

Bee, Bird and Bat habitats 1

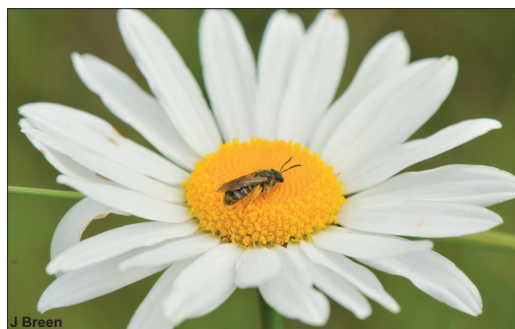
Irish Bee species



Honey bee (1)



Bumblebees (20)



Solitary bees (77)

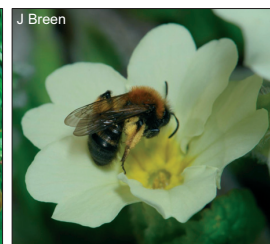
One third of our 98 bee species are threatened with extinction

Why are bees important?

- ❖ Pollination of food crops:
 - ✓ Oilseed rape
 - ✓ Peas
 - ✓ Beans
 - ✓ Apples
 - ✓ Soft fruit
- ❖ Pollination of wildflowers, trees
- ❖ Green image for Irish food
- ❖ Production of honey

Why bees are declining?

- ❖ Reduction in flowers
 - Pollen (protein)
 - Nectar (carbohydrate)
- ❖ Lack of continuity of flowers
Bees need food all year round = a diversity of flowering plants in the landscape
- ❖ Less nesting sites



	Trees / Shrubs	Climbers	Wildflowers
January	Willow		Primrose
	Hazel		Bluebell
	Blackthorn		Dandelion
	Holly	Dog rose	Clover
	Crab apple	Honeysuckle	Vetches
	Whitethorn	Blackberry	Knapweed
December	Gorse / furze / whins	Ivy	Heather



Bee, Bird and Bat habitats 2

How farmers can help Bees

- Allow space for a diversity of flowers grow and flower
 - along farm roadways
 - around farmyards
 - field margins
 - field corners



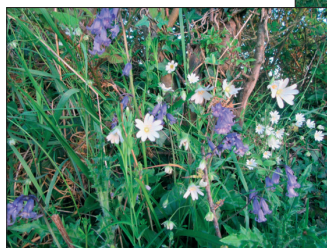
Field Margins

- Fence off from livestock
- Cut or graze *after* flowering
- Do not fertilise
- Do not spray



Routinely trimmed hedgerows

- Side trim to a triangular shape
- Leave as high as possible
- Allow new individual thorn trees mature at irregular intervals
- Allow wildflowers grow at the base



If spraying insecticides in crops:

- Spray early morning or late evening when honey bees are less active
- Notify local beekeepers



Bee Boxes



Some solitary bees are cavity nesters and nest in hollowed twigs or holes in wood or masonry.

❖ Solitary bees

- Mining bees - in ground
- Mason bees - often in masonry - but not widespread in Ireland
- Sweat bees - in ground
- Leafcutter bees - holes in stone walls, stems
- Yellow faced bees - tiny bees - holes in stumps of trees

➤ Making a Bee Box

- Wood - not treated with insecticide / preservative
- Selection of hole sizes - between 3/8 and 1/4 inch
- Clean smooth holes
- Selection of holes - Include hollow stems eg bamboo
- Holes must not interconnect - dead-end required
- Pack with subsoil - substitute clay bank



➤ Placing a Bee Box

- Near flowering plants
- At least 40 cms off the ground
- Sheltered and sunny - south to south-west
- Fix firmly - bees will be navigating home



Bee, Bird and Bat habitats 4

Sand Habitat for Bees

Why?



Ashy mining bee



- Place 1 tonne of Builders Sand in a mound in a field
 - Sunny location
 - South facing slopes
 - Exposed to direct sunlight
- Fence off
- Strim annually to keep shading vegetation under control
- Do NOT spray
- Keep receipt

Bumblebee queens may also use the sand heap to 'hibernate' over winter



Bird Nestboxes



❖ Open-fronted

- Robin
- Pied Wagtail
- Wren



Robin



❖ Nestbox with hole

Hole size determines which species use it

- Blue Tit: 25mm
- Coal Tit: 25mm
- Great Tit: 28mm
- Tree Sparrow: 28mm
- House Sparrow: 32mm
- Starling: 45mm



Blue tit

Boxes for other bird species may be used

- Locate on a tree / post / external wall of a farm building
- Face between North and North-East
- Locate over 2.5 m above ground level
- Tilt slightly forwards to allow moisture drain out
- Mark location
- Clean boxes annually in February

Bee, Bird and Bat habitats 6

Bat Boxes

Why?

- Provide alternative roosts
 - Used April to October

9 Resident Irish Bats

- Common pipistrelle
- Soprano pipistrelle
- Nathusius' pipistrelle
- Natterer's bat
- Whiskered bat
- Daubenton's bat
- Brown long-eared bat
- Leisler's bat
- Lesser horseshoe bat



➤ Locate Bat Boxes

- In groups of 3 per tree / post / building in different directions
- Near hedgerows or feeding areas
- Over 4 m above ground level
- Away from lights
- Mark location

