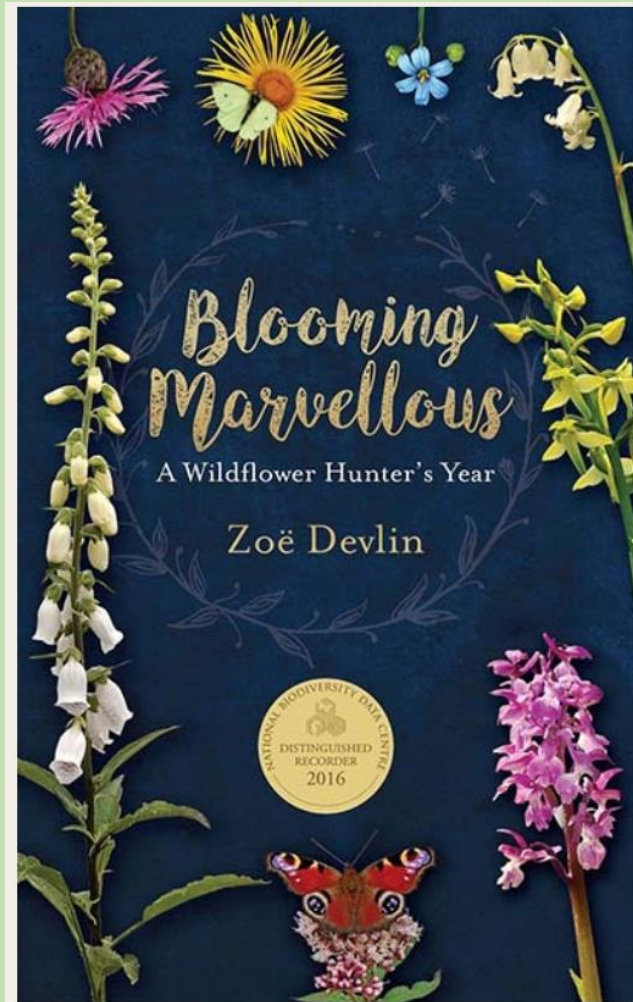
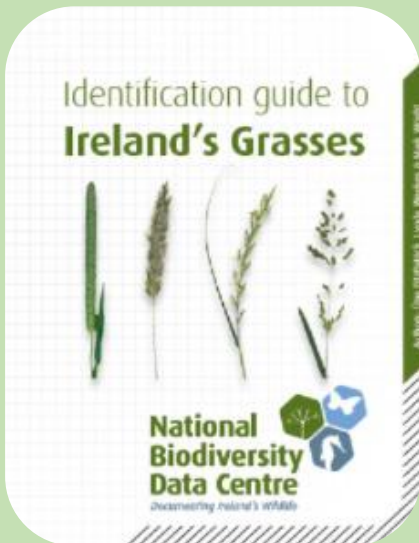
What you might expect to see per month.....



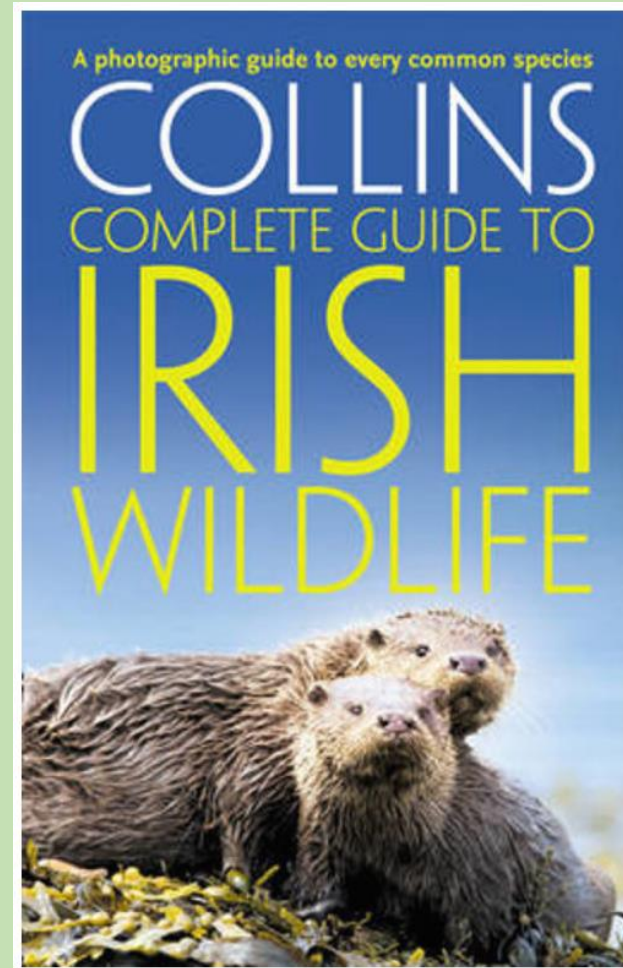
# Some very useful flower/plant identification resources:

National Biodiversity Data Centre Swatches/Guides:

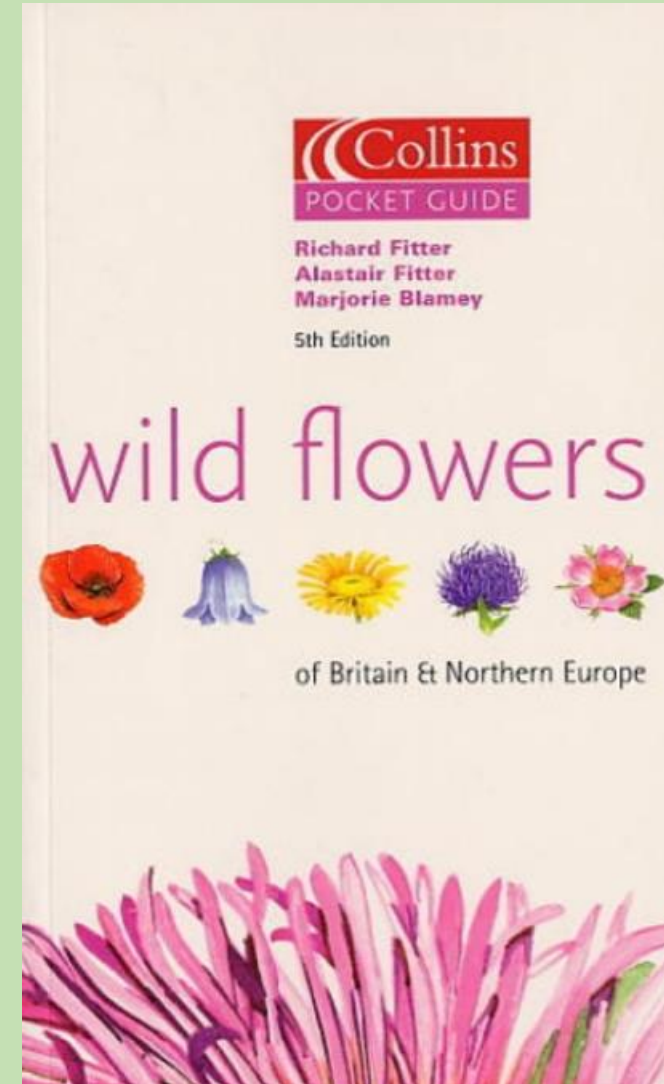
<https://www.biodiversityireland.ie/shop/>



What to look for per month.



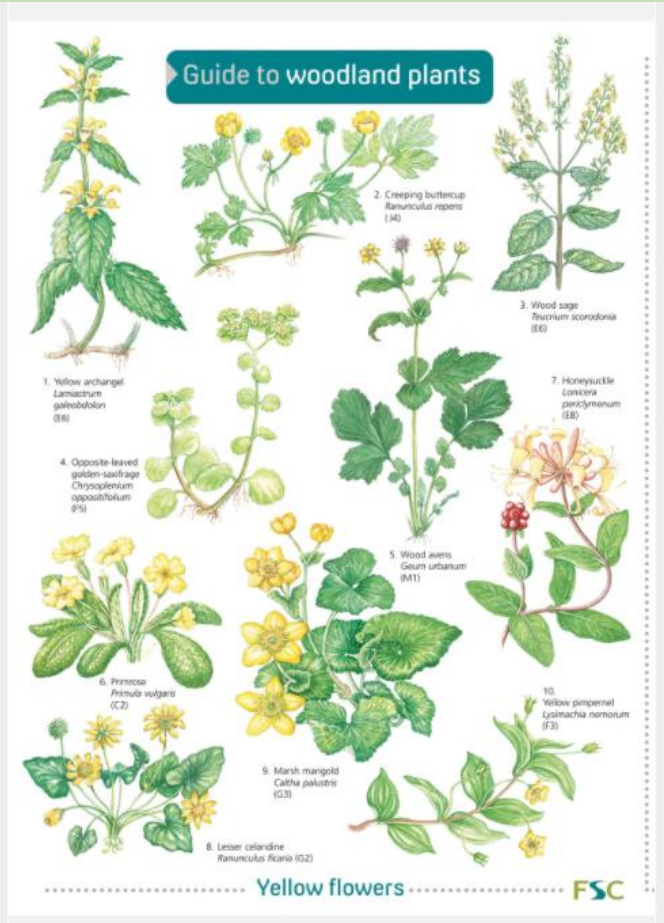
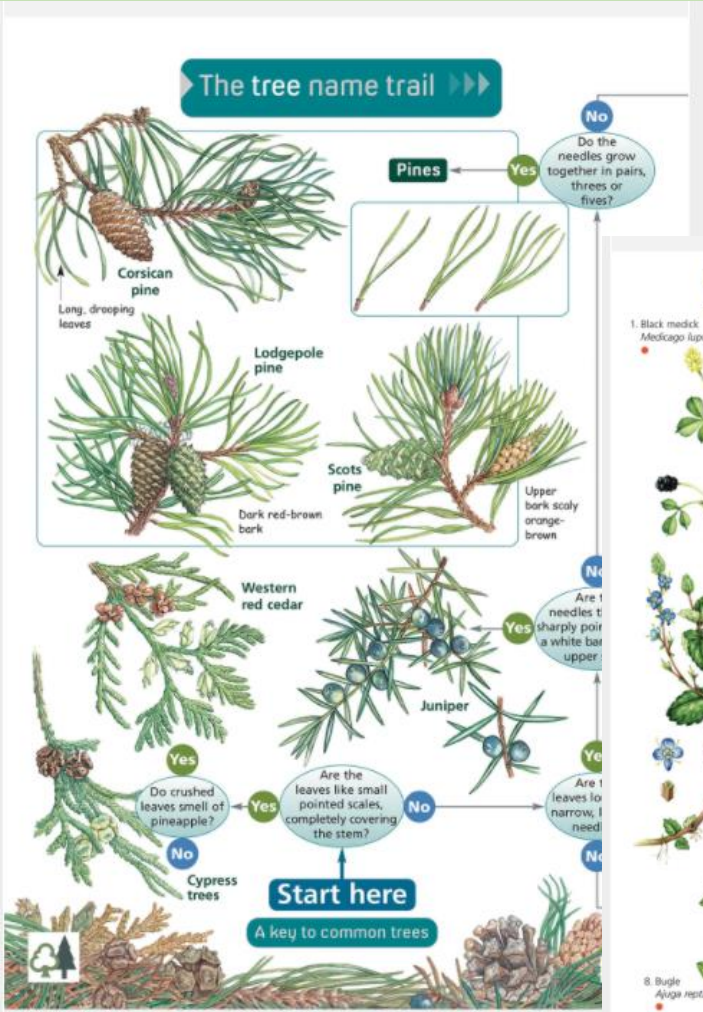
Books



5<sup>th</sup> Ed. 1996

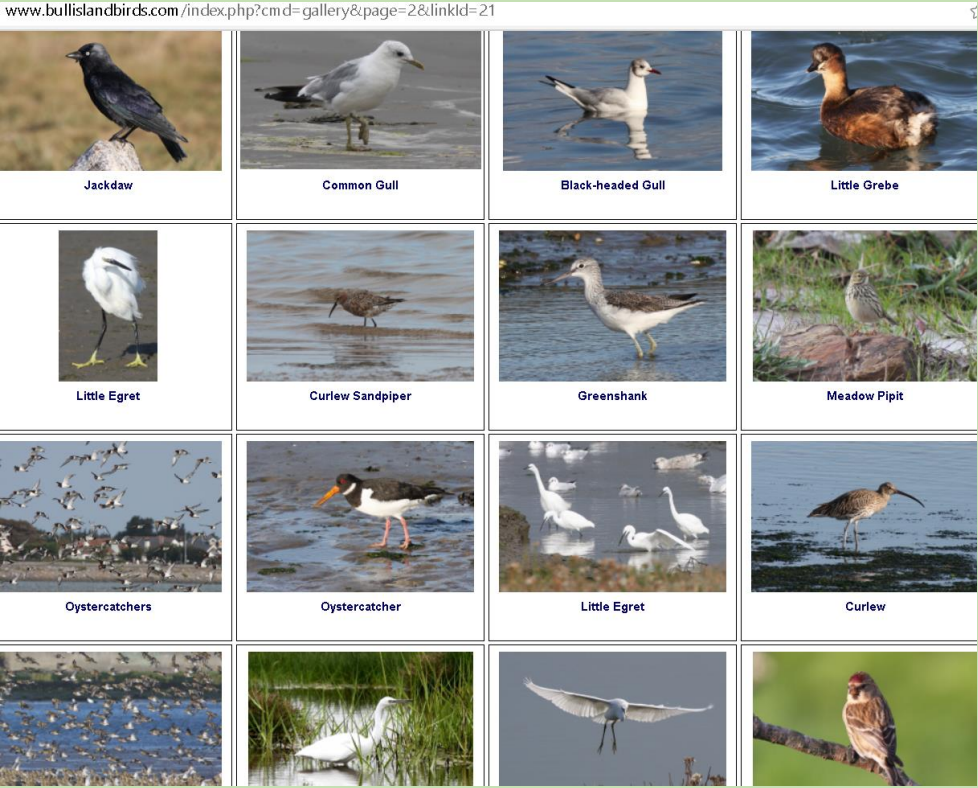
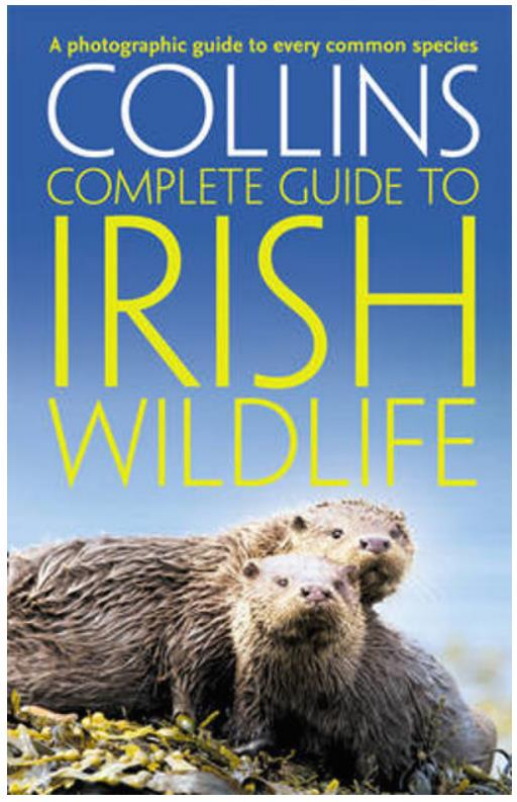


# Field Studies Council Guides:



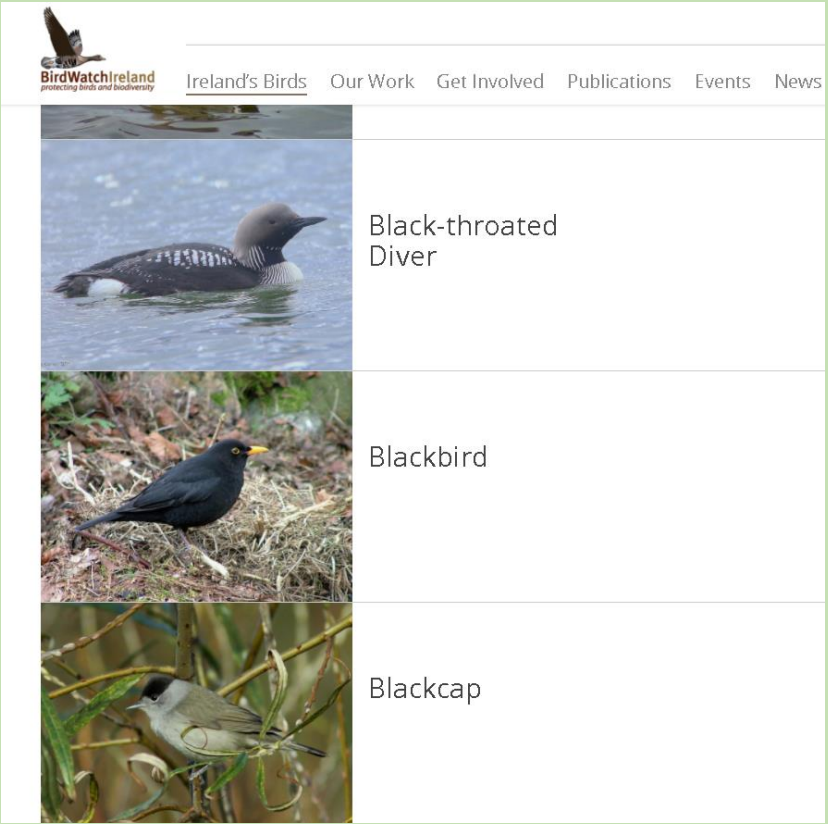


# What bird is it?



Bullislandbirds.com  
Lots of waterbirds but many others too

BirdWatch Ireland Species list. But, need to know the name first, or you could just scroll through and look....







## Local Biodiversity Action Plan

## Appendices

Doesn't look exciting but has every resource you will need!!

<https://www.fingal.ie/sites/default/files/2022-04/local-biodiversity-action-plan-appendices.pdf>



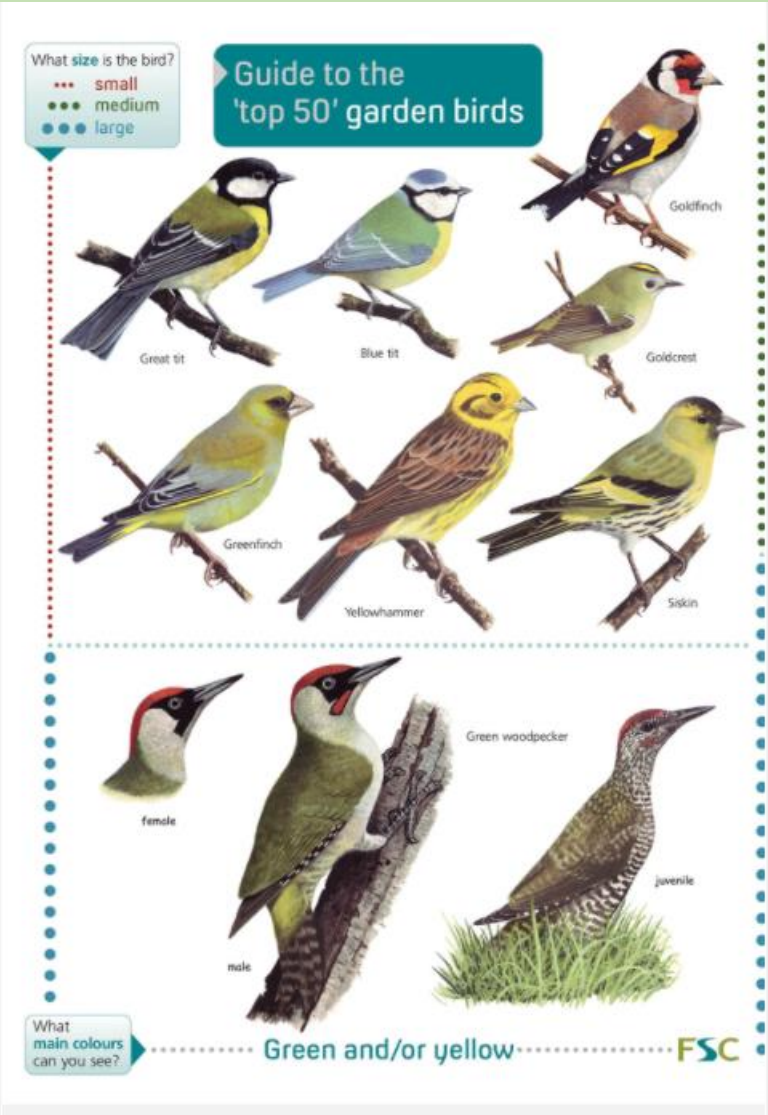
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# Field Studies Council Guides:





# This is why we're doing this.....

<https://www.facebook.com/biodiversityconferenceireland/videos/239223110316564/>

Wildlife of Ireland video from National Biodiversity Conference 2019

Facebook video player interface showing a video of a wolverine in a forest.

URL: <https://www.facebook.com/biodiversityconferenceireland/videos/239223110316564/>

Video content: A wolverine standing on a mossy log in a forest.

Video player controls: Play button, progress bar (0:36), volume, HD, and share icons.

Caption: This Is Ireland

Post by: New Horizons for Nature - Ireland's National Biodiversity Conference

Engagement: 63 Comments, 1,315 Shares