

KEEPING BEES AND MAKING HONEY

ALISON BENJAMIN AND
BRIAN MCCALLUM





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BRIAN MCCALLUM**

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Editorial Manager: Emily Pitcher
Senior Designer: Sarah Clark
Project Editor: Caroline Taggart
Photographer: Marie O'Hara
Picture Researcher: Liz Eddison
Illustrations: Lizzie Harper
Production Controller: Kelly Smith

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Introduction

People are always surprised when we tell them we keep bees in our small city back yard. Is the reason for their incredulity the fact that beekeeping is a hobby associated with large country gardens and pastoral scenes? Our urban friends tend to think of a beekeeper as a middle-aged man sporting a beard and brown sandals. While the stereotype does exist, beekeeping is fast becoming a more popular pastime for younger people of both genders in towns and cities. It may be impractical for most of us to live the rural idyll, and indeed many of us would not want to, yet keeping bees can bring a little of the countryside into any garden.

At a time when a generation brought up on computers has less exposure to the outdoors – a condition dubbed ‘nature-deficit disorder’ – bees can also bring us closer to the world of flowers and trees whose nectar is the source of their honey.

Bees are fascinating, industrious creatures. They live together in a complex community and are incalculably important to the cycle of life, pollinating a large percentage of the crops we eat. When people ask – as they invariably do – what made us decide to keep bees, one of the main reasons is that we wanted to help the environment by providing a home for nature’s master pollinator.

The growth of interest in beekeeping means there are many suppliers selling hives and equipment that make the hobby safe, easy and, with ready assembled components and a variety of labour-saving devices, far less

time-consuming than it used to be. It is no longer the preserve of those with lots of time on their hands – even a high-flying city executive can keep bees nowadays. Like cats, bees do their own thing and require only occasional attention. The busiest time of the year is early summer, when you’ll need to add extensions to the hive to give the queen bee enough room to lay her eggs and the workers sufficient space to store their honey. But even then, they will only take up a few hours of your week. In the winter, you need do nothing except occasionally check that the hive hasn’t fallen over and the bees’ honey stores haven’t become seriously depleted – and preparing for the year ahead is also a good idea.

Most beginners find that it is worth joining a local beekeeping association, where they can pick up tips from experienced beekeepers keen to share their knowledge. But a word of warning: there is a saying that if you get three beekeepers together you will get four opinions on how best to manage your colony, and this is not far from the truth. The art of beekeeping is constantly evolving and beekeepers continue to invent their own ways of managing their colonies. Therefore there is no definitive guide on how to keep bees.

The goal of many beekeepers is to get as much honey as possible from their bees and they measure their success based on the quantity harvested at the end of the season. This, however, is not our goal, nor is it the purpose of this book. What we hope to do is introduce you to the basic principles of

modern beekeeping and enjoying the fruits of the bees’ labour. As well as honey, bees produce wax, which for centuries has been highly prized in candles, polish and cosmetics. With a little practice you will be able to make your own candles, furniture polish and even hand and body lotions.

Beekeeping is endlessly fascinating, from the variety of honey the bees produce – no two harvests ever seem to taste the same, even from the same hive – to the different behaviour displayed by different colonies. You may find that before long what started as a passing interest becomes something of an obsession. And, as with anything else, the more deeply you delve into it the more complicated it becomes.

However, another saying among the beekeeping fraternity is that bees don’t read books and there are many instances of bees behaving in ways that surprise even the most experienced apiarists. So don’t be concerned if your bees do something unexpected. We can only assume that they know best – after all, they have been looking after themselves for millennia without any help from us.

Above all, this book aims to illustrate the huge enjoyment you will derive from having one of nature’s most wondrous creatures residing in your garden. We really hope it will whet your appetite for beekeeping and encourage and inspire you to bring bees into your life, wherever you live.

Alison Benjamin and Brian McCallum



Understanding bees

The bee is one of nature's wonders. As well as being its most effective pollinator, honey bees produce delicious and healthy food that humans have been eating for centuries. While they can't be tamed, they can be given shelter and protection from the rain and cold. In return for providing them with a home, we can find out about the intricate workings of a colony, discover the joyful art of beekeeping and enjoy some of the bee's sweet-tasting food stores. In addition, a hive is an attractive feature in any garden or outside space.



History

Honey bees and humans

Humans have revered bees for centuries. Not only did they supply us with one of the first natural sweeteners, versatile medicines and precious commodities, but the workings of the hive and its residents' industrious behaviour have provided endless fascination as well as countless lessons. Political theorists have based numerous models of society on bee colonies, businessmen have drawn inspiration from their division of labour to develop management practices and the construction of their hexagonal honeycomb home has taught architects about the principles of design.

We know that beekeeping had begun by 30BC, because the Roman poet Virgil included a practical treatise on the art in his *Georgics*, in which he vividly describes the workings of a hive:

*Aware that winter is coming, they use the summer days
For work, and put their winnings into a common pool.
Some are employed in getting food, and by fixed agreement
Work on the fields; some stay within their fenced abode,
With tear of daffodil and gummy resin of tree-bark
Laying their first foundation of the honeycomb, then hanging
The stickfast wax: others bring up the young bees, the hope
Of their people: others press
The pure honey and cram the cells with that crystal nectar.
Some allotted the duty of sentry-go at the gates...
Relieve incoming bees of their burden, or closing ranks
Shoo the drones – that work-shy gang – away from the bee-folds.
The work goes on like wildfire, the honey smells of thyme.*

No wonder Virgil describes the hive as a 'tiny republic'. No wonder, also, that throughout history, from Aristotle and Plato to Erasmus and Marx, the bee colony has been held up in support of wildly different forms of society, from absolute monarchy to republicanism and socialist utopia.

The bees' relentless toil has been proffered as an example for humans to emulate throughout the ages. The expressions 'hive of

activity' and 'busy bee' have entered the English language, while the name of the non-working male, referred to as the 'lazy yawning drone' by Shakespeare in *Henry V*, is now used to describe a slothful individual. It is no coincidence that in the books of PG Wodehouse the Mayfair establishment where fashionable young men waste their days is called the Drones Club.

Right A 15th-century portrait of Virgil (70–19BC) writing the 'Life of Bees' from *The Georgics*.



The worker bee's industriousness was also embraced by the early colonizers of North America, who brought the honey bee with them from Europe. While peace has its olive branch, industry has its beehive, and US companies were quick to choose the bee and its home for their logos. The midwest state of Utah, whose motto is industry, is known as the Beehive State.

Despite their heavy workload and their chastity – save for the queen and a few drones – bees have also been closely associated with love and sex. Golden, dripping honey has symbolized the deliciousness sweetness of both love and lust since biblical times: the Old Testament *Song of Songs* contains the lines

*Thy lips, O my bride as the honeycomb
Honey and milk are under thy tongue.*

And the expression 'the birds and the bees' is still a euphemism for the mechanics of sexual reproduction.

For centuries, however, we got the gender of the big bee in the hive wrong. Just as it was assumed that human rulers had to be male, so the same prejudice was applied to the beehive: 'They have a king,' wrote Shakespeare in *Henry V*. It wasn't until English bee expert Charles Butler published his famous thesis, *The Feminine Monarchy*, in 1623, that the hive was conceived of as a matriarchal kingdom. Butler's ideas were confirmed a century later by Dutch scientist Jan Swammerdam in his *Book of Nature*.

For as long as humans have been studying bees we have also been utilizing the products of their labour. As much as 3,500 years ago the ancient Egyptians were making beeswax candles to provide artificial light. In the 12th century candlemaking became a profession practised by wax chandlers and there is still a

Worshipful Company of Wax Chandlers in the City of London. Their main customer was the church; wherever Christianity spread in Europe, so did beekeeping and candlemaking. It is said that in Britain beekeeping never recovered after the Reformation which destroyed the monasteries, as monks and nuns were among the most enthusiastic apiarists. The bee then became associated with the Catholic church and from the 17th century was an official symbol of papacy. Not until 1900 were Catholic churches allowed to use non-beeswax candles.

Honey, beeswax and mead also had close ties with monarchs and landowners, who would accept them as payment of taxes and tithes. The practice stretches all the way from the ancient Aztec rulers of Mexico to feudal Welsh kings. The Greeks minted coins with bees on them and taxes were later demanded on bee products. In 16th-century France,

beekeepers destroyed their hives rather than pay higher taxes.

In Greece and Egypt early hives were made of pottery and shaped like giant thimbles. The Romans used hives made from all manner of things – logs, bricks and even dung. In Europe, from the Middle Ages, wicker skeps were the predominant type. As they would rot if exposed to bad weather, special holes were made in walls in Britain and Ireland to shelter them. These 'bee boles' can still be seen in grand 17th- and 18th-century country houses, such as Packwood House in Warwickshire. It was not until the invention of movable frame hives around the mid-1800s that modern beekeeping began.

Below A 19th-century engraving entitled a 'study of different bees'.

