



Biodiversity and bees

Irish Bee species



Honeybee
(1)



Solitary
bees
(77)



Bumblebees
(20)

Why are bees important?

- Pollination of food crops: oilseed rape, peas, beans, apples, soft fruit
- Pollination of wildflowers, trees
- Sustainability of Irish agriculture and food
- Production of honey

Why bees are declining?

- Less wildflowers in the countryside : Pollen provides protein and nectar provides carbohydrate.
- Lack of continuity of flowers: Bees need food all year round - a diversity of flowering plants in the landscape.
- Less nesting sites

Bees need flowers

- in hedgerows
- in field margins
- in roadside margins
- anywhere!

- ✓ Allow hedgerows to flower
- ✓ Don't spray field margins

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



Notes: _____



Honeybees and pollination



Social insects:

- Live and work in a group (colony)
- Recognise each member of the colony
- Colony size = 40 000 workers
- Perennial nest



Why honeybees are important pollinators?

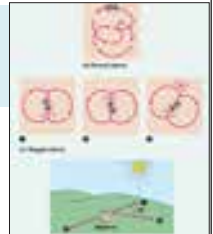
Honeybees need pollen and nectar for food...

- Pollen...source protein
- Nectar...source carbohydrate

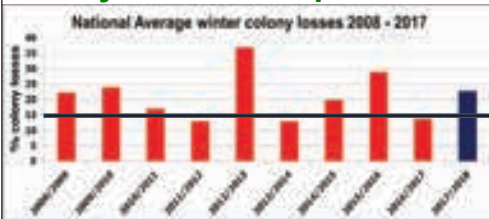


Why bees are efficient pollinators?

- Branched hairs
- Flower constancy
- Special communication between members...



Colony losses and potential reasons....



- The Varroa mite
- Lack of forage/diversity of forage
- Inadvertent chemical applications



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