

Backyard beekeeping

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Plant Biosecurity and Product Integrity

Introduction

Keeping two or three hives of bees as a hobby can be an interesting and rewarding experience but NSW DPI occasionally receives complaints about bees in residential areas.

Some points need to be considered in relation to backyard beekeeping:

- legal requirements
- neighbours
- the number of hives
- water
- location in yard
- bee diseases
- when to handle your bees
- when to re-queen
- swarming

Failure to observe them will detract from the pleasure of keeping bees and may result in annoyance or potential harm to others.

Legal requirements

All beekeepers in NSW who own bee hives must be registered with NSW DPI. A small registration fee is payable every second year. Failure to register may result in a fine.



Figure 1 Correctly labelled beehives in a backyard setting

An important condition of registration is to comply with the Australian Honey Bee Industry Biosecurity Code of Practice.

On registering you will receive a registration number. All your hives must be branded with this number so that it is clearly readable.

See [Compulsory labelling of bee hives](#)

You have a responsibility for your hives and to monitor for disease. This may require a number of checks each year of the brood nest.

Beekeepers must notify NSW DPI immediately if they suspect their hive might have American foulbrood, European foulbrood, nose-mosis, small hive beetle, chalkbrood or exotic mites.

Failure to notify and/or satisfactorily control disease will result in action by NSW DPI which may result in the destruction of your hives and a heavy fine.

If someone has a reasonable grievance about you keeping bees, you can be directed to reduce or remove bee hives from a given location.

See [Biosecurity Act 2015](#)

Neighbours

Most people have been stung by a bee at some stage in their life. As a result we often have an inbuilt fear of bees. So it is understandable that problems arise with bees in residential areas.

We therefore need to approach backyard beekeeping with caution and understanding, and take measures to reduce inconvenience to others.

See [Nuisance bee complaint guidelines](#)

Number of hives

A comfortable number of colonies in an average backyard is two or three hives. This is sufficient to obtain some honey for yourself and others, and to experiment with variations in management. If you wish to keep more it is important to discuss this with nearby neighbours.

If a complaint comes to the notice of NSW DPI, the number of hives at the location will be closely examined. You may be directed to reduce or remove hives from that location.

See [Beekeeping Code of Practice for NSW](#)

Water

Bees use water to air-condition the hive. The hive is kept at a constant temperature and humidity to ensure that the brood nest does not suffer stress. On a hot day in the middle of summer a hive may collect half a litre of water or more to maintain their internal temperature.

Bees will often fly to the nearest source of water. In urban situations, bees tend to favour swimming pools and other local sources of water.

It is important to arrange a water source in your own yard and keep this replenished. Ensure bees will not drown by providing landing sites, for example rocks or sand protruding above the water. Maintain and check the water source all year round. Once bees start foraging in given area it is impossible to stop them without moving the hive out of the area.

Your bees may still collect water from several locations, but at least you have taken steps to reduce the problem.

Location in the yard

Bees require a dry, sunny position, preferably with a north-east aspect. Windy locations are not suitable for maintaining temperature and humidity in the hive.

Consider flight paths and place hives away from human traffic areas like footpaths, back doors and vegetable gardens. It may be necessary to build a screen on top of a fence to encourage bees to fly above head height.

The hive entrance should not face an exterior light as this will attract bees if kept on overnight.

Bee diseases

Bee diseases do not impact on human health.

Bee diseases can affect hives within a few kilometres in any direction from your hive.

Bee diseases are divided into adult and brood diseases. The adult disease of importance is nosema, which infests the bee's gut, considerably reducing the life of the worker bee.

Nosema is related to hive stress and is quite common in the autumn, winter and early spring. Management strategies aimed at reducing stress will lessen this problem. Shifting the bees to a warm, sunny location and reducing the space in the hive by taking off all empty supers and ensuring that the hive is full of honey will greatly assist.

In NSW, bees suffer mainly from four brood diseases: sacbrood, chalkbrood, European foulbrood (EFB) and American foulbrood (AFB).

Sacbrood is a virus, whereas EFB and AFB are bacteria, and chalkbrood is a fungus. Sacbrood is a minor problem and generally hives are not too troubled by this disease. Chalkbrood is not treatable but re-queening can assist.

EFB and AFB, on the other hand, can cause the complete demise of your hives and all the other hives within flying distance.

EFB is treatable with antibiotics and can be reduced by management strategies such as a good pollen supply, young queens and new combs in the brood nest.

AFB is controllable only by destruction of the colony and either burning or gamma

irradiation of the equipment. This control measure may seem dramatic, but if left unchecked AFB will eventually kill all hives in your apiary and all other hives within flying distance.

If you don't take care and responsibility in maintaining and regularly checking the condition of your hive, you will be frowned upon by fellow beekeepers in your area. Besides this you may be breaking the law.

See [Bee pests and diseases](#)

Handling your bees

Bees are cold blooded and their flight and activity will increase on warm sunny days as compared to cool, overcast days.

Older field bees are the more aggressive individuals in the hive. Thus it makes sense to work your hives on a sunny day, during peak activity when the more aggressive bees are occupied away from the hive. If you handle bees on overcast or cool days you will find most of the field bees at home and the hive will be a lot more aggressive.

A complication to working bees during warm days is that other people are more likely to be outside during the time bees are most active. In warm weather people like to barbecue, garden, swim and enjoy the outdoors just when you wish to work your bee hives. Again, it is most important to consider your neighbours.

When a bee hive is opened, the bees take several hours to settle down. So, in a backyard location, aim at opening hives in the late afternoon to allow the bees to settle down overnight.

Re-queening

The cost of a new queen can be quite an outlay when multiplied by the number of colonies in the apiary.

Three points need to be considered:

- the temperament of the hive
- bees' tendency to swarm
- the amount of honey the colony gathers

For hobby beekeepers the emphasis should be placed on bee temperament. Honey production and swarming tendency are more important to commercial beekeepers.

Temperament varies between strains of bees. It is important to select queens which are quiet and easy to handle for backyard beekeeping. Bees tending to sting frequently are highly undesirable in a populated area.

If your hive is not performing, or is particularly savage, it needs to be re-queened. This can be done in most areas between October and March, depending on your convenience and the availability of suitable queen bees.

Swarming

Swarming of bees is a natural occurrence. The old queen leaves the colony with half the workers, leaving behind a ripe queen cell to replace her, thus creating two colonies. Familiarise yourself with the stimuli that promote swarming and take measures to reduce it, particularly in spring time.

- re-queen regularly with a reduced swarming strain
- relieve the brood nest of full combs of honey and replace them with empty combs
- remove a nucleus colony (called artificial swarming).

Swarming is very alarming to the general public with thousands of bees on the loose. It is the prime cause of complaints against bees in urban areas.

Training

NSW DPI offers accredited training in beekeeping through [Tocal College](#).

Clubs

All beekeepers should consider joining a local beekeeping association. The associations hold regular meetings and are a great resource for knowledge as well as mutual support and encouragement.

- [Amateur Beekeepers Association](#)
- [NSW Apiarists Association](#)
- [North Shore Beekeepers' Association](#)

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