

Bumblebees are attractive, harmless, social insects which rarely sting; they live in nests with up to 400 individuals, ruled by a queen bee. Bumblebees are extremely important pollinators of crops and wildflowers and without them our fields and gardens would lose their rich variety of flowers and crops. It is estimated that the total value of Europe's insect pollinators is an amazing 14.2 billion Euros!

Sadly, changes to the farmed countryside have not been kind to our bumblebees. The number of species found in most of lowland Britain has halved since 1950 and two bumblebee species have become extinct and others have experienced major declines. Further extinctions may follow in the near future unless we act quickly.

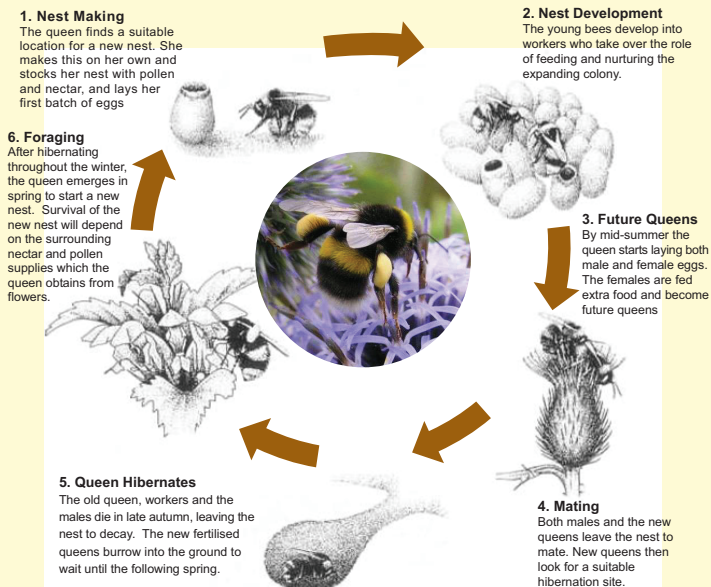
The reason that bumblebees have declined in the countryside is simple. Bees feed exclusively on pollen and nectar, and there are far fewer flowers in the countryside than there once were. Hedges have been grubbed up and marshes drained, unimproved grasslands which are rich in wildflowers have mostly been replaced by silage and cereal fields. Pesticides and fertilisers too, either harm the bees directly or reduce the numbers of wildflowers available for them to feed from.



**From this to this!**

So we neglect our bees at our own peril, with the colour in the countryside and the variety on our dinner plates hanging in the balance!

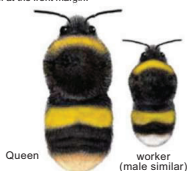
## A BUZZY YEAR! Life Cycle of the Bumblebee



## BEE WATCHFUL

From a possible 18 species of bumblebee once found in Northumberland, only six species now remain common in gardens. More than 95% of all sightings are now of these common species, so if you can identify these then you're a long way to becoming a bumblebee expert!

**Buff-tailed bumblebee, *Bombus terrestris***  
Queens very large and common in early spring. Workers have largely white tails, but usually with a hint of buff at the front margin.



**Early bumblebee, *Bombus pratorum***  
A small bee, often nesting in lit-boxes. Colonies are very short-lived, producing males as early as April. Rarely seen from July onwards



**Common carder bee, *Bombus pascuorum***  
Abundant everywhere, the only common all-brown bumblebee.



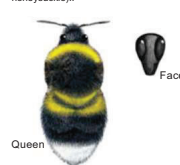
**White-tailed bumblebee, *Bombus lucorum***  
A common bee, often nesting under garden sheds. Distinguished from the similar buff-tailed bumblebee by pure-white tails and lemon-yellow bands



**Red-tailed bumblebee, *Bombus lapidarius***  
Very common on chalk downland, frequent in gardens.



**Garden bumblebee, *Bombus hortorum***  
A very long-tongued species preferring deep flowers (e.g. foxgloves, Delphinium, honeysuckle).



## BEE POSITIVE, BEE HAPPY



It is essential that we conserve our remaining bumblebee populations, and if possible restore them to their past abundance. Here's what we can do:

- Encourage farmers to adopt appropriate **agri-environmental schemes**. These actually benefit farmers by improving crop yields at the same time as enriching the countryside.
- **Replanting of hedgerows** and the recreation of **hay meadow** and **flower-rich grasslands**
- In **gardens nationwide** we need to use wildflowers and traditional cottage-garden plants
- Roadside **verges** and **motorway embankments** should be managed to encourage wildflowers, and cut less often
- Create a **mosaic of suitable habitat** across the whole of the UK. Bumblebees need small patches of wildflowers here and there in field corners, margins, gardens, waste ground, roadside verges and motorway embankments.