THE AUSTRALIAN HONEY BEE INDUSTRY

BIOSECURITY CODE OF PRACTICE



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The authors wish to thank the following organisations who were involved in the development of the Code of Practice























INTRODUCTION

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OBJECTIVES OF THE CODE

The Australian Honey Bee Industry Biosecurity *Code* of Practice (the *Code*) has been developed in consultation with *beekeepers* and governments to provide a clear framework for Australian *beekeepers* to engage in best-practice biosecurity.

The objectives of the Code are to:

Increase productivity in the Australian honey bee industry by improving the general level of pest and disease control by Australian beekeepers. Assist beekeepers in recognising exotic pests and diseases of bees and prepare for an exotic or emerging pest/disease response.

In the context of beekeeping, biosecurity can be defined as a set of preventive measures designed to reduce the risk of introduction and spread of pests or diseases in bees. The principles of good beekeeping biosecurity describe the actions a beekeeper should take to minimise the impact of pests and diseases on their bees and the bees of other beekeepers.

Ensure beekeepers conduct regular surveillance for the presence of exotic and endemic pests and diseases.

Assist with the management of Varroa mite in Australia.

Assist in the management of significant endemic diseases of bees, particularly American foulbrood (AFB).

Facilitate the cross-border movement of bees through adoption of a single national code for biosecurity practices.

Ensure the future viability and sustainability of the Australian honey bee industry.

The Code underpins the National Bee Biosecurity Program and is based on the principles of good biosecurity. It describes the outcomes a beekeeper needs to achieve for good pest and disease prevention and control. It is not a manual on how to keep bees; the Code tells beekeepers what they must achieve but how they achieve it will be up to the individual and will be influenced by their situation and specific state legislation. The standards set in the Code are only those things that all beekeepers should be doing to minimise the impact of pests and diseases on their own hives and those of their fellow beekeepers.

PRINCIPLES OF GOOD BIOSECURITY

The Code has been developed to incorporate fundamental biosecurity principles into the practices of all Australian beekeepers.

TRAINING AND PLANNING

All beekeepers, recreational, commercial and their employees must be appropriately trained in disease and pest prevention, identification and control. Because our understanding of honey bee pests and diseases and the tools we have available to manage them are continually evolving, regular refresher training, even for experienced beekeepers, is important to keep knowledge and practices up to date.

Beekeepers should plan ahead so that they know in advance how they will respond to a disease or pest detection. All Beekeepers should have a written biosecurity plan that is regularly updated as their situation changes.

REDUCING EXPOSURE OF BEES TO PESTS AND DISEASES

Exposure of bees to pests and diseases should be minimised. This can be achieved through maintaining strong bee colonies to prevent robbing of hives. As a fundamental biosecurity principle, hive movements should be minimised. Where possible, known pest and disease "hot spots" should be avoided.

Bees, feed and equipment should be obtained from a reliable and reputable source. Second-hand equipment should be sterilised before introduction. Introduced bees should be segregated (quarantined) and tested pre-purchase or post-arrival to ensure freedom from pests and disease. Beekeepers must not allow bees to access spilt honey.

OBSERVING BEES FOR SIGNS OF PESTS AND DISEASES

Bees, brood and hive material must be regularly inspected for evidence of pests and diseases - early detection means faster control and minimal spread. Monitor for Varroa mite at regular intervals that align with your state/territory's regulations. Monthly tests should be completed year-round in areas where Varroa is established, and brood is present. In jurisdictions where Varroa is not established, brood frames/combs should be inspected throughout spring, summer, and autumn. Regular examination and testing for American foulbrood is also essential. Detection or suspicion of any notifiable pest or disease or any unusual pest or disease in an apiary must be promptly reported to the relevant state or territory authority.

MANAGING PESTS AND DISEASES

Diseased hives are less productive than healthy, well-managed hives and are a threat to other beekeepers. All beekeepers have an obligation to ensure that their management practices do not put other beekeepers' bees at risk. Pests and diseases must be actively managed to ensure they do not spread within and between apiaries.





CONTROLLING THE SPREAD OF VARROA MITES

Varroa mites can spread:

- Naturally through drifting drones, worker bees, swarms, and absconding colonies.
- 2. Bees from mite free colonies robbing hives weakened by Varroa and bringing the pest back to their own colony.
- Human assisted movement of Varroa mite carriers. The transport and movement of hives, used beekeeping equipment, package bees and queen bees are an effective means of mite spread.

Control is achieved through regular *hive* testing and treatment once mite populations reach threshold.

UNDETECTED DISEASE IN AN APIARY

Beekeeping activities can contribute to the spread of disease among *hives* in an *apiary* through the transfer of disease on infected equipment and *hive* components. Early infections of disease are not always obvious, and *beekeeper* assisted spread can occur before a problem is apparent in the *apiary*. To limit the spread of any introduced pest or disease and make it easier to trace the source of infection, larger apiaries can be partitioned into smaller, individually identified sub-units. Introducing this barrier system limits the spread of disease and assists with tracing the source of an infection.

KEEPING ACCURATE RECORDS

Good record keeping is an important part of any business and complete records must be kept of all biosecurity-related actions and observations. *Hives* or groups of *hives* should be clearly identified, and accurate records of movements kept for traceability. Templates for record keeping are very simple and are available through most beekeeping organisations and societies or can be downloaded from beeaware.org.au.

HIVE AND EQUIPMENT MAINTENANCE

Hives must be maintained to assist bees in defending their hives from robber bees and to prevent leakage of potentially diseased honey. Equipment and vehicles should be kept clean and well maintained.

With these principles in mind, the *Code* has been written to provide a set of clear outcomes that all *beekeepers* need to achieve to raise the overall level of pest and disease management in Australian bees.

IS THE CODE COMPULSORY?

The *Code* is the industry's guiding document and is legislated to varying degrees by some states. Where the *Code* has been legislated, Part B of the *Code* is compulsory for ALL *beekeepers*. Part C is compulsory for *beekeepers* who manage 20 or more *hives*.

Beekeepers are assisted in their compliance with the Code by a team of Bee Biosecurity Officers employed through the industry-funded National Bee Biosecurity Program.

The aim of the *Code* is to positively assist in raising the overall level of pest and disease management across Australia.

MONITORING COMPLIANCE WITH THE CODE

Compliance with the *Code* is actively monitored through a combination of self-certification, and both targeted and random inspection of *beekeepers*' records by *apiary* officers. Emphasis is placed on *beekeepers* who manage 20 or more *hives*. Where the *Code* is legislated, these *beekeepers* are required to certify each year that they are in compliance with the *Code* including that they have maintained appropriate records.

In addition, the records of a sample of *beekeeper*s in each state and territory are inspected and their biosecurity practices assessed by an *apiary* officer to provide an independent appraisal of their compliance. Using the principle that "if it's not written down, it wasn't done", this inspection of records and assessment of biosecurity practices gives a high level of assurance that a *beekeeper* is complying with this *Code*. If there are any concerns with the *beekeeper*'s records, the assessment may also include physical examination of *hives*.

The Australian Honey Bee Industry Council (AHBIC) has worked with organisations that manage quality assurance (QA) for the industry to incorporate this *Code* into routine QA programs (i.e., BQUAL and BTRACE). *Beekeepers* who successfully participate in a QA program are not subjected to further assessment unless the Bee Biosecurity Officer is notified of a potential problem.

REVISION OF THE CODE

The *Code* is regularly revised to ensure it meets the needs of the honey bee industry. The most recent update includes revisions relevant to the establishment of *Varroa destructor* in some Australian states.



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Approved laboratory means a testing laboratory approved by the relevant state or territory authority for the purposes of testing honey for the presence or absence of American foulbrood spores.

Assessor means a person approved for the purpose of assessing records and/or inspecting *hives* to verify a *beekeeper's* compliance with this *Code* of Practice. This will usually be the Bee Biosecurity Officer or another authorised officer from a state or territory authority or an approved quality assurance auditor.

Beekeeper means any person who keeps bees or a person who is in control of bees or *hives*. This includes *apiary* managers.

Beekeeper Biosecurity Training and Assessment Program means a training program administered by an approved body, to assess a beekeeper's knowledge of the prevention, identification, monitoring, reporting and control of significant pests and diseases of bees.

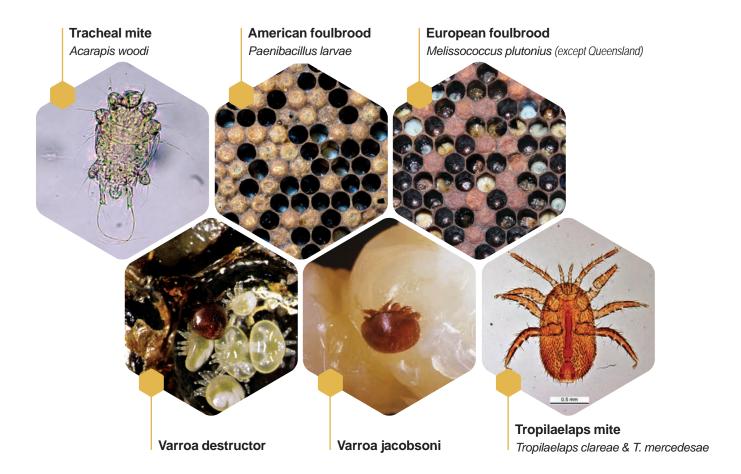
Code means the "Australian Honey Bee Industry Biosecurity Code of Practice" (Sections A, B, C and D of this document).

Foundation means material impressed with the pattern of cell bases on which bees build comb.

Hive means any receptacle, or any component of a receptacle, which houses bees, which has housed bees, or is intended to house bees. This includes swarm catch boxes specifically placed with the intention of catching swarming bees.

Hive identification code means the hive identification code, registration number or other brand allocated to the beekeeper by the relevant state or territory authority.

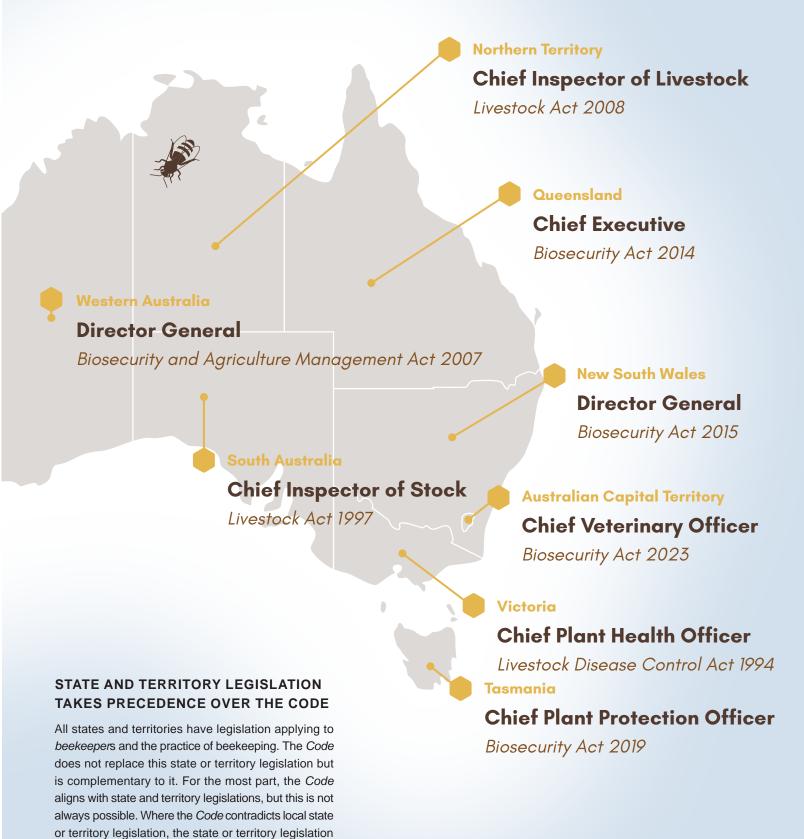
Notifiable disease means a pest, disease, agent, syndrome or substance declared as notifiable by the *relevant state or territory authority* where the bees are located. In South Australia, these are referred to as "notifiable conditions", in Queensland as "notifiable incidents". All states and territories have agreed to declare the following bee pests and diseases as notifiable:



Some states and territories have additional notifiable pests and diseases that are of significance in that state or territory (see p.10).' *Varroa mite* means *V. destructor, V. jacobsoni*, and other Varroa species that are external parasites of honey bees and their brood.

takes precedence.

Relevant state or territory authority means the person (including his or her delegate) in each Australian state or territory vested with the authority to register beekeepers and to grant approvals or exemptions in relation to this Code. They are:





INTERPRETATION OF THE CODE

The Code contains elements that a beekeeper must do and some elements that a beekeeper should do. Where "must" is used, industry has sought agreement from governments to mandate (regulate) these sections of the Code so that a beekeeper will have no discretion about complying - failure to comply with a "must" is an offence that may render the beekeeper liable to be fined or prosecuted. These are identified in the Code as a REQUIREMENT.

Where "should" is used, this is considered highly desirable or best practice, and beekeepers are strongly encouraged to comply with the element. It is not, however, mandatory and failure to comply will not be illegal. These are identified in the Code as a RECOMMENDATION.

SCOPE OF THE CODE

PART B of the Code (sections 1 – 8) applies to ALL beekeepers and specific requirements are marked in green.

PART C of the Code (sections 9 – 11) applies to beekeepers with 20 or more hives. Requirements are marked in purple.

Therefore, beekeepers who manage 20 or more hives should comply with ALL of Part B and Part C of the Code. Although Part C does not target small beekeepers, they are encouraged to adopt these requirements as best practice where appropriate.

PART D of the Code (sections 12 and 13) contains two further recommendations that are considered to be best practice. These recommendations are marked in blue. Although not a requirement, all beekeepers are strongly encouraged to adopt these two recommendations and incorporate them into their apiary management plan.





PART B: REQUIREMENTS FOR ALL BEEKEEPERS



BEEKEEPERS MUST BE REGISTERED

It is essential that there is an up-to-date register of *beekeepers* and their contact details so they can be notified quickly in the event of an emergency pest, disease or natural disaster. Up-to-date information on the number of *hives* and *beekeepers* present in each state and territory of Australia also needs to be available to inform decisions on pest/disease control and eradication.

Registration is compulsory in all Australian states and territories.

REQUIREMENT

- 1.1 All beekeepers must register with their relevant state or territory authority and pay the prescribed fee (if any) set by that authority.
- 1.2 At the time of registration, in addition to other details required by the registering authority, the beekeeper must provide an accurate count of the number of hives under the beekeeper's control.



BEEKEEPERS MUST REPORT NOTIFIABLE PESTS AND DISEASES

The requirement to report the detection or suspicion of notifiable pests and diseases exists in all states and territory legislation but it is included in the *Code* to reinforce this very important obligation. The prompt reporting of notifiable pests and diseases is essential for control and eradication. Governments also use pest and disease reporting to compile pest and disease prevalence data to support trade with interstate and overseas partners.

Individual states and territories have different reporting requirements and/or exemptions for reporting notifiable pests and diseases and all *beekeepers* must ensure that they are aware of these requirements and comply with them.

- 2.1 A beekeeper must report the detection or suspicion of any notifiable pest or disease to their relevant state or territory authority by the quickest practicable means. Verbal reports should be followed up in writing (for example, by e-mail, text message (SMS) or letter).
- **2.2** A *beekeeper* must have knowledge of the pests and diseases that are *notifiable diseases* in the state or territory where their *hive*s are located.





BEEKEEPERS MUST REGULARLY INSPECT THEIR HIVES FOR PESTS AND DISEASES

Good biosecurity is a shared responsibility between all *beekeepers* and all *beekeepers* have an obligation to take steps to minimise the risk of pest and disease spread both within their own apiaries and to other *beekeepers*' apiaries. As part of this obligation, all *beekeepers* must regularly look for pests and diseases in their *hives* in a manner that will likely detect any that are present.

The Code requires beekeepers to inspect their hives at regular intervals noting that a monthly Varroa mite test should be completed year-round in areas where Varroa is established, and brood is present. In states/territories where Varroa is not established, inspection is required in spring, summer and autumn. Inspections should check for both pests (arthropods including Varroa mites, Tropilaelaps mites, and other exotic mites) and diseases (especially American Foulbrood). Beekeepers are required to keep records of their inspections. Detection or suspicion of any notifiable pest or disease must be reported to the relevant state or territory authority as soon as possible (see Part B 2.1).



- 3.1 A beekeeper must examine each apiary under their control by visually inspecting each hive for general hive strength and for the presence of pests and diseases. Inspections must be carried out:
 - a) In a manner that will enable likely detection of any visual evidence of a pest or disease present in the *hive* and at least involving the visual inspection of the equivalent of three fulldepth frames of brood after shaking off adult bees, and
 - as often as necessary to minimise inter-hive spread of any pest or disease and/or colony death, and
 - c) in any other case at least three times every year, at a minimum of 3 consecutive calendar months apart.
- 3.2 In areas where Varroa mite is not established, inspection is required in spring, summer, and autumn. At least one hive in each apiary must be examined for the presence of arthropod pests, including Varroa and Tropilaelaps mites, using one of the following methods:
 - a) Alcohol wash
 - b) Soapy water wash
 - c) Sugar shake
 - Drone uncapping (but not suitable for determining subsequent mite treatment threshold)
- 3.3 In areas where Varroa mite is present, more frequent inspections and tests should be completed to determine whether mite loads have reached treatment thresholds.



BEEKEEPERS MUST CONTROL OR ERADICATE PESTS AND DISEASES AND MUST MANAGE WEAK HIVES

If a *beekeeper* finds a pest or disease in a *hive*, they must take appropriate steps to manage its impact on the infected *hive*(s) and to prevent its spread to other *hives*. Robber bees provide a major pathway for the spread of pests and diseases, so maintaining strong *hives* is an important preventative measure.

If the pest or disease is a *notifiable disease* it must be reported to the relevant authority and controlled and/or eradicated in accordance with state or territory legislation (see *Part B 2.1*).

American foulbrood (AFB) is the most significant bee disease already present in Australia, and it can have a devastating impact on individual apiaries. If AFB is detected, a beekeeper is required to take action to bee-proof the infected hive(s) and to destroy or sterilise the hive(s) as soon as practicable. Elimination of AFB is part of good beekeeping, and no compensation will be payable to the beekeeper for hives destroyed due to AFB infection unless an industry-funded compensation scheme is in effect in that state or territory. Because antibiotics do not kill AFB spores but may mask the symptoms of the disease, their use to control AFB is prohibited.

- 4.1 A beekeeper must take all reasonable actions required to minimise the likelihood that a pest or disease detected in their hive will either weaken the hive or be transferred to another hive including Varroa mite.
- **4.2** Any weak *hive* must be managed to ensure that it does not become attractive to robber bees.
- 4.3 Any dead hive or any hive with insufficient bees to prevent robbing by other bees must be immediately removed from the apiary and/or managed in a way that prevents robbing and renders the hive and any honey that may leak from the hive impervious to robber bees.
- 4.4 If a beekeeper identifies American foulbrood in a hive they must, after the field bees have returned to the hive, immediately isolate the affected hive and any contaminated appliances and take steps to prevent the risk of spread of disease from the hive. This includes:
 - a) Destruction of all bees in the hive, and
 - b) rendering and maintaining the hive and appliances bee-proof until they are cleaned, sterilised or destroyed as appropriate. In this context "bee-proof" means eliminating bee access to the affected appliances, hive and hive contents including honey that may leak from the hive.
- 4.5 If it is not reasonable to immediately implement the steps in 4.4 and the *hive* is not in danger of being robbed, they must be completed within seven (7) days.
- 4.6 A beekeeper must eliminate American foulbrood from an infected hive by sterilisation or destruction as soon as is reasonable but, in any case, before sale or reuse of the hive.

- 4.7 If a beekeeper elects to sterilise an infected hive it must be either:
 - Subjected to irradiation at a minimum radiation dose of 10 kiloGray, or
 - b) dipped for a minimum of 10 minutes in hot wax held at a minimum temperature of 150°C. Complete records of the process including observed temperatures of the wax at the start and end of each dipping must be maintained, or
 - c) treated by another method approved by the *relevant* state or territory authority.
- 4.8 Frames, combs and hive mats and any plastic parts must not be dipped in hot wax but must be destroyed by burning or irradiated as appropriate.
- **4.9** If *American foulbrood* cannot be eliminated through sterilisation, the *hive* must be destroyed by either:
 - a) Burning and burial of the remnants so that they are covered by at least 30 cm of soil, or
 - **b)** any other means approved by the *relevant state or territory authority*.
- 4.10 A beekeeper is not entitled to any compensation for the value of hives, appliances or equipment infected with American foulbrood and subsequently destroyed to achieve compliance with this Code unless an industry–funded compensation scheme is in place in their state or territory.
- 4.11 Appliances likely to be contaminated with American foulbrood must be scrubbed or steam cleaned to remove all traces of honey, beeswax and propolis prior to rinsing in clean water.
- **4.12** A *beekeeper* must not use any antibiotic for the purposes of controlling *American foulbrood* in *hives*.



BEEKEEPERS MUST MAINTAIN RECORDS OF BIOSECURITY-RELATED ACTIONS AND OBSERVATIONS

Good record keeping is critical to good beekeeping and good biosecurity. It provides a record of actions that were undertaken. Accurate records are essential for tracing the source of pest and disease outbreaks. It is also important that records are contemporaneous, that is, they are made at, or close to, the time that the action or observation being recorded was taken.

The records required under this section of the *Code* are the minimum all *beekeepers* must keep of biosecurity-related actions and observations. Example templates for record keeping are available at beeaware.org.au to assist *beekeepers* in compliance with this requirement.

REQUIREMENT

- **5.1** All *beekeeper*s must keep legible records of:
 - a) The dates of all apiary inspections and observations from the inspections including an assessment of the overall strength of the hives in the apiary, and any pests or diseases found in the hives.
 - b) What Varroa mite test method was used including date of test and test results as per Part B 3.2.
 - Details of all treatments and actions taken to manage any pests or diseases in the apiary.
 - d) Details of sampling method, date(s) of collection, testing laboratory and the results of all honey tests or other independent assessments for the presence of American foulbrood.
 - e) Details of movements of *hives* (including swarm catch boxes); including dates, numbers, geographic locations.
 - f) Details of introductions of any bees and used hives or hive components (with or without bees) from external sources, including the date of introduction and the supplier or source.
 - g) Details of biosecurity-related training by the beekeeper and any employees of the beekeeper.
- **5.2** Records may be paper-based or electronic.
- **5.3** Records must be retained for a minimum of 3 years.



HIVES MUST BE APPROPRIATELY CONSTRUCTED, MAINTAINED AND BRANDED

Hives (including swarm catch boxes) must be maintained in good condition to minimise the risk of disease spread. If bees can only enter and leave the *hive* through the entrance designed by the *hive* manufacturer this will assist bees in defending their *hive*s from robber bees.

To facilitate the *hive* inspection required in Part B section 3 of the *Code*, all *hive*s must have removable frames/combs. Top bar *hive*s are permitted but only if the frames/combs can be individually and separately removed from the *hive* for inspection.

This section also contains a requirement that all *hive*s must be branded in accordance with state or territory regulations.

- 6.1 A beekeeper must ensure that each hive (including swarm catch boxes) is manufactured and maintained so as to have intact external surfaces with bee access only permitted via specifically designed and manufactured access points.
- **6.2** All *hive*s must be maintained in way that allows frames/ combs to be individually and separately removed from the *hive* for easy inspection.
- 6.3 A hive placed for the purpose of catching bee swarms (a swarm catch box) must only contain foundation. Frames already drawn or that contain brood, honey or pollen are not permitted.
- **6.4** Each *hive* must be clearly and legibly marked with the *beekeeper*'s allocated *hive identification code* in accordance with relevant state or territory legislation.
- 6.5 A hive placed for the purpose of catching bee swarms (swarm catch box) that is not on the property where the beekeeper normally resides must also be identified with the beekeeper's name (or company name) and a contact telephone number, in characters at least 25 mm in height.







BEEKEEPERS MUST NOT ALLOW HIVES OR APPLIANCES TO BECOME EXPOSED OR NEGLECTED

Allowing *hives* or *appliances* to become exposed or neglected is an offence in all states and territories. Robbing of exposed or neglected *hives* is a major pathway for the spread of pests and disease and this Section is included in the *Code* to reinforce the importance of the *beekeeper*'s biosecurity obligation and the importance of properly caring for *hives*. The appropriate care of *hives* also means ensuring bees have ready access to suitable water.



- 7.1 A beekeeper must not allow a used hive, part of a used hive (including frames, combs, honey or beeswax) or an appliance containing honey to be exposed in a manner or under conditions likely to attract robber bees; including during transportation.
- **7.2** A beekeeper must not do any of the following:
 - a) Abandon a hive previously kept by the beekeeper.
 - b) neglect the management or care of a hive kept by the beekeeper to the extent that the hive is likely to become infected with disease or attract robber bees.
 - c) fail to destroy or properly dispose of any unwanted bees or part of a *hive* (including frames, combs, honey or beeswax).
- **7.3** A *beekeeper* must ensure bees under his or her care have access to water suitable to sustain the bees.
- **7.4** A *beekeeper* should manipulate the space available in a *hive*, to manage swarming activity, which can be a source of disease.



BEEKEEPERS MUST ALLOW THEIR OPERATION TO BE ASSESSED

The record keeping requirement of Part B, Section 5 of the *Code*, allows for the ease of monitoring compliance with the *Code*. All *beekeepers* are required to keep records but *beekeepers* in charge of 20 or more *hives* are required to certify their compliance with this *Code* annually through completion of Appendix 1 (see Part C, Section 11).

All beekeepers may have their records examined by the Bee Biosecurity Officer or other authorised person to verify this self-certification and beekeepers are required to cooperate with the assessment and make their records available. An examination will include a review of the beekeeper's records and may include one or more on-site visits to inspect individual hives, appliances or equipment.

These assessments will focus on *beekeepers* in charge of 20 or more *hive*s but the requirement to make records available applies to ALL *beekeepers* and smaller *beekeepers* may be inspected if a serious breach of the *Code* is suspected.

There will be no cost to the *beekeeper* for the initial assessment but if the *assessor* determines that the *beekeeper* is not in compliance with the *Code*, the *beekeeper* may be given the opportunity to rectify the failing within a specified period of time and the *beekeeper* will be responsible for any costs associated with re-inspection of the operation to verify compliance with the *Code*.





PART C: ADDITIONAL REQUIREMENTS FOR BEEKEEPERS WHO MANAGE 20 OR MORE HIVES

Part C has been amended to cover semi-commercial as well as commercial *beekeepers*, as those with 20+ *hives* are more likely to move *hives* for pollination or honey flows into areas of high bee density and out again, therefore posing a greater risk of exposure to and spread of pests and diseases to other apiaries, and it is appropriate that there is a higher level of biosecurity knowledge and of pest and disease identification and management for migratory or semi-commercial operators. Part C of the *Code* contains additional requirements for these *beekeepers*.



BEEKEEPERS MUST DEMONSTRATE A MINIMUM LEVEL OF KNOWLEDGE OF PEST AND DISEASE IDENTIFICATION AND MANAGEMENT

All people working with bees must know how to identify pests and diseases in their *hive*s and must have up-to-date knowledge on how to manage detected pests or diseases. This Section of the *Code* requires that *beekeeper*s who manage 20 or more *hive*s demonstrate that they have this knowledge by undertaking a formal assessment within 12 months of first registering and, again every 3 years. This assessment can be in the form of an on-line *Beekeeper Biosecurity Training and Assessment Program* or attendance at an approved training course on the management of bee pests and diseases.

While this Section of the *Code* is only mandatory for *beekeepers* managing 20 or more *hives*, *beekeepers* with fewer than 20 *hives* are strongly encouraged to regularly undertake training in the identification and management of bee pests and diseases. The on-line *Beekeeper Biosecurity Training and Assessment Program* provides a low-cost opportunity for *beekeepers* with a smaller number of *hives* to regularly update their knowledge.



- **9.1** This requirement applies only to *beekeepers* who manage 20 or more *hives*.
- **9.2** Within 12 months of first registering and, every 3 years afterwards, a *beekeeper* must successfully complete either:
 - a) An approved pest and disease management course, or
 - the Beekeeper Biosecurity Training and Assessment Program.
- **9.3** Subsequent to initial compliance with 9.2 above, a *beekeeper* must have completed one of the programs described in 9.2(a) or 9.2(b) above in the 3 years prior to any application for re-registration.
- **9.4** The *beekeeper* will be responsible for any costs associated with the training and assessment.



BEEKEEPERS MUST HAVE HONEY TESTED ANNUALLY FOR AMERICAN FOULBROOD

Early infections of *American foulbrood* (AFB) may be difficult to detect visually and laboratory evaluation of honey for AFB spores remains the most sensitive and accurate test for detection of the disease. Laboratory testing may also detect AFB before it has any visible impact on the *hive*.

This section requires *beekeepers* with 20 or more *hives* to have an annual, independent test of their *apiary* for the disease. This will detect disease present at low levels and will provide a snapshot of the level of AFB in different geographical areas.

The *beekeeper* is only required to have one test conducted on a pooled honey sample collected from at least 20% of their *hives*. More extensive testing, either through a laboratory or by using AFB test kits, is recommended to assist with AFB detection and control.

Control of AFB is a major burden on the honeybee industry. It is essential that all *beekeeper*s, regardless of their *hive* numbers, should monitor their *apiary* for AFB so, while this Section of the *Code* is mandated for *beekeeper*s managing 20 or more *hive*s, smaller *beekeeper*s are strongly encouraged to regularly test their *hive*s for the presence of AFB

REQUIREMENT

- **10.1** This Section applies only to *beekeepers* who manage 20 or more *hives*.
- **10.2** A *beekeeper* must have their *hive*s independently tested for the presence of *American foulbrood* at least once in every 12 consecutive months by:
 - The microbiological examination of a representative, pooled honey sample by an approved laboratory, or
 - **b)** any other method approved by the *relevant state* or *territory authority*.
- 10.3 Where a beekeeper sends honey to a honey packer, the honey sample may be collected by the packer from submitted honey containers and consigned to an approved laboratory.
- 10.4 Where a beekeeper does not send honey to a honey packer, the beekeeper must submit to an approved laboratory one or more pooled honey samples collectively containing honey from at least 20% of the total number of hives under their management, chosen at random. Samples can be collected during the routine extraction of honey.
- **10.5** The *beekeeper* will be liable for all costs of collection, transportation and testing of honey samples collected for compliance with this *Code*.



BEEKEEPERS MUST DECLARE COMPLIANCE WITH THE CODE AND PROVIDE ACCOMPANYING DOCUMENTATION

This Section details the additional information a *beekeeper* with 20 or more *hives* must provide each year to enable the assessment of their compliance with the *Code*. This includes a declaration from the *beekeeper* that their operation and management of their bees is in compliance with the *Code* including requirements, where applicable, for *hive* inspections, pest and disease management, record keeping, AFB testing and training. Making a false declaration is a serious offence and may result in a fine or prosecution. A template for declaration is provided in Appendix 1.

- **11.1** This Section only applies to *beekeepers* who manage 20 or more *hives*.
- 11.2 In addition to any other information required by the relevant state or territory authority, all applications for renewal of registration as a beekeeper managing 20 or more hives must be accompanied by an accurate declaration, in the prescribed format, certifying:
 - a) The beekeeper's status in respect to demonstration of knowledge of pest and disease management detailed in Section 9 of the Code.
 - b) The date, testing laboratory and result of the most recent independent laboratory honey test for *American foulbrood* (date must be within the past 12 months).
 - c) That the *beekeeper* management and operation is fully compliant with the *Code*.
- 11.3 In any year where the *beekeeper* is not required to re-register (because their registration extends for more than one calendar year) the information prescribed in 11.2 (a), 11.2 (b) and 11.2 (c) must be provided to the *relevant state or territory authority* on the anniversary date of the *beekeeper*'s registration.







PART D: RECOMMENDATIONS FOR ALL BEEKEEPERS



APIARY SITES SHOULD BE IDENTIFIED

The identification of *apiary* sites with clearly visible signage bearing contact details will enable the *beekeeper* to be contacted quickly in the event of a natural disaster (e.g. bushfire) or other potential threat to the bees (e.g. exotic disease incursion, pesticide spray drift). Although *hives* are identified in most jurisdictions with brands or registration numbers, this does not facilitate rapid contact with the *hive* owner. This requirement is not mandatory, but all *beekeepers* are encouraged to comply.

This does not apply to *hive*s or swarm catch boxes located on the *beekeeper*'s normal place of residence.

RECOMMENDATION

- **12.1** All occupied *apiary* sites, not on the *beekeeper*'s normal place of residence, should be identified by a clearly visible notice legibly showing the *beekeeper*'s name (or company name) and a contact telephone number in lettering no less than 25 mm high. This is in addition to any other requirements of relevant state or territory legislation.
- **12.2** Beekeepers are strongly encouraged to use the template available on the <u>Plant Health Australia website</u>.



BEEKEEPERS SHOULD MAINTAIN A BARRIER SYSTEM OF HIVE MANAGEMENT

A major method of disease transmission within or between apiaries is through the *beekeeper* transferring infected material between *hives* prior to disease symptoms being detected. A well-managed barrier system will contain potential spread to within *beekeeper*-defined units and enable the *beekeeper* to trace both the source and spread of the disease, facilitating eradication.

A barrier system is a method of dividing apiaries into smaller subunits and ensuring there is no transfer of potentially infected materials between the sub-units. *Hive*s and *hive* components in one sub-unit are not interchanged with those from another sub-unit. Of course, the larger the enterprise, the more important a barrier system becomes but how the barrier system should be implemented depends on the individual circumstances of the enterprise. Effective barrier systems require forward planning and an understanding of both the disease and the business. Good record-keeping is essential and all people working with the bees must understand how the system works.

Some *beekeepers* treat their entire *apiary* as a single unit for disease control, so the use of a barrier system is not mandatory, but it is strongly recommended for all *beekeepers*.

RECOMMENDATION

- 13.1 A beekeeper should maintain a barrier system that divides the apiary into one or more clearly identified, isolated sub-units, ensuring that the movement of hives, components and appliances between these sub-units is strictly controlled.
- **13.2** A barrier system should include the following elements:
 - Clear, permanent marking and identification of hives, components and appliances within each sub-unit.
 - **b)** Procedures (including appropriate controls), to prevent non-permitted interchange of *hives*, components and *appliances* between sub-units.
 - c) Training and instructions for all employees.
 - d) Documentation to enable the tracing and identification of *hive* components, honey and honeycomb to identifiable sub-units.
 - e) Procedures to ensure captured bee swarms and acquired used items including *hives* and appliance are not introduced to the apiary until after appropriate inspection and testing for diseases or sterilisation.

APPENDIX 1

CERTIFICATION OF COMPLIANCE WITH T	HE CODE
Date of your last successful completion of an approved Honey bee Pest and Disease Training Course or the <i>Beekeeper Biosecurity Training and Assessment Program</i> to comply with Section 9 of the <i>Code</i> ?	/ / Provider reference No. RESULT
Dates over which all <i>hive</i> s were inspected to comply with Sec. 3.1 of the <i>Code</i>	/ / to / / / / to / /
Dates over which all <i>hive</i> s were inspected to comply with Sec. 3. 2 of the <i>Code</i> Tick the method(s) used for mite examination:	/ / to / / Alcohol wash Soapy water wash Sugar shake Drone uncapping (but not suitable for determining subsequent mite treatment threshold)
Date of your last independent honey test for <i>American foulbrood</i> to comply with Sec. 10 of the <i>Code</i> .	/ / Testing laboratory Laboratory reference number RESULT Positive / Negative
During the past 12 months I have maintained management standards that are fully compliant with the Australian Honeybee Industry Biosecurity <i>Code</i> of Practice, including maintained accurate, legible, records of all biosecurity-related activities in accordance with Part B Section 5 of the <i>Code</i> .	Yes / No
I certify that the above information is true to the best of my knowledge	
Name	
Signature	
Data / /	

