



STC Honey Bee Larder



European honey bee (*Apis mellifera*)

We are facing a decline of honey bees. They have a crucial role in pollinating many of our important crops. Scientists are warning that without changes to the way we manage the land, declines in pollinators needed to feed a growing global population are likely to continue.

Many factors may be behind the decline of bee colonies in the UK, including declines in flowering plants, increased parasites (e.g. *Varroa destructor*) and air pollution.

A report by the UN Environment Programme (UNEP) has called for farmers and landowners to be offered incentives to restore pollinator-friendly habitats, including key flowering plants next to crop-producing fields and landscape features, such as hedges and watercourses.

Lack of pollen and nectar sources can starve bee colonies. At STC, we are creating a 'Honey Bee Larder'; this involves establishing annual and perennial flowers and shrubs under and alongside our existing hedges to provide nectar and pollen. The aim is to supply food for honey bees during their entire active season (February to October). When selecting plants species to include, we considered the timing of flowers and the quality of the pollen and nectar. Honey bees have short tongues relative to other bee species; therefore, it is also important to ensure that the nectar is accessible to them.

Times of the year during which bees are in particular need of pollen and nectar:

There are times of the year when the bees are particularly struggling to find the forage plants they need. We have tried to particularly provide for these times.

Early in the year: From the end of February bees need plenty of pollen. This enables the colony to bring that pollen into the hive which stimulates the queen to lay eggs. Two of the best plants included in our larder that provide good quality pollen early in the year are:

- **Willow** (*Salix* spp, has the best quality pollen of all)
- **Viburnum** (*Virburnum foetens*, fragrant flowers from mid-winter to early spring)

The 'June-Gap': June is a time of dearth of flowering plants between spring and summer, yet the colony is almost at its largest so in need of even more pollen and nectar. Some of the of the June flowering plants we have included are

- **Meadow Crane's Bill** (*Geranium pratense*, native wildflower producing flowers during June)
- **Rosemary** (*Rosmarinus officinalis*, flowering May to September)
- **Elderberry** (*Sambucus nigra*, particularly good quality pollen)
- **Borage** (*Borago officinalis*, an annual, abundant in accessible nectar)

Summer: July and August are months that bees struggle to find nectar because their colonies at their largest. Therefore, we have provided plants that are prolific nectar producers in the summer, such as:

- **Anise Hyssop** (*Agastache foeniculum*, one acre of this is said to support up to 100 hives)
- **Wild Marjoram** (*Oreganum vulgare*)
- **An annual and a perennial wildflower pollen and nectar mix** (including yarrow, oxeye daisy, selfheal and wild carrot)

Autumn: During September and October, bees are building up fat and protein reserves to survive the winter

- **English lavender** (*Lavandula angustifolia*, flowers July-September, the essential oil contributes towards reducing *Varroa destructor* mites)
- **Goldenrod** (*Solidago vigaurea*, abundant in late nectar and pollen)