



**Hive density** - the general rule of thumb is 10 (double box) honey bee hives per ha and 10 bumble bee hives per ha. Given pollination is one of the main factors affecting production and flowers are only viable for a few days some choose to stock at higher rates. If the weather has been cold or wet it is especially important to have the maximum number of bees present for when conditions are suitable for pollination. Consider introducing more hives if you still have the chance this season.

**Hive placement** - place honey bee hives outside of netting where they get the morning sun as early as possible. If tunnels are long (100m+) it is ideal to have hives at either end of the tunnels. Bumble bee hives are best placed on a raised platform mid-tunnel and are normally staggered in their introduction every 2-3 weeks.

**Monitor bee activity** – various guidelines exist as to optimum bee activity, some include:

**Honey bees** – during the warmest part of the day in peak bloom 4-8 bees per bush at any one time or 4 bees/second entering or exiting the hive.

**Bumble bees** - 6 or more entry or exits every 10 minutes, in 50% or more of the colonies.

**Hive health** - ask your honey beekeeper to regularly assess hive health (frames of bees & brood). It is in both of your interests that hives stay as healthy as possibly.

**Hive lifespan** – honey bee hives are ideally replaced every 3 weeks but could potentially last the entire pollination if they maintain good health. The lifespan of bumble bee hives is 4-6 weeks.

**Water source** – having water present for honey bees before introduction helps them both to orientate as well as maintain hive health. A suitable option is a near filled 10L bucket with some side netting/mesh draped in the water as a landing area for bees.

**Additional food sources** – diverse nutrition helps bees stay active and healthy. Having a range of other flowering plants nearby or planting wildflowers can also help with this. Good options include borage, flowering basil, alyssum and blue or purple coloured flowers in general. You may also want to discuss with your beekeeper the merits of supplementing hives with sugar syrup, pollen or protein.

**Bee attractants** – pheromone-based bee attractants are used in other crops and while they require bees to already be foraging, they may have a place to encourage more honey bees into tunnel houses. We are only aware of the following product on the market [Bee-Scent – Grochem](#)

**Avoid pesticide use while bees are present or spray in the evening when bees are not foraging.**