

Getting Started in Beekeeping

by Colin Goodwin, September 2019

Introduction

When people take up driving cars, they generally learn to drive before buying a car. When people take up riding horses, they generally learn to ride and care for horses before buying a horse.

Yet for some reason, many assume that beekeeping is so simple a pursuit that they can buy a hive (with or without bees) and “learn as you go”.

The result for these potential beekeepers is frequently confusion (as they try to relate what’s actually happening in their hive with books and video’s), frustration (with bees absconding or dying), and waste (of their time and money).

If you want to get started in beekeeping, actually getting a hive is something that you should work up to over a year or two.

Here’s a programme designed to make you a successful and confident beekeeper.

Year Zero - Learn the Basics

In cartoons and children’s story books bees are presented as cute fuzzy critters that are dedicated to making honey for humans, while Queen bees issue orders and run the hive. Well none of that’s true!

Here’s how you can learn about real bees.

- 1) Take a Beginner’s Beekeeping Course (with hands-on bees)

Most beekeeping clubs and suppliers run Beginner’s Courses in Spring. They will give you a basic understanding of bee biology, and beekeeping practices, and the chance to open a beehive and handle real live bees. The courses are cheap, and they provide the necessary protective gear and tools.

- 2) Join your local beekeepers club and actually participate in meetings

Beekeeping clubs take their role in educating “newbies” very seriously. They are quite affordable, and very welcoming. Go along to every meeting and ask questions. Your understanding of bees and beekeeping will grow rapidly.

- 3) Read a few good modern Australian textbooks on beekeeping (see **References**)

Public libraries and beekeeping club libraries carry a large range of books on beekeeping. Be aware that beekeeping has advanced over the decades, so a recently published textbook will provide more accurate information than older texts. Note that the absence of the Varroa Mite in Australia means that - for the time being - Australian beekeeping practices are a bit different from US and European practices.

- 4) Download and read the Victorian “Apiary Code of Practice”, the “Livestock Control, Act” and the “Australian Honey Bee Industry Bio-Security Code of Practice”. Check with your Shire for Local Government regulations (e.g. maximum number of hives).

As with all forms of animal husbandry, when you own hives you become legally responsible for the wellbeing of your stock (the bees), and the safety of your neighbours. These documents identify your legal responsibilities.

- 5) Purchase protective equipment (suit/jacket, gloves, gaiters) and tools (hive tool, brush, smoker)

Ask other club members where they got their gear, and what they would recommend.

When starting out it's a good idea to buy your bee suit from a shop where you can try it on. Sizes vary enormously! You want loose, but not baggy, so that movement is not restricted. (Don't expect to look sexy or cool in a bee suit!)

- 6) To gain experience arrange to help other more advanced beekeepers, or find a mentor through your club.

Ask around at the Club to see if an experienced member will let you help them. Even better if the club has a formal mentor programme.

Every time you visit another beekeeper's apiary, wash your suit and sterilise your tools afterwards.

You will learn that hive boxes are heavy, and that beekeeping can be hot sweaty work.

Be warned - you will get stung! It will hurt!

(Note: A tiny percentage of the population (1-2%) are truly allergic to bee stings, and risk dangerous Anaphalactic shock and even death when stung. They will need emergency treatment with adrenalin (via an epi-pen). They should not take up beekeeping!)

- 7) Make a decision - Do I really want to be a beekeeper?

By now, you will either have found that beekeeping is a fascinating and rewarding activity .. or frightening and uncomfortable.

You will have learned that a honey harvest is not guaranteed every year.

You will have learned that beekeeping is a highly seasonal activity. In particular you need to be around to manage your bees in Spring and early Summer.

You know to check weather forecasts and plan ahead for the best days to open your hives. (Calm warm days are best.) This can be hard to do when also scheduling a weekday job and children's weekend activities.

Good beekeepers are calm, organised and methodical. Does this sound like you?

You haven't spent much money yet, so if beekeeping is not for you can still walk away.

Year One - Using what you Learned

Still interested in bees?? Since you are now more knowledgeable and experienced, and probably more confident, here's a plan to actually get your own hives.

- 1) In Summer/Autumn select the site/s for your apiary/apiaries, erect hive stands

Recreational beekeepers will have a modest number of hives (1-5) kept at an easily accessible location. Close to home (but several metres away from the house or paths) so that you can easily monitor the hives is ideal.

Some beekeepers will have a deal with a friend or family member to have a small apiary away from the home apiary. (At least 5km distant). This extra apiary can be used occasionally for quarantining swarms or handling splits.

Beehives should be placed so that they are protected from the predominant winds and rain and receive good morning sun while being shaded from hot afternoon sun in Summer.

Beehives MUST be level (so that comb is built vertically), with entrances at least 150 mm / 6 inches above ground level. Wooden stands, concrete blocks or old bricks can all be used.

- 2) In Winter, arrange to purchase a nucleus colony (a "nuc") or a complete hive. They will be ready to collect in Spring.

Decide what type of hive is for you - Langstroth (commercial type) hives? Warre? Top Bar? This decision will determine who you can source "nucs" or hives from.

Source your nucs or hives through your club. They will attempt to establish appropriate guidelines around the quality of hive gear, disease and pest free hives, etc..

Having two hives is better than one - even though they cost twice as much. With one hive, you have no reference as to whether a hive is thriving or declining. With two hives you can compare them, and if necessary use a strong hive to assist a weaker hive.

- 3) Purchase (and if necessary assemble and paint) new boxes, bases, roofs.

Again, ask other club members where they sourced their boxes, and whether they are happy with them. Good quality boxes, wax-dipped and painted, will last many years exposed to the elements. Don't be stingy!

Old used boxes may be offered to you, but unless they have been irradiated recently you risk importing pests and disease into your apiary.

Woodworkers are advised to use bought boxes initially. Once you actually have some beekeeping experience then you can bang away making novel hives and "improvements".

- 4) Assemble frames, foundation, etc., or buy frames pre-wired and with foundation

It's faster and more accurate to use a jig to assemble frames straight and true.

Similarly wiring frames and inserting foundation (wax sheets) is best done with a jig.

Be warned - only buy good quality Australian beeswax foundation from a local supplier you trust. Imported foundation is very often contaminated with chemicals and is often paraffin wax rather than beeswax.

5) Register yourself as a beekeeper and mark your boxes

State law requires that if you have hives you register as a beekeeper. So go online and register. You will be assigned a 4 digit ID code, which you MUST paint or brand onto all your hives.

Online registering of 5 hives or fewer is free.

6) Prepare for dealing with diseases and pests by purchasing test kits and pest traps.

You may be a diligent beekeeper, but bees can and do move between hives carrying disease and pests with them. You will experience diseased hives and pests.

Purchase test kits for AFB and EFB so that you have them handy when you need them.

Purchase SHB traps and insert them into your hives in Spring.

Your club will probably provide talks on using test kits and SHB traps periodically. Otherwise ask your mentor or experienced members how to use them.

7) In Spring, collect the nuc colony/ hives/ bees and transfer into your new boxes.

When you have collected your nucs / hives set them up immediately on the stands in your apiary, and let them settle in for a few days.

For Langstroth nucs, place a new hive box alongside the nuc, and transfer the frames from the nuc to the new box. Fill the space with new frames equipped with foundation.

For Top Bar Hives or Warre Hives if you are using package bees or a swarm be prepared to feed the bees syrup for the first few weeks, until they have built comb and egg-laying has commenced. (And hope like mad that the bees don't abscond!)

8) Monitor your hive/s, query your mentor and other beekeepers

This is the time to visit the bees regularly and monitor their behaviour.

Resist the urge to open the hive frequently as this will disrupt the bees activities. But do inspect every month or two to check for good brood patterns and pests.

Work with a friend or "beekeeper buddy" from your club. Hive boxes are very heavy. Having a co-worker is safer and a lot more fun. And be sure to help them in turn.

Don't expect a honey harvest in the hive's first year. (You may get lucky .. but then again!) Always leave several frames of capped honey for the bees.

9) Ensure you can identify common diseases and pests (perhaps with advice from your mentor)

Over time you will begin to recognise what is "normal" in a hive; which then means you are more likely to see when things are not "normal".

10) In Autumn inspect for hive strength and resources; pack down for winter

If your Autumn inspection shows poor brood production, or if the bees from a particular hive are very aggressive, then order a replacement queen and re-queen the hive before Winter.

If the bees have not collected adequate honey stores, or if you were greedy and stole too much, you may need to feed your bees heavy syrup or white sugar to allow them the chance to boost their reserves for the winter. Don't wait for Winter to do this!

Year Two, Three, etc. - Keep Learning

So after a full year working with bees, you figure you're an expert huh! You ain't seen nothing yet!

- 1) In your second year you are likely to have one or more hives swarm.

Reducing the likelihood of bees swarming is desirable, but will never be totally successful. Learning how to catch and hive swarms is part of beekeeping, and a valuable service you can provide to your community. Most clubs will review swarm catching before the main swarm period in Spring and early Summer.

- 2) More hives? Mobile or sedentary beekeeping?

Many beekeepers take advantage of swarms (and splits of strong hives) to grow the number of hives in their apiaries. This increases their honey and wax production but also means more time and money invested in beekeeping. Consider how much honey and beekeeping is enough for you and your circumstances!

It's unwise to have more than a few hives in a single apiary. Some beekeepers with tens of hives move them from season to season across several apiary sites. Commercial beekeepers with hundreds of hives move them from "flow" to "flow" across the entire State.

- 3) Learn more about processing honey and wax.

Your club will probably have annual competitions where members show their bee-products (honey, comb honey, wax, mead, ...). Join in! Beginners can get lucky and win!

- 4) Help others in order to continue your education in beekeeping ... forever!

Bees and beekeeping can be a wonderful hobby, a modest business, or a career. Enjoy!

... and be sure to repay all the help and guidance that was given to you, by contributing to your club, and by helping others as a mentor and beekeeping speaker.

Conclusion

Is it expensive? Not compared to many other hobbies and activities. (See **Appendix: How much does it Cost?**)

People are attracted to beekeeping for all sorts of different reasons. But they tend to stay as beekeepers because

- they find that bees are fascinating and being a beekeeper provides opportunities to learn and experience more about them;
- beekeepers themselves are generally a helpful pleasant mob;
- and having a little honey and wax to share with family and friends is also nice.

Welcome to beekeeping!

References

General Beekeeping

“The Australian Beekeeping Manual”, Robert Owen

- Excellent book on general beekeeping in Australia. Highly recommended!

“A Beekeeper’s Year”, Janet Luke

- Very readable book on NZ practices, including dealing with Varroa.

“Natural Beekeeping with the Warre Hive”, David Heaf

- A good introduction to Natural Beekeeping philosophy, as well as the mechanics of building and using Warre hives.

“The Honey Factory”, Jurgen Tautz & Diedrich Steen

- An easy introduction to the more scientific study of bees.

“Do you keep bees or are you interested in keeping bees?”, Agriculture Victoria

- A summary of Victorian and Australian Beekeeping regulations

http://agriculture.vic.gov.au/_data/assets/pdf_file/0015/323106/Bee-field-day-Flyer_final_V2.pdf

Appendix: What does it cost?

Note: approximate prices Sep 2019, not including freight

<i>Category</i>	<i>Item</i>	<i>Unit Price</i>	<i>Number</i>	<i>Total Price</i>
<i>Personal Protective Equipment</i>				
	Full Suit (thick cotton)	\$150.00	1	\$150.00
	Jacket (thick cotton)	\$120.00		\$0.00
	Gauntlets/Gloves (pair, leather)	\$35.00	1	\$35.00
	Gaiters (pair, canvas)	\$25.00	1	\$25.00
			subtotal =	\$210.00
<i>Tools</i>				
	Hive Tool (stainless steel, J tool)	\$15.00	1	\$15.00
	Brush (wood+horsehair)	\$15.00	1	\$15.00
	Test kits (AFB, EFB)	\$25.00	2	\$50.00
			subtotal =	\$80.00
<i>Langstroth Hive (8 frame)</i>				
	Full depth (Brood) Box (wax dipped & painted)	\$55.00	1	\$55.00
	Frames Full Depth (wired + foundation)	\$9.00	3	\$27.00
	Ideal Super (Honey) Box (wax dipped & painted)	\$50.00	1	\$50.00
	Frames Ideal (wired + foundation)	\$9.00	8	\$72.00
	Roof/Lid (wax dipped & painted)	\$45.00	1	\$45.00
	Base/Bottom Board (wood + ss mesh)	\$45.00	1	\$45.00
	Cover Mat (vinyl ofcut)	\$2.00	1	\$2.00
	Queen Excluder (metal)	\$16.00	1	\$16.00
	Strap + Emlock (metal)	\$9.00	1	\$9.00
	Beetle Trap (plastic)	\$6.00	1	\$6.00
			subtotal =	\$327.00
<i>Stand</i>				
	Concrete Base	\$25.00	1	\$25.00
	Besser (Concrete) Blocks	\$5.00	2	\$10.00
			subtotal =	\$35.00
<i>Nucleus Hive</i>				
	Nuc (corflute, 5 frames wired+ foundation)	\$250.00	1	\$250.00
			subtotal =	\$250.00
			total =	\$902.00