



THORNE

# Beginners guide to **beekeeping**



This 4 page  
pull-out leaflet is  
aimed specifically  
at beginner  
beekeepers

## **Why should I start beekeeping?**

**Keeping bees is not only rewarding but also immensely interesting. Beekeeping practices are constantly changing so there is always something new to learn. Managed appropriately and treated properly, healthy honey bees contribute to our environment by providing pollination for many crops and fruit that we rely upon in our diet. Of course, they also make honey, beeswax, propolis and royal jelly, all of which have their own individual uses.**

## **What is the beekeeping year?**

**Winter** is the start of the beekeeping year, when all hives are being shut up ready to go into the cold winter months. Bees cluster when the weather is cold so they do not do much over this period. During winter, hives need to be hefted in order to see whether they are light on stores. Hefting means lifting one side and then the other gently from the bottom of the hive. It may take some time to get used to how heavy each hive should feel, so get used to doing it throughout the year. If the hive feels light, it will need to be fed fondant. Other winter jobs include cleaning and repairing equipment, reading and preparing for spring.

**Spring** arrives and the bees become more active. The queen will start laying once the temperature has risen and the colony numbers will begin to increase. The colony may need treating for Varroa and may also need a stimulative syrup feed or pollen supplement to give them a boost. As spring continues, the colony should build in numbers. Any comb changes should take place once the weather is consistently warm. Inspections should start to take place once a week.

**Early Summer** is swarm season. During this period, the beekeeper may have to perform artificial swarms to make the bees think they have already swarmed, therefore avoiding large losses of bees and queens. Inspections should still be once a week. As summer progresses, there may be a period in June called the June Gap where, despite the good weather, there may not be a lot for bees to forage on so they may need feeding. Wasps can become a real nuisance as temperatures increase so deterrent methods should be put in place. At the end of summer, there is normally a good honey harvest where you can take off the supers and extract the honey.

**Autumn** usually sees the Varroa numbers increase so this is a good time to treat before winter. As the weather gets colder, mouseguards should be attached to stop mice entering the hive and causing havoc over the winter. If any colonies are looking particularly weak, they can be united with stronger ones to ensure they will make it through the winter. Bees may need to be fed again before winter so that they have plenty of stores going into the cold weather.

## **What are the best books to get me started?**

There is a wealth of books about bees and beekeeping out there and it is a great idea during the colder, quieter months to do some reading. It will help you to prepare for the coming season. It is always a good idea to read lots of different books as all beekeepers have different opinions and it will be up to you whose advice you follow.

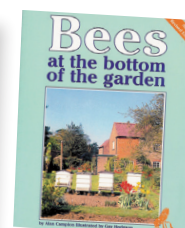
The following books are a good place to start when you begin or are thinking about keeping bees:

**Haynes Bee Manual** - Claire and Adrian Waring

**At the Hive Entrance** - H. Storch

**BBKA Guide to Beekeeping** - Dr Ivor Davis and Roger Cullum-Kenyon

**Bees at the Bottom of the Garden** - Alan Champion



## Hives



### What type of hive should I start with?

It is down to personal preference really. It may depend on aesthetics, weight, size etc. At the beginning of the catalogue you can find the comprehensive 'Hives and Bees' section which outlines all the different hives we make here at E. H. Thorne Beehives. Our advice would be to start with a National or WBC. The National is the most popular hive in the UK and the frames are the same as the ones used in a WBC. It is square and one of the smaller hives we make, so that means the supers are not quite as heavy as others when full of honey! The WBC is popular and looks like the traditional garden hive. It has smallish boxes and is double walled so many people choose this hive for winter insulation purposes.



### How many hives should I start with?

We recommend starting with two hives. This enables the beginner beekeeper to compare their colonies giving them a better idea about what is normal and what is not. It is also very useful during manipulations. For example, if one colony is queen-less, a frame of eggs can be taken from the queen-right colony and added to the queen-less colony. This will give the bees a chance to raise their own queen and hopefully save the colony.

### What are the different parts of the hive for?

Generally, hives are made up from the same components. This excludes the Warré, Layens and Top bar hives which are slightly different.

**Stand:** This keeps the hive off the ground and away from any pests that may be able to enter the hive. It also keeps the hive off damp grass which can cause bees serious problems.

**Floor:** This can be open mesh or solid. Solid floors are the traditional option and are still popular. However, since the arrival of varroa into the UK in 1992, open mesh floors have provided an easy way to monitor the level of infestation. This comes with a removable correx insert underneath the mesh onto which dead or dying Varroa drop. They can then be counted and disposed of.

**Entrance block:** This comes as part of the floor but you may not want it in all year round. While the hive is busy and strong, you can leave it out. Once wasps appear, you will need to put the entrance block in to reduce the entrance down to a size the bees can easily defend. It will also cut out draughts if it is windy.

**Brood body:** This is where the queen lays her eggs and is therefore where all the brood is reared. It is where eggs turn into larvae, then pupate and emerge as adults. The brood is normally towards the middle of the hive with frames of honey towards the outside. A healthy frame of brood should have a rugby ball shaped brood pattern surrounded by cells filled with pollen and honey.

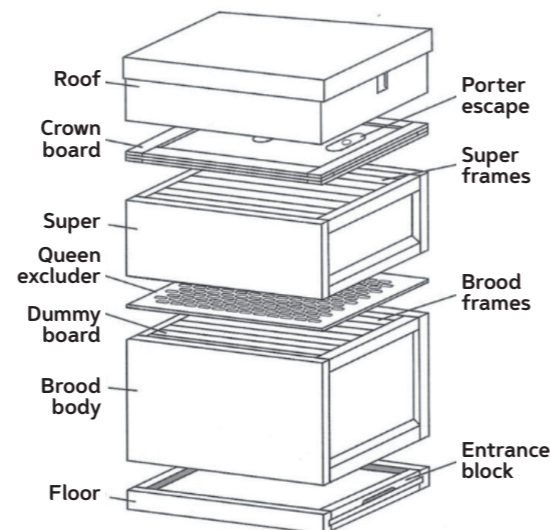
**Queen excluder:** This stops the queen from traveling around the hive and laying her eggs in the supers. The last thing you want when going to remove supers full of honey is to take them off and realise the queen has been in there and instead of honey, you have eggs and larvae!

**Super:** This is shallower than the brood body, which means the super frames are also shallower than the brood frames. Bees like to keep their stores above the brood so this is where they put their honey and why we put supers above the brood boxes. When ripe and/or capped, the supers can be taken off and the honey can be extracted from the frames.

**Crownboard:** This is a piece of wood with holes in, which is normally placed on top of the supers or brood box (in the winter). It provides cover for the inside frames. It can also be used when feeding the colony. The feeder is placed over one of the holes and the bees will come up to feed from it. Porter bee escapes will also fit in the holes if you are looking to clear the bees from the supers and will allow bees to go down into the hive but will not let them back up.

**Roof:** This comes with a galvanised metal or copper cover and protects the hive from adverse weather.

### National hive parts



## Looking after bees



### Do I need lots of time to look after bees properly?

No. During the active season, which is normally from about April to September, you will need to inspect the hive about once a week. During this time, activities may include swarm control, feeding and treating for Varroa. In the winter, the main job is to make sure they have enough food. This can be done by hefting the hive every two to three weeks to see how heavy it is, which avoids having to go into the hive during cold weather.

### Do bees need feeding?

This depends on the forage available to your bees at different times of the year. If there is plenty, you may not need to feed them at all. However, most beekeepers will find that during certain times of the year forage is light and the bees may need supplementing.

In the spring, if you need to encourage colony growth, you should apply a thin sugar syrup. This can be given via a rapid, contact or frame feeder. You may also want to feed a pollen substitute such as Nektapoll to stimulate the queen to lay. During summer, you may experience the June Gap where there is very little to forage on and you need to feed the bees. Feed syrup, but be careful not to spill it as this may encourage robbing from other bees and wasps. In autumn, to feed any hives that are light, use a thick sugar syrup.



During winter, you should heft the hives every two or three weeks. If they feel light, put on some fondant to keep them going into spring. This may be placed on top of the brood frames or above the crownboard with an eke.

### Will I get stung?

You can't call yourself a beekeeper until you have been stung, so yes! Treat the bees gently, do not wear strong perfume or aftershave and do not look in the hive if the weather conditions are stormy i.e. overcast, rainy or windy. This way you can keep stings to a minimum. If you do get stung, the most popular methods for reducing the red, itchy and swollen symptoms are to take an antihistamine and ibuprofen as well as applying ice.

Some people are allergic to bee stings or can suffer from anaphylactic shock. If in doubt, get medical help.

## Siting a hive



### Do I need a big garden?

No. Beehives can be found on numerous roofs and balconies in cities. With the parks and small-town gardens packed with plants, there is excellent forage for bees in built up areas. If you have a large garden, then great!

However, if you do have a small garden, considerations must be made to minimise any impact the bees may have on neighbours. Place your hives facing a fence or climbing plant to force bees upwards before they fly off. This means people will not be in the flight path and therefore will be less likely to be stung. Keep friendly bees and manage them properly so that any swarm activity is kept to a minimum. And of course, keep neighbours stocked up with plenty of honey!

### How should I set up the hive?

Ideally, it should be set up facing either south-east, south or south-west on level ground. If you have more than one hive, it is easier during inspections to have all hives facing the same way because you do not end up stood in the way of the entrance to one hive while you are inspecting another. That said, to minimise the impacts of drifting and robbing, many beekeepers organise their apiaries so that their hives face in different directions. In this case, ensure that all hives get plenty of sunlight and that they are spaced out sufficiently for easy inspections.



## Health



### **Do bees suffer from pests and diseases?**

Like all pets and livestock, bees come with their own pests and diseases which the beekeeper should look out for. The most common and serious of all pests is the varroa mite, which you may need to treat for twice a year. Other pests include wax moth, which can be treated for using a biological larvicide and wasps which can be kept at bay using deterrent methods such as entrance blocks. Woodpeckers may also be a problem as they can bore holes into the sides of wooden hives if not protected.

Currently, a pest on high alert in the UK is the Asian Hornet. This non-native invasive pest has been found several times in the UK and poses a threat to our honey bee population. If you find one of these pests, contact the National Bee Unit who will verify the insect and carry out their contingency plans from there.

By maintaining strong, healthy colonies headed by young, prolific queens, your bees will stave off most diseases. It is also important to make sure the hives are positioned towards the sun, have plenty of ventilation and that they do not get damp. Old combs should be replaced with fresh foundation every couple of years. This is because old comb can harbour pathogens which can cause a variety of brood and adult bee diseases.

### **So, varroa is the most serious pest of the honey bee. What exactly is it?**

*Varroa destructor* is a mite that is more closely related to spiders and ticks than to insects. It is an external parasite of the honey bee and multiplies rapidly within the colony. Although small, they are visible with the naked eye. Varroa cannot be completely eradicated but successful colonies can be kept despite the presence of the mite. Levels of infestation can be monitored and controlled by use of appropriate methods to keep mite numbers below levels that are harmful.

Varroa reproduce very rapidly in the capped cells of honey bees and feed off the haemolymph of developing bees. This not only damages their development into adults but the mite also acts as a vector for viruses such as the Deformed Wing Virus. Bees usually live long enough to emerge as adults but suffer from a variety of ailments including shorter lifespan, reduced weight, shrunken and deformed wings and reduced natural resistance to infections. Varroa infestations can lead to the collapse of a colony if left untreated.

### **Can I get rid of varroa?**

Not entirely and not for long. Varroa levels are something you will have to monitor throughout the year. There are a variety of treatments available to reduce the number of varroa mites in your hives. Thymol based treatments include Apiguard and Api Life Var and Oxalic acid-based treatments include Oxybee, Api-Bioxal and Varromed. Other treatments we supply are Apivar, MAQS and Apistan. More details on how and when to use these individual treatments can be found in the Health and Maintenance section of the catalogue and on the FAQ section of our website.

## Honey



### **How do I get the honey out of the hive and into jars?**

Firstly, you need to get the bees out of the super which is full of honey – there are quite a few ways to do this. The most common way is to use two bee escapes (a one-way valve) in a crownboard. The bees can go down but cannot come back up into the super. Then you will need to remove the super and take it to a bee tight clean room. Carefully remove the wax cappings using an uncapping knife or fork. Then put the frames into an extractor (you can usually borrow one for the first year) and spin out the honey. Strain it using a good quality filter into a tank with a valve and leave it to settle. Once settled, pour out into your jars and label them.

### **Can I sell honey?**

Yes. Put up a sign at your front gate or take some jars to work with you. There is a big demand for local honey. Many people say that local honey helps with hay fever as it contains a small amount of local pollen. All honey that is to be sold needs labelling. There are a few regulations regarding information you must have on your labels which you can find online under Labelling of Honey from the Trading Standards.

