A beekeeper's notes for the year

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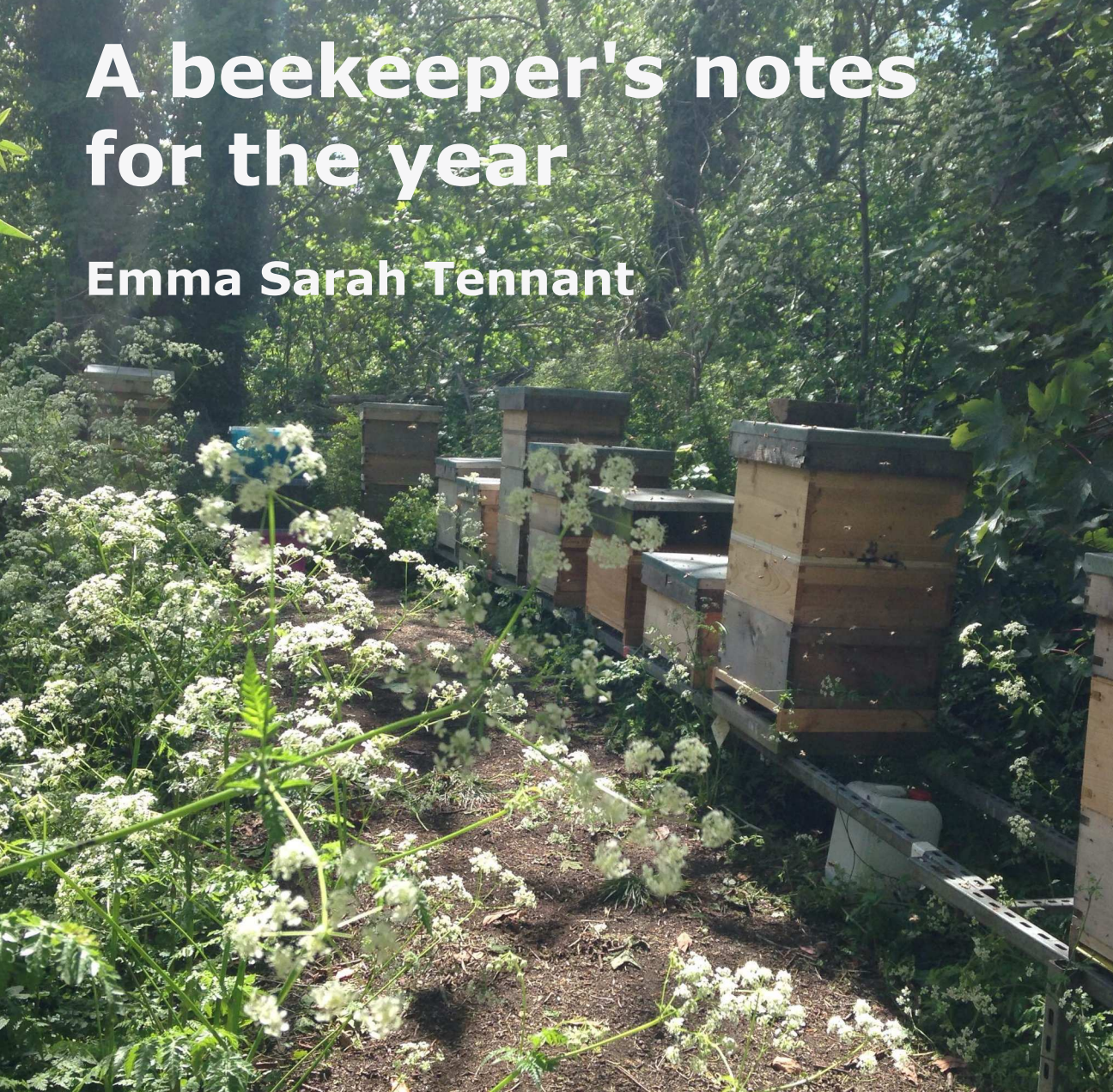


A beekeeper's notes for the year

Words and photography by Emma Sarah Tennant, London, England 2015.

Based on the blog posts of Miss Apis Mellifera at missapismellifera.com. Emma has kept bees for over five years at Ealing apiary with her hive partner Emily Scott adventuresinbeeland.com/.

A beekeeper's notes for January

We're into January and it's wild and windy. Some days are mild when a dull, grey blanket covers the sky and other days are frozen as frosts strengthen the cold. A block of fondant under the roof may provide a window into the hive as the workers eat away the sugar. A hand placed above the crownboard can reassure that the bees are warm as well as fed.

In the northern hemisphere there are fewer tasks for the beekeeper during the shorter daylight hours. A quick heft of the hive to check the weight of the colony and its stores. A glance at the entrance to make sure that it isn't blocked by dead bees or debris, while wearing a veil for the guard bees. A varroa board left beneath the floor for one week of the month monitors the number of mites falling from the hive, and reveals the seams of bees and their activity through piles of pollen and wax cappings.

The days can be mild or wet at the start of the year, and they can freeze even as the snowdrops push up through the hard ground. On a bright day it may be tempting to open up the hive to see what's inside, and while it could not do much harm, whatever is found might have to wait till spring.

January is more often a time to watch and wait.

A beekeeper's notes for February

In February the purple crocuses open to join the white snowdrops in flower. Winter aconite and catkins of the hazel and willow also blossom to bring early forage for the bees.

February is a quiet and still month through rain and shine. A cold snap sometimes makes a surprise visit, but overall winter feels ready to retire for spring. On a chilly day, few bees take to the wing as the beekeeper stands outside the hive entrance. The stillness at the apiary makes all other movements sharper. A red-breasted robin hopping along a bare branch and a magpie swooping down to pick up a twig to build her nest. A spider crawls across the fondant under the hive roof. They like to live in warm, dry spaces. Two slugs slide across the ground as the varroa board is put back under the floor for another week.

February can be a time of uncertainty for beekeepers with thoughts of wakeful bees kept inside the hive. The winter larder is starting to, or has already, run bare. Warm days and forage can be scarce and the queen may begin to lay more bees for the colony to feed. But a beekeeper's worries are often short-lived like the month.

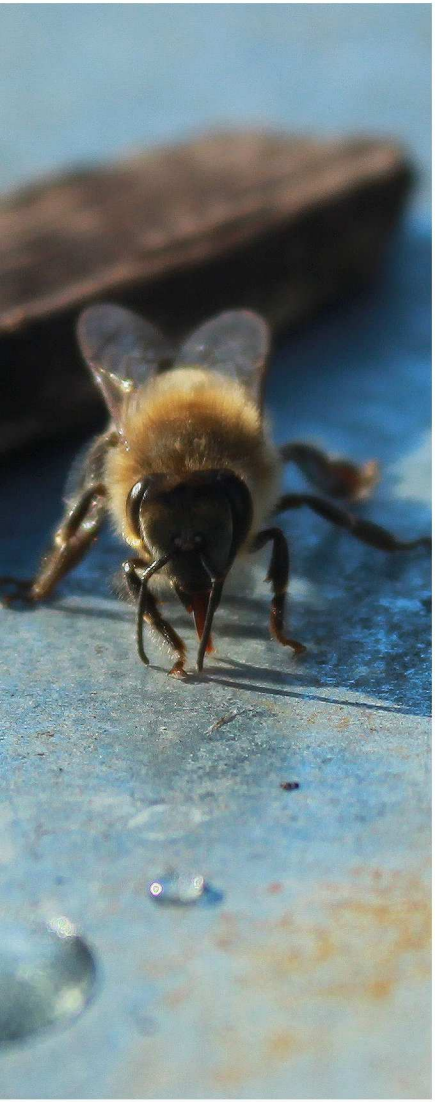
The beekeeper keeps an eye on stores, observes the need for more insulation or ventilation, tidies the apiary, cleans up hive boxes, makes up frames, and repairs the beekeeping suit ready for spring.

A beekeeper's notes for March

As every beekeeper knows, spring can come twice for the bees. On a perfect spring day there may be only one thing on the beekeeper's mind: the comb change. But in early March the weather is not always constant and spring can come and go a few times before it stays.

The comb change is a spring clean for the hive when bees are moved onto new brood frames with fresh foundation and put inside cleaned brood boxes to start the season. It may be carried out using the shook swarm or Bailey method, or done by gradually replacing one brood frame at a time throughout spring. The comb change helps to prevent a build-up of pests and diseases inside the hive and may be done each year or every other year depending on the conditions for each colony. Some beekeepers shook swarm their hives as soon as the weather allows in late February to early March feeling that the earlier the comb change the less brood is lost and the bees get a head start on the season. Other beekeepers prefer to change the comb from late March to early April in wait for consistently warmer days and blossoming trees for forage.

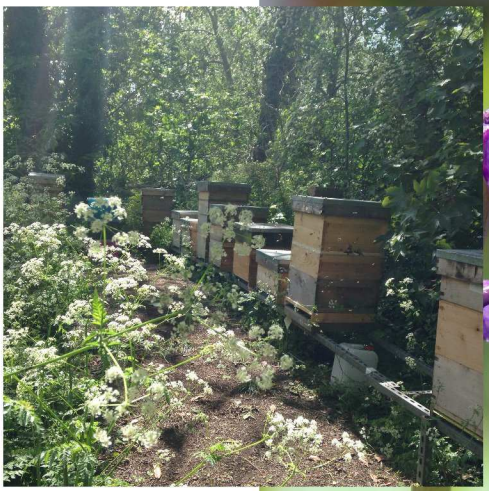
Observations of the hive made in winter can be useful in deciding the need for and timing of the comb change, such as recording the number of mites on the varroa board, comparing the weight of stores week to week, making a note of signs of ill health from an accumulation of dead bodies outside the hive entrance to dysentery on the hive boxes.



A few early spring inspections are prudent to assess the size and strength of the colony before carrying out the comb change. The hives can be opened up to see if the queen is still present after winter and whether she is laying well enough to build-up the nest for spring, or whether she has become a drone layer. The brood is also examined for signs of disease.

Queenless colonies might be re-queened or combined with queen-right colonies, providing both hives are in good health, before a comb change. Weaker colonies might be supported with extra dummy boards for warmth and fed sugar syrup to strengthen the nest to make them ready for a comb change.

If feeding, then winter fondant can be swopped for sugar syrup to help the bees build wax comb. The chicken wire defenses against the woodpecker are usually removed in early spring as the ground softens and the birds can find food elsewhere. There's no harm in leaving the entrances reduced to make it easier for the bees to defend their nest while they are recovering from winter, although the mouseguard can be removed for the increase in foragers returning to the hive with heavy baskets of pollen.



A beekeeper's notes for April

The bees can be in high spirits in April. The apiary gets busier too with beginner beekeepers floating around like drones and hoping for a glimpse inside the hive. A smoker helps to manage the hive during inspections now that the nest should be growing bigger and stronger. The honeybee is a forest creature wary of fire and the effects of smoke seem to quieten excitable colonies, particularly when burning dried lavender. The smoker is also a useful tool for the beekeeper when lifting hive parts up and down, a few puffs encourage the bees to move and avoid injury.

If the comb change was carried out in March or early April, then the beekeeper is keeping a careful watch on the hive's recovery after the upheaval. Is the colony settling down into their new home and filling up the brood frames with freshly drawn comb, brood and stores? Do they need feeding, or is the nest strong and the weather forecast ahead good with plenty of forage about?

Hive records should be updated weekly to note any changes in the colony and the monthly varroa count not forgotten. Already the beekeeper is watching for signs of swarm or supersedure by spotting queen cups on the frames. Spare hive equipment stands by ready for the inevitable discovery of queen cells with an egg or larva inside, and queen cages and marking kits are stashed in pockets.

A beekeeper's notes for May

On a warm and sunny day in May parks and gardens are buzzing with honeybees, bumble bees, solitary bees and other pollinators. Fairer weather also attracts beekeepers to the apiary at weekends foraging for tea and cake. Bee suits are pulled on and smokers are lit as the apiary hums with talk about bees. After tea and cake, beekeepers make their way along the overgrown path towards the hives.

The changeable weather from March to May and varying conditions between individual colonies can see hives at different stages of their life cycles. Stronger colonies that were shook swarmed have filled up the brood nest and a super or two of honey. Colonies prone to swarming are populating the apiary with smaller colonies from artificial swarms. Nucleus hives, or brood boxes with nests closed up by dummy boards, stand alongside parent colonies. Bailey comb changes started in April might now only be completed after being interrupted by poor weather or failing queens. Newspaper sticks out between hive boxes from weak colonies being combined following the loss of a queen or a drone layer.

The stories of different hives hang about like threads in the air as the beekeeper walks around the apiary and the bees criss-cross past the flowers and trees. Today is fine and warm, tomorrow rain is forecast, and the June gap could be just around the corner.

A honeybee worker forages on a flower in summer.

A new queen is introduced to the hive.

Entrances are no longer reduced if colonies are strong.

Workers bearding together at the bottom of the hive.

A queen is caged and marked to make her easy to spot.

Waves of comb built across the top bars by the workers.

A beekeeper's notes for June

After spring has blossomed and before summer has quite arrived, there may be a lull in flowering foliage which in the UK is called 'the June gap'. As nature takes a breath before the summer rush, there are some perennial plants in parks and gardens that help to bridge the gap, but sometimes not enough to satisfy all pollinators.

The June gap is significant in beekeeping because it can come at a time when most colonies have built-up their numbers and have many more bees to feed, or they have been split after swarming and may be smaller and weaker with fewer stores. Sometimes the June gap can come early in May or not at all, but it's a date in the beekeeping calendar to remember to watch out for starving colonies and to keep a canister of syrup standing by for hives that need an emergency feed.

The longest day of the year passes with the Summer Solstice in June. At the apiary talks turns from swarms and queens to the honey crop and how much can be harvested. The days get shorter from midsummer, inch by inch, but summer isn't over yet and there's a lot happening inside the hive. Queens are laying; workers are cleaning, nursing, wax-building, honey-making, guarding and foraging; and drones are eating, resting and congregating. The beekeeper is in the thick of the season dealing with queen cells, drone layers, nucs, monitoring varroa, managing bee space and supers, planning the honey harvest, and loving every minute of it.

A beekeeper's notes for July

June to August are the months of honey. The harvest is usually taken off the hive in July and August, sometimes earlier depending on conditions of the season both inside the hive and outside among the local forage.

A rhombus board or crownboard with Porter bee escapes can do a good job of clearing the supers of bees. A hive partner and a soft bee brush, or a large feather, can usually do the rest. If so inclined, one beekeeper shakes and brushes each super frame to encourage stragglers to leave and the other beekeeper wraps each frame in a clean bin liner and places them into an empty super to drive home without any hitchhikers.

Two can make short work of extracting the honey in a kitchen or shed with doors closed and windows fastened to stop nosy wasps from entering. One beekeeper uses a sharp knife or decapping fork to remove the wax caps from each frame and the other beekeeper places the dripping combs into a centrifugal extractor to spin off the honey.

Every cell releases the gifts of some flower's nectary with an explosion of fragrance. Sometimes rich and fruity with hints of berries and citrus flavours, other times dark with the scent of heavy blossoms and forests. The extractor gets heavier and heavier to spin until the tap is released and the honey drained into buckets ready to be filtered and bottled.

A beekeeper's notes for August

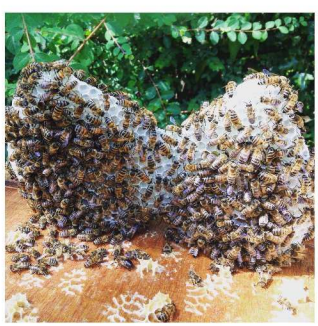
This year's crop tastes of blackberries and lime. The kitchen is filled with the smell of freshly spun comb ready to be drained into buckets through fine mesh sieves and then filtered with muslin and string. The honey is left to settle overnight as air bubbles rise to the surface, then the froth is scooped off and the process of filtering begins again. Finally it is ready to be poured into jugs and bottled into jars, labelled 'Honey'.






Wax cappings in mini buckets are left to be cleaned up and made into candles later in the year. Meanwhile, at the apiary smokers billow in the hazy late summer sunshine where more work remains to be done. Queen cells may be found as late as August and even into September as workers consider whether or not to replace the old queen with a new one before winter, or perhaps the colony is still feeling the urge to swarm. Weaker hives are assessed for the need to feed and/or unite with other colonies, and treatments begin for the persistent varroa mite.



A beekeeper's notes for September

Spiders spin their crafty webs between the autumn sedum in September. Thousands of pink star-like flowers open to welcome honeybees in their dozens to drink from a forest of nectar. The bees trip over themselves to visit every single flower, flying carelessly close to where garden spiders dangle waiting to pounce. The beekeeper is tempted to brush away the webs, but who is she to deprive a spider of its dinner?

At the apiary everyone is talking about the annual honey shows. Who will enter and whose honey will win the prize?

It has been a good season and many hives have ended the summer queen right, with healthy broods and plenty of stores to overwinter. The bright orange pollen dropped on the varroa board shows foragers are as busy as ever, and perhaps it's too early for mouseguards to go on, but the entrances are reduced against the prowling wasps outside.

A beekeeper's notes for October

Some years autumn arrives almost unnoticed. One day the beekeeper walks to the bottom of the garden to collect her kit and finds the crimson vine creeping over the sheds is set ablaze in the morning sun.

The beekeeping year ends and begins somewhere between August and September when the honey has been harvested and the colony is being prepared for winter, to start all over again in spring. However, on a warm autumn day in October it can feel like the season never ended. The beekeeper opens the hive in autumn expecting to find the queen is laying fewer eggs, drones cowering as their sisters evict them from the colony, and the nest shrinking in size. The hive tool works hard to prise apart boxes and frames stuck fast with sticky red-brown propolis.

This seasonal activity can vary according to the local climate and forage, and conditions within the colony. Some hives keep flying and growing long into October if the weather allows, but winter is likely to arrive eventually. The beekeeper can get ready for the days or weeks ahead when it may be too cold for bees to fly for long periods of time. The hives can be wrapped in chicken wire to deter the green woodpecker, the mouseguard can be put on despite foragers continuing to bring home pollen, a block of fondant can be placed above the crownboard ready for when stores start to run low or for when it's simply too cold for a worker to walk to the other side of the hive to collect a cell of honey.

A beekeeper's notes for November

In November the leaves fall from the trees and the drones fall from the hive. The trees are preparing to rest for winter as their leaves drop to the ground, and the bees are getting ready to close the hive factory as the drones are finally thrown outdoors. Autumn and winter are good times of the year for consolidation. The beekeeper can take stock of the hives and colonies, clear up apiaries, clean up equipment, disturb a few spiders, and plan ahead for the next season.

The ebb and flow of the seasons are not constant, however, and the points on the beekeeping calendar can move each year. The autumn syrup may be poured a month earlier in August for late summer rains. The mouseguard might be pinned to the entrance a month later in November for the workers still bringing home baskets of pollen. Wasps may be seen gliding around the creepers beside the hive, and drones found sitting on the roof as late as December.

But if it's true the season can sometimes be mild, overall there are fewer days when either bees or beekeepers feel like going outside. On those days both bees and humans are glad of a well-stocked cupboard, an insulated roof, and a secured entrance. A beekeeper's notes for November often turn to thoughts of what she has and hasn't done, none of which matters now, and then she dreams of the bees returning in spring.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A beekeeper's notes for December

When winter doesn't come for the bees they fly outside enjoying the mild weather and bring home lots of pollen. A well-fed drone sitting comfortably on the hive roof and a young forager aimlessly resting on the hive boxes provides a merry mystery for the beekeeper. Did the drone survive the end-of-summer cull? Is there a drone-laying queen or a laying-worker inside one of the hives? Are the queen and her workers still producing female and male brood because of the unseasonably warm weather? Some hives are hefted and feel heavier now than at the end of summer, with not much of the fondant touched under the roof. While this is a happy discovery, perhaps the bees are getting over-crowded inside and preparing queen cells to swarm?

The beekeeper wishes it could be colder and the bees clustered in their winter nest. Treatment for varroa is usually given in midwinter when the days are frosty and it's most effective during almost broodless periods, because the varroa have fewer places to hide. The fixed points on the beekeeping calendar are turning as the seasons become more uncertain. The beekeeper decides it's best to wait until the weather is wintry and conditions are better inside the hive for treatment. A cold spell might yet arrive in January or February and though the days will be getting longer, hopefully there might be a window to treat the hives. If not, it could be shook swarms in spring. For now the bees seen flying to and fro seem content enough to remain undisturbed for Christmas.


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A beekeeper's notes for the year is based on the blog posts of Miss Apis Mellifera, by Emma Sarah Tennant, a London beekeeper. Each page follows the beekeeper's observations about the hives through the changing and unchanging seasons. Pictured: a worker honeybee licks sugar syrup droplets off the roof and it seems the apiary robin has dropped a mealworm.