# Hobby Beekeeping

## Getting started

Join a beekeeping association or club, or working with a local apiarist. Requirement for hives in Gold Coast City Council area.

## Protective clothing

Wear protective clothing that is smooth and light-coloured as bees react unfavourably to dark or woolly material.

Beekeeper's hat. The hat should be firm and strong to support the veil. Ventilated helmets are ideal for the hot months of the year. Avoid dark felt hats.

Beekeeper's veil. Folding wire veils fitted to a hat keep their shape and provide a reasonable distance between the beekeeper's face and the bees. Black cotton veils are cheaper than folding wire veils, but can be easily blown against the skin.

A pair of coveralls with elastic cuffs and wrist bands. The cuffs and bands may need to be inserted after buying the coveralls. Bee suits are also worth consideration because they incorporate a number of protective features. Most beekeepers wear khaki or white coveralls.

Beekeeping gloves. These need to be strong, but pliable, to allow movement of the fingers when lifting boxes and frames. Elbow length cloth sleeves attached to the gloves will prevent bees gaining access to the inside. A band of elastic should be sewn into the cloth sleeve at the elbow end to make it bee-proof. Vinyl or plastic coated gloves are frequently used.

A pair of boots that will cover the ankles. Elastic sided boots are commonly worn.

## Apiary tools

Hive tool. This tool is used to separate the boxes when opening the hive and to separate and lift the frames which hold the combs (a screw driver will do in an emergency).

Smoker. It is best to buy a smoker that has a barrel of approximately 100mm. This size smoker will provide an ideal amount of cool smoke which is used to subdue bees before opening the hive and during the time the hive is open.

## Bee hive components

To set up your first beehive you will need to purchase boxes and frames. These are usually bought 'in the flat' and need to be assembled.

There are two hive sizes in use – 'eight frame' and 'ten frame'. The eight frame hive being lighter than the 10-frame is a little more user friendly when it comes to lifting boxes of honey or relocating the hive.

You will also need:

•1 bottom board and 1 lid

•2 supers (hive boxes)

•16 frames and 16 sheets of bees wax comb foundation for an eight frame hive or 20 frames and 20 sheets of foundation for a ten frame hive.

•Water proof glue and enamel or acrylic paint

•65mm x 2.8mm galvanised nails for supers

•25mm x 1.25mm galvanised (or cement coated) nails for each end of the bottom bar of the frame

•30 mm x 1.4mm galvanised (or cement coated) nails for each end of the top bar of the frames

•1 reel of frame wire.

You may need to purchase or borrow a frame wiring board plus an electric embedder to fix the comb foundation onto the wires of the frame.

Take care when assembling the material that every joint is nailed and glued as the timber can warp easily. All supers, bottom boards and lids need to be thoroughly painted as they have to cope with all extremes of weather. Once painted the boxes need to air for some time to lose the paint smell that may irritate bees.

As the colony develops and expands, a third box with frames and foundation will be required to provide adequate space for the bees and honey storage.

Beekeeping equipment needs regular maintenance and upkeep.

#### How to obtain bees

There are three ways to obtain bees.

1. Nucleus colony

Probably the best method is to purchase a 'nucleus' colony (a small colony) from a reputable queen rearer or bee equipment supplier during September or October. It is best to place an order well in advance to ensure supply of the nucleus. Nucleus colonies come with a queen, 3-4 combs with worker bees, brood and honey.

The nucleus is transferred into your hive with added new frames, with foundation fitted, to fill the box. The nucleus will then slowly build up to a stronger colony. When it almost fully occupies the box, a second box may be added to the hive.

## 2. Honey bee swarms

Another method of obtaining bees is to collect swarms which occur in spring and early summer. Hiving a swarm of bees is simple when the swarm has settled in a convenient place not too high. Place an empty box under the swarm and a quick shake of the branch will dislodge most of the bees into the box. Use your smoker to move any remaining or returning bees from the branch. Some bees may take flight during this process. The box with the lid on may be left on the ground below the branch for a short period of time to allow any flying bees to enter the box and rejoin the swarm. Sometimes a swarm may land on a solid object like a roadside post. In this instance, the swarm can be brushed off the post into an empty box.

A box of frames with drawn combs or comb foundation is placed over the box which contains the collected bees. This allows the bees to continue to hang in a cluster for a while before they move into the box of combs or foundation. The bottom box is removed later or has frames placed inside it.

Requeening a swarm can ensure quiet bees and a strong, productive colony for the season. The term 'requeening' describes the process of replacing the old queen with a new one.

3. Purchase of hives with bees and used beekeeping equipment

Occasionally beehives and beekeeping equipment are advertised for sale. Buying these is one way of obtaining bees and beekeeping material. However, there is a risk that the colonies and previously used beekeeping material may have come from a diseased apiary. To avoid buying diseased bees and material ask the seller for a vendor's declaration. This written declaration will provide the buyer with important information about the health of the bees and/or material being offered for sale. Blank vendor declaration forms are available from Department of Primary Industries (DPI) apiary officers.

## Legal requirements for keeping bees

Honeybees like other live stock don't just look after themselves. Once the decision has been made to keep bees, the beekeeper has a legal and moral obligation to maintain the bees in a healthy state and in such a way that they do not become a nuisance to other people. The bees must be kept in accordance with the terms of the DPI and the Apiary Code of Practice 1997.

## **Registration as a beekeeper**

DPI Act requires anyone who owns one or more hives of bees to register as a beekeeper with the Department of Primary Industries. The current annual fee is \$???

A registration number is allotted to a beekeeper when registering for the first time. It is compulsory to brand (by painting or firebrand) this number on each of your hives.

For more information about registration and the DPI Control, refer to the DPI website.

## Apiary Code of Practice 1997

The prime aim of the Apiary Code of Practice is to ensure that beekeeping does not become a nuisance to people. The Code describes a number of standards for the placement and management of hives.

In brief, beekeeping activities may be conducted without a planning permit provided the activity complies with the requirements of the Code. If the requirements of the Code cannot be met, a planning permit must be obtained from the local government council before beekeeping is commenced on the property.

#### The Code requires beekeepers to:

•manage colonies to prevent or minimise swarming

- •capture swarms that have left a colony they own
- •provide water on the property where the bees are located if they don't have access to water
- •maintain colonies located in urban areas with young docile queens
- •store used hive components not housing bees in such a way that bees cannot gain entry to it
- •prevent or minimise activities of robber bees
- •observe hive density limits for properties in urban areas
- •ensure bee flight paths don't interfere with neighbouring land

•place hives greater than 3 metres from a property boundary fence. This does not apply if a bee proof barrier, not less than 2 metres high, is situated on the boundary fence line adjacent to the hives. A bee proof barrier is not required where the adjoining property to that fence is unimproved land.

#### General points for urban beekeeping

Keeping bees in urban areas requires good management skills, otherwise the bees can have a negative impact on those who live close by.

Hives are best placed in a sunny but sheltered spot.

Always position the hives so that the bees do not become troublesome to neighbours. Always comply with the Apiary Code of Practice.

Do not place hives in the front yard where bees only have to cross a low fence before mingling with a passer-by that may happen to cross the flight-path of the bees. Always remember that some people are extremely sensitive to bee venom. If a passer by receives an accidental sting, or even a bee in the hair, any beehives nearby will be blamed.

#### Water supply

Provide a good water supply for the bees in a partially shaded position where possible, and in close proximity to the hives. Never assume that the colony will satisfy its water requirements without your help. A strong colony of bees will use over a litre of water on a warm day.

Have the water supply in place before the hives are introduced to the area, otherwise the bees will become accustomed to watering where they are not wanted and it will be difficult to change their habits.

Containers of water should have floating material (corks, polystyrene foam, sticks) in the water to provide a landing platform and so reduce the risk of the bees drowning. An alternative is to provide trays of damp sand and fine gravel to provide a beach effect for the bees. The water level may be

topped up by having water slowly drip from a container situated somewhat above the tray. A boardman feeder fitted to the hive entrance may also be used to provide water. However, the feeder does require daily attention to replace water used by the bees. Bees sometimes prefer water that is slightly salty.

#### Maintain a quiet strain of bee

Aggressive colonies should be requeened with a gentle strain. However, a number of factors should be considered before deciding if a colony is aggressive by nature. Seasonal conditions and the skill level of the apiarist can affect bee behaviour and aggression. Factors include the way a hive is approached and opened, the way combs are handled, the use and quantity of smoke, the type of flora and the amount of nectar flow in progress, the type of clothing worn and the time of day. All of these factors should be considered before deciding that a colony is too aggressive and requeening is necessary.

#### Neighbourly responsibilities

Most non-beekeepers find being in the vicinity of a swirling swarm of bees a frightening experience.

Practice proven swarm control methods, but if your bees do swarm collect them quickly to prevent their establishment in your neighbour's house or tree. Some beekeepers choose to collect swarms in neighbouring properties even they though know the swarm did not issue the hives they manage.

Keep good relations by sharing a little honey over the fence from time to time. Stress the value of bee pollination in fruit and other crops.

#### Loss of Interest

Many of the critical management tasks are overlooked when a beekeeper has lost interest or no longer has the time to put into the management of the bees.

Neglected hives may become diseased and be a source of infection to colonies nearby. They may also swarm causing serious public relation implications for the beekeeper and the honey bee industry. It is far better to dispose of the hives to someone who can look after them properly.

Department of Primary Industries <u>http://www.daff.qld.gov.au/27\_124.htm</u>

Gold Coast Amateur Beekeeper Society <u>http://www.gcabs.net.au/</u>

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Community Bee Keeping Shed (in development) at <a href="https://www.facebook.com/EnidStreetCommunityGarden">https://www.facebook.com/EnidStreetCommunityGarden</a>