



hat the honeybee is under threat is old news. Pesticides, disease, a catastrophic decrease in habitat have all been cited as reasons for its decline. But could it also be the way we have been keeping bees that is putting them at risk? If so, the alternative could be natural, or apicentric beekeeping, which puts the health of bees first.

A natural beekeeper uses local bees, preferably a swarm, allows them to draw their own comb down from top bars, rear their own queens and crucially swarm to make new colonies. Natural beekeepers avoid smoking the bees and don't feed with sugar. Instead, the bees are left enough honey to survive the winter independently. All these things help the bees to use their natural physiology to promote resistance to disease and increase genetic diversity and in doing so create strong, healthy colonies. The good news is that although going on a course first is essential, natural beekeeping doesn't require a lot of time or expensive equipment and dovetails beautifully with a flower-rich, wildlife-friendly approach to gardening.

We owe the beauty and variety of our gardens to the insects that pollinate our flowers but there is another advantage. "When gardeners grow a wide range of flowers for bees, they will be rewarded with wonderful music in the garden," says Heidi Hermann, a natural beekeeper and trustee of the Natural Beekeeping Trust. I agree, there is nothing better than sitting with eyes closed and the sun on my face listening to the sound of bees droning through lavender.

provide easy access to nectar.

3 Echinacea, with its flower head, made up of multiple single florets, is a magnet for butterflies and bees. 4 A brightly painted Warré hive with panels removed to show observation windows. When decorating hives, it's important

you use a natural-resin, toxin-free paint. 5 Natural beekeeper Heidi Hermann examines one of her hives. She only opens them for sporadic health checks as integrity of nest scent and warmth is key to the bees' health.

Warré hives

For a gardener who wants to become a natural beekeeper a Warré hive (see picture 4) is ideal. This vertical hive, invented by Abbé Émile Warré in the early 20th century, is cheap to make, easy to use and best of all bees thrive in it as they naturally want to build down. You open the hive very rarely, just once or twice a year, as the heat and scent of the nest are crucial to the bees' health, but you can opt for boxes with an observational window that allows you to peek in. The bees themselves will seal every crack with propolis, the resinous substance bees glean from plants. You can buy a readymade hive from makers such as Matthew Mercy (zorbanet.com/warre/). Prices start at around £160 for a four-box hive. or £240 if you include glass observation windows. Alternatively, you can make your own. David Heaf offers plans on his website biobees.com and his book (see next page). You'll also need a smock with veil attached (see page 19).

¹ Traditional skeps, woven from straw, are used to gather swarms. These can be combined with Warré boxes to create a hive. 2 Single-petalled blooms, such as borage, are loved by bees as they



The gardens that host bees under the care of Heidi and other NBKT trustees are planted with perennial plants, such as *Hebe* 'Nicola's Blush', and annuals including *Calendula officinalis*. Beneath the roof of a small, open-sided wooden structure, a bit like a miniature band stand, hangs a sun hive, an egg-shaped hive comprised of two straw skeps divided by a wooden board in which the bees build circular combs. Heidi uses a combination of these sun hives, along with skeps, Warré hives (vertical hives made up of several Warré boxes, named after a French priest called Abbé Émile Warré) and German-made golden hives (rectangular one-room boxes that encourage the colony to build deep, brood nests backwards rather than down).

"I have one hive I call my PR girls," says Heidi. "They are such toughies, they have survived so long but they are also so gentle. You can sit very close and observe them without wearing a veil. The experience of watching bees is something everyone should have. My bees are my companions. I love them, I am very grateful for everything they have taught me."

Heidi came to natural beekeeping through the work of the Austrian philosopher and social reformer Rudolf Steiner, whose lectures on agriculture inspired the biodynamic movement and foretold the bee's current crisis. I discovered it by accident when among a wild garden on Hackney Marshes, east London, I came across some hand-built hives behind woven hazel fencing. These Warré hives consisted of three wooden boxes stacked on top of

1 Designed by the German sculptor, Günther Mancke, sun hives are made out of rye straw, and have nine, sickle-shaped movable frames. They're hung at 2.5m so that bees fly well above the heads of onlookers

2 This golden hive – so-called because its measurements conform to the golden ratio – is a single-room box that reduces the need to lift heavy boxes.

3 Bumblebees, such as this one

feeding on a foxglove, are also

important pollinators. 4 Bees and gardeners will be equally attracted by the vivid colours of bee-friendly plants such as this cosmos. 5 Honeybees receive a boost from feeding on pure honey on a simple jam-jar feeder.

Further reading

At the Hive Entrance by H Storch, (CreateSpace Independent Publishing Platform, 2014). An essential tool for the low-interventionist beekeeper.

The Bee-Friendly Beekeeper: A Sustainable Approach by David Heaf (Northern Bee Books, 2015). A wellargued case for sustainable beekeeping with information on building a Warré hive.

The Buzz about Bees: Biology of a Superorganism by Jürgen Tautz (Springer, 2008). A highly readable, scientific account of honeybee behaviour. Available as a free download from archive.org/details/AtTheHiveEntrance

Honeybee Democracy by Thomas
D Seeley (Princeton University Press,
2010). An engaging description of how
honey bees communicate and decide on
new nest sites when swarming.

Some of these titles are available at a discount from the *Gardens Illustrated* bookshop. See page 108 for details.



each other. I was veilless but these mellow bees posed no threat. I spent some time watching them fly, arriving at the hive with fat bags of chalky white, yellow, orange and red pollen on their legs. I went home determined to become a Warré beekeeper.

That was four years ago and the magic of the bees continues to inspire me. Although the Warré beekeeping method is sometimes derided by conventional beekeepers, across the country this gentler approach is gathering momentum. Sustainable beekeeper Tim Evans, whose hives on Hackney Marshes showed me the way, feels there is a growing symbiosis between natural and conventional beekeepers. "There is a sharing of information and an understanding that the highly intensive way is not working anymore," he says. For Tim, keeping honeybees has opened up a world of other pollinators "the joy of gardening is seeing a garden full of insects, and that should be part of the pleasure." Beekeeper and Warré hive maker Matthew Mercy, who last year sold 40 hives, agrees. "Natural beekeeper is a growing movement," he says. "Many of my customers are turning to natural beekeeping for the same reasons I converted – they are not comfortable with the intensive interference and medication."

My own bees swarmed last summer and have made a second healthy colony. That swarm is now being looked after by another natural beekeeper in east London. I have taken some honey (but only once), but for me having helped 50,000 more healthy bees survive feels like a far greater achievement than endless cupboards full of honey. □

USEFUL INFORMATION

The Natural Beekeeping Trust (naturalbeekeepingtrust.org) runs courses in natural beekeeping at its East Sussex base. • OrganicLea (organiclea.org.uk) runs a two-day introduction to sustainable beekeeping at its Hawkwood site on the edge of Epping Forest.

• Find out more about Tim Evans's sustainable beekeeping at sustainablehackney.org.uk

Plants for bees

Agastache rugosa

Known as a 'wonder honey' plant, as some claim an acre can support 100 hives. Flowers July to September. 90cm, USDA 4a-9b[†].

Anethum graveolens

Feathery, acid-green foliage topped by larger saucers of tiny, yellow flowers, Flowers July to October. 90cm.

Crataegus monogyna

The tiny, white flowers are highly favoured by honeybees, the nectar makes a dark-amber honey that is almond flavoured. 9m. USDA 4a-7b.

Echium vulgare

A long-flowering, bushy plant with long, tubular flowers. Tolerates sun or shade. 90cm, USDA 3a-8b.

Elaeagnus angustifolia

An essential June-flowering shrub that provides much-needed nectar during the flower gap and is highly attractive to bees. 9m. USDA 3a-8b.

Eranthis hyemalis

Shiny, cup-shaped yellow flowers appear in late winter when bees are low on forage. Ideal for a woodland garden. 8cm. AGM*. RHS H5, USDA 3a-7b.

Lamium purpureum

Attractive to both honeybees and bumblebees. Blooms from February or earlier. 30cm. USDA 6a-9b.

Lavandula angustifolia

A plant loved by bumblebees, solitary bees and honeybees. Its essential oil may also help honeybees rid themselves of varroa mites. 1m. USDA 5a-9b.

Phacelia tanacetifolia

Bell-shaped flowers in blue-to-mauve. Highly attractive to both honeybees and hoverflies, 1.2m. USDA 7a-10b.

Salvia nemorosa 'Caradonna'

Dramatic, dark-purple stems intensify the colour of upright spikes of purple flowers that cover this bushy plant. 50cm. AGM. RHS H7, USDA 4a-9b.

Tithonia rotundifolia 'Torch'

Tall, striking plant with velvety orange florets and a deep-yellow centre. Bees love it and the seed is easy to save. Flowers summer to late autumn. 1.8m.

*Holds an Award of Garden Merit from the Royal Horticultural Society. 'Hardiness ratings given where available.