



Guidance Notes

Creating a Buzz in your Churchyard: Conserving Bees

Background

Changes in the way we manage our countryside during the last century has led to a dramatic reduction in opportunities for wildlife, with agricultural intensification the main cause. Since the 1930s, 97% of England's wildflower-rich grasslands have disappeared, which has led to similar reductions in the animals that rely on this habitat such as bees. The use of pesticides in agriculture and in gardens is adding to this pressure, with growing evidence that widely used chemicals like glyphosate and neonicotinoids persist in the environment and spread into watercourses, killing plants and animals far from the intended target.

Bees are essential to a healthy environment and healthy economy. We rely on them and other insects to pollinate most of our fruit and vegetables – it would cost UK farmers £1.8 billion a year to pollinate their crops without bees.

But bees are under threat and without them so is our food and economy. In the last 60 years, the changes in farming practices and loss of countryside due to urbanisation has caused the loss of 97% of the UK's important natural wildflower meadows and this is one of the biggest contributors to the alarming decline of our bee populations.

The decline should concern us because without bees the whole food chain is under threat. We need to play our part in supporting our pollinators; bees, hoverflies, butterflies and wasps (yes, wasps too!).

With appropriate management churchyards can provide essential food and shelter for pollinators, and help reverse the trend of declining bee populations in the UK.

Solitary Bees

In the past much of our focus has been on the Honeybee but if we look at other pollinators we find that compared to one species of honeybee (*Apis mellifera*) there are 25 species of bumble bee and more than 200 species of solitary bees.

Solitary bees include *mining bees* who build their nests in tunnels in the ground, *mason bees* who nest in holes in walls and *leaf-cutter bees* who use pieces of leaf to line nests in holes in walls and wood.

Solitary bees with their huge numbers and their presence at different seasons are very important pollinators for fruit and vegetables and their specialised mouthparts make them one hundred times more efficient pollinators than honeybees.

So what can we do?

There are two very helpful web sites from the Bumble Bee Conservation Trust;-

<https://www.bumblebeeconservation.org/gardeningadvice/>

<https://www.bumblebeeconservation.org/land-management-advice/>

Provide additional nesting sites

A **bug hotel** is simple, a great way of recycling, and provides pollinators with somewhere to live. It could be a nice winter project for the church community.

Discarded pallets can form the main structure and you can fill the spaces with whatever is lying around: old plant stems, bamboo, pine cones, bits of bark. A roof of tiles will keep things dry. Locate them around the churchyard in full sun, facing south or south east.

On a smaller scale a baked beer tin tightly filled with old, dry, hollow plant stems, bamboo canes or even paper drinking straws. Hang the can up somewhere sunny and sheltered and make sure the stems/straws are pointing slightly down, so that water doesn't collect inside them.

There are numerous helpful web sites.

Ground nesting solitary bees

Many solitary bees nest in the ground. They need loose, crumbly and exposed soil or sandy banks. Create small mounds of bare earth in places that catch the sunshine.

The edges of paths often have exposed areas of soil. Try starting a few inviting holes by creating small holes with a pencil.

Never use chemical pesticides

While most modern herbicides are designed to kill only plants and have little or no toxicity to humans, many still have extreme consequences in the environment, changing habitats in ways that affect insects and wildlife.

