

# Canadian Beekeepers' Practical Handbook to Bee Biosecurity and Food Safety

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Modern beekeeping requires beekeepers to keep track of a lot of information to meet current regulations for bee biosecurity and food safety. One of the challenges they face is sorting through extensive documents that sometimes are overwhelming and seem confusing. Two essential recent documents which all beekeepers should read are the **Honey Bee Producer Guide to the National Bee Farm-Level Biosecurity Standard** (i.e. the Bee Biosecurity Standard), and the **Canadian Bee Industry Safety Quality Traceability Producer Manual - Good Production Practices** (i.e., CBISQT). They are important resources which extensively outline biosecurity and food safety requirements for Canada's beekeeping industry. Although valuable, both are information dense and can be difficult to negotiate. They offer sample record keeping tables which can be confusing when compared to one another because of repetition, different intents under similar titles, and similar records spread over several different tables.

This handbook is a practical tool which is designed to help beekeepers manage the more theoretical information presented in the Bee Biosecurity Standard and CBISQT. It provides beekeepers with:

1. a reference source to the Bee Biosecurity Standard and CBISQT,
2. tools to help beekeepers to meet biosecurity and food safety protocols, and
3. tools to help new inexperienced beekeepers achieve required standards.

The handbook is a collection record keeping templates that are each accompanied by a general information page which lists the target user, frequency of use, reasons why the information is useful to maintain, general comments about the table and also references to the Bee Biosecurity Standard and CBISQT. These references make it easy to locate more detailed information.

Many large commercial beekeepers already maintain bio secure and food safe operations. These beekeepers may find this handbook is mainly useful as a reference guide to the biosecurity and food safety documents. They may benefit by reviewing this handbook to determine if there are any minor alterations to their record keeping practices which would help their operations. As well, the Handbook may help those operators communicate with inexperienced beekeepers and reduce potential conflict by providing them with templates of records they need to maintain.

Less experienced operators and new beekeepers will benefit from this handbook because it will help them to negotiate through the various types of records which need to be kept. All beekeepers need to run food safe and bio secure operations, no matter how many colonies are run. In particular, if there is a lapse in bee biosecurity neighbouring beekeeping operations can be impacted because bees may interact if they are within flight distance.

There are 34 stand-alone templates in this handbook. This may seem like a daunting amount of record keeping, but some of these records are used very rarely (e.g., for product recall), once a year (e.g., facility inspections), or never (e.g., beekeepers who do not have pollination contracts will not need the template concerning moving bees for pollination contracts).

These records are important for biosecurity and food safety, but also offer the additional benefit of helping beekeepers run more efficient, and thereby, profitable operations. They are an organizational tool to help beekeepers be aware of their bees' needs, know what is going on within their operation, schedule tasks effectively, communicate with staff and inspectors, as well as customers, reduce confusion and redundancy.

## **Frequently asked questions:**

### **1. What are the benefits of maintaining a high degree of food safety and bee biosecurity within every beekeeping operation no matter the size?**

- Improved recordkeeping can help to maximize profits and reduce excess expenditures.
- Reducing the spread of disease within and between beekeeping operations.
- Higher food safety
- Traceability throughout operation
- Improve communication with Provincial Apiarists, bee inspectors, extension staff, crop insurance, CFIA
- Improve communication with staff
- Help seasonal staff to maintain a consistent high level of food safety and bee biosecurity
- Understanding and implementation of biosecurity and food safety protocols
- Becoming a better beekeeper

### **2. What is the difference between this handbook and the Bee Biosecurity Standard and CBISQT documents?**

This handbook is a practical supplement to the two recent, more theoretical documents which detail current Canadian government biosecurity and food safety guidelines to beekeepers. It integrates bee biosecurity and food safety protocols which sometimes overlap. This handbook reduces the overlap and possible confusion between them.

### **3. Do beekeepers still need to read and become familiar with the Bee Biosecurity Standard and CBISQT?**

CHC recommends that all Canadian beekeepers review the Bee Biosecurity Standard and CBISQT. Greater detail on the suggested practices can be found within the original documents. Beekeeper need to understand clearly both programs.

### **4. Are the record keeping templates in this handbook voluntary?**

Yes. This guide is an adaptation of Bee Biosecurity Standard and CBISQT which are currently voluntary programs. The CHC recommends that all beekeepers, no matter the size of their operation, conform to the protocols and requirements in those documents. These templates are one way to help achieve that goal.

### **5. Are Canadian beekeepers already using many of the suggested protocols?**

Yes, there are Canadian beekeepers who already embrace many of the protocols contained within the bee biosecurity protocol and CBISQT.

### **6. How can the record keeping templates in this handbook be used?**

- Beekeepers can use these forms in whichever way best suits their needs and record keeping styles. The most important consideration is that records are kept for the important aspects of bee biosecurity and food safety (such as traceability or audits).
- The forms have been designed to be brought into the bee yard for record keeping, either paper copies or electronic devices (smart phones or tablets) with forms.
- As well, additional record keeping can easily be incorporated into these records. For example, the economics of the operation can be made more apparent by including costs of treatments, honey production, queen sales etc. for each hive or bee yard. Such information would be beneficial for preparation of business plans and operation management.
- No matter the method of record keeping, it is highly recommended to have backup copies which are stored in a separate location. Keeping electronic records could make it easy to cloud store files.

**7. Will beekeepers who follow all the record keeping in this handbook meet CFIA registration regulations?**

Beekeepers still need to review CFIA registration regulations to make sure they will meet inspectors' expectations during inspections.

**8. Are there other records which beekeepers need to maintain?**

These templates mainly deal with bee biosecurity and food safety. Other aspects of management (e.g., financial record keeping) are additional records which are needed. Some of these templates can be modified by beekeepers to include additional information if it suits beekeeper preference and record keeping style.

**9. Why doesn't this handbook have a table of contents?**

- A table of contents wasn't included to reduce the potential for embedded errors, as well because there are no page numbers. It is designed to be taken apart and for each template to serve as a standalone record.
- The first template serves the dual function keeping track of the location of biosecurity and food safety records and their backups, as well as indicating in order of presentation the templates which are included.

**10. What is the form reference #s included at the top of the templates?**

This section can be used to keep track of files through reference numbers. These numbers would be different for each operation and need to be assigned by the beekeeper.

**11. Why are there no page numbers?**

To make the handbook as flexible as possible, and reduce the number of embedded features page numbers were not included.

**12. Why are the templates not numbered?**

The templates are not numbered to make them as flexible as possible for beekeepers to modify and incorporate into their operations.

**13. Why is this handbook available in PDF, Word and Excel formats?**

- It is designed to be flexible so that beekeepers can use how they prefer. The templates can be printed and photocopied or downloaded for electronic use. Some beekeepers may find certain templates are most useful in their Excel format which has expandable cells.
- If the handbook is printed double-sided in from either PDF or Word files, each template will be printed with its accompanying information page.
- The PDF is not writable, but beekeepers can modify the Word file to suit their needs. Each template is obviously a table, but each of the information pages is also a table in which the lines have been removed. If the tables become merged when they are manipulated, split them from the last row of the top table.

| Handbook templates  |                            |                    |                           |                     |
|---|----------------------------|--------------------|---------------------------|---------------------|
|   | name of person responsible | location of record | backup location of record | last update (d/m/y) |
| General records   |                            |                    |                           |                     |
| Contact list  |                            |                    |                           |                     |
| Employee training   |                            |                    |                           |                     |
| Landowner and bee yard information  |                            |                    |                           |                     |
| Visitor log   |                            |                    |                           |                     |
| Bee records:  |                            |                    |                           |                     |
| Bee: colony assessment  |                            |                    |                           |                     |
| Bee: colony genetics  |                            |                    |                           |                     |
| Bee colony log  |                            |                    |                           |                     |
| Bee: disease log (monitoring and treatment)   |                            |                    |                           |                     |
| Bee: grafting log   |                            |                    |                           |                     |
| Bee: sales  |                            |                    |                           |                     |
| Bee yard: maintenance log   |                            |                    |                           |                     |
| Bee yard: map   |                            |                    |                           |                     |
| Bee yard: moving colonies (excluding for large pollination contracts)                           |                            |                    |                           |                     |
| Bee yard: moving colonies (large scale operator with pollination contracts)                     |                            |                    |                           |                     |
| Bee yard: off-hive disturbance record   |                            |                    |                           |                     |
| Bee equipment inspection / inventory  |                            |                    |                           |                     |
| Facility records:   |                            |                    |                           |                     |
| Facility cleaning and disinfection (facility and facility equipment)                            |                            |                    |                           |                     |
| Facility: inspection (exterior)   |                            |                    |                           |                     |
| Facility: interior inspection   |                            |                    |                           |                     |
| Facility : maintenance (facility and facility equipment)  |                            |                    |                           |                     |
| Facility: map   |                            |                    |                           |                     |
| Facility: pest control  |                            |                    |                           |                     |
| Facility: potable water   |                            |                    |                           |                     |
| Facility: waste disposal record (excluding feed and medication)                                 |                            |                    |                           |                     |
| Honey records:  |                            |                    |                           |                     |
| Honey: customer complaint   |                            |                    |                           |                     |
| Honey extraction log  |                            |                    |                           |                     |
| Honey: lab analysis and product recall report   |                            |                    |                           |                     |
| Honey: receiving bulk honey shipment from beekeepers  |                            |                    |                           |                     |
| Honey: packing log  |                            |                    |                           |                     |
| Honey: removing full honey supers for extraction  |                            |                    |                           |                     |
| Honey: sending bulk honey shipment to purchaser   |                            |                    |                           |                     |
| Inventory records:  |                            |                    |                           |                     |
| Inventory: feed/ medication - inventory and disposal record                                     |                            |                    |                           |                     |
| Inventory: packed honey   |                            |                    |                           |                     |
| Inventory: supply inventory and disposal (excluding feed, medications, hive equipment and bees) |                            |                    |                           |                     |

## Contact list

1. User:
  - all beekeepers
2. Frequency of use:
  - as required
3. Reasons for recording this information include:
  - communication
    - ease of contacting people relevant to the operating of the beekeeping operation
    - helps to ensure correct actions taken by having ready access to communication with key people
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: page 86
  - CBISQT: page 102
  - this template is an adaptation of Bee Biosecurity Standard form 9.0 (page 151)
5. General comments:
  - keep the information updated and easily accessible
  - provincial government contact information can be found in the Bee Biosecurity Standard Appendix A: Provincial contact info (page 86)
  - beekeepers may find it handy to keep a paper copy of this information in their bee truck/vehicle

Contact List

| person responsible for this record: |                              | form reference #:                 |                        |
|-------------------------------------|------------------------------|-----------------------------------|------------------------|
|                                     | name and contact information | date contact last updated (d/m/y) | additional information |
| provincial apiarist                 |                              |                                   |                        |
| extension specialist                |                              |                                   |                        |
| bee inspector                       |                              |                                   |                        |
| provincial beekeeping association   |                              |                                   |                        |
| lab services                        |                              |                                   |                        |
| suppliers                           |                              |                                   |                        |
| neighbouring beekeepers             |                              |                                   |                        |
| bee yard owners                     |                              |                                   |                        |
| customers: bees                     |                              |                                   |                        |
| customers: pollination              |                              |                                   |                        |
| transport companies                 |                              |                                   |                        |
| crop insurance                      |                              |                                   |                        |
| CFIA representative                 |                              |                                   |                        |
| R.M foreman / councillor / reeve    |                              |                                   |                        |
| federal riding representative       |                              |                                   |                        |
| provincial riding representative    |                              |                                   |                        |
| staff                               |                              |                                   |                        |



## Employee training

1. User:
  - all beekeepers (to help maintain a record of their own training small beekeepers without employees should modify this template)
2. Frequency of use:
  - as required
3. Reasons for recording this information include:
  - business management
    - this record provides accountability that the employees are trained for food safety and bee biosecurity
    - it provides valuable occupational health and safety records and documentation of staff training
    - it provides a record of what training is required (i.e., helps to assign tasks)
  - bee biosecurity
    - it verifies that staff knows correct biosecurity protocols
    - better trained employees may lead to improved biosecurity
  - food safety
    - it verifies staff knows correct food safety protocols
    - better trained employees may lead to improved food safety
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 66-68, 81-85, 121 and 123
  - CBISQT: pages 15, 24, 33, 48, 51, 78, 86, 92, 94-98 and 102
  - this template is an adaptation of Bee Biosecurity Standard form 11.0 (page 153), and CBISQT forms 11.0.1 (page 150) and 11.0.2 (page 151)
5. General comments:
  - separate sheets should be kept for each employee
  - small operators who use family and friends to assist with beekeeping should make sure that they are properly trained to ensure food safety and bee biosecurity standards are met
  - the intent in the Biosecurity Standard and CBISQT is different: the Bee Biosecurity Standard presents a record of training whereas CBISQT recommends a log which focusses on noncompliance by personnel
  - all beekeepers should also keep record of their own food safety/biosecurity training in addition to that of employees



## Landowner and bee yard information

1. User:
  - all beekeepers
2. Frequency of use:
  - update or reference as required
3. Reasons for recording this information include:
  - business management
    - provides background information to the bee yard which can be useful for assessing value of the yard to the operation
    - organized yard records may increase the saleability of the operation
  - communication
    - handy location information (e.g., land locations) make it easier to give directions to bee yard visitors (e.g., provincial apiarist, crop insurance, bee inspectors, visiting beekeepers)
    - in case of emergency, bee yard contact and location information should be readily accessible to the beekeepers staff, family and others
    - facilitates contact between neighbouring beekeepers - timely communication of disease can lead to greater profitability for all concerned (better honey production, increased winterability, fewer medication costs, less employee/beekeeper time spent treating diseased colonies)
    - ease of contact with landowners
  - bee biosecurity
    - beekeepers should contact their provincial apiarists and bee inspectors when they have questions about disease and recommended treatments
    - when there are disease and issues (e.g., treatment resistance) arise operators (in particular small or new beekeepers) should contact neighbouring beekeepers (in particular large and/or experienced beekeepers) to maintain good neighbourly relationships and high standard of bee biosecurity
  - food safety
    - bee yard descriptions and location information may help trace origins of contaminants
    - knowing the environment around a bee yard may reduce the risk of honey contamination
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 19-25 and 116
  - CBISQT: pages 9-14
  - this template is an adaptation of Bee Biosecurity Standard form 4.0 (page 142)
5. General comments:
  - keep an up to date copy in bee truck/vehicle in case need to contact yard owner immediately while in bee yard
  - neighbouring beekeepers should be contacted if bees are within flight distance
  - beekeepers should consider a yearly evaluation of their bee yard descriptions to ensure they are current and reflect the environment to which their bees are exposed
  - small and/or new beekeepers will likely need more assistance with disease problems than those with large scale operations
  - removal of disease ridden equipment is important to keep bees healthy in the bee yard as well as in other bee yards which are within flight distance
  - all hive equipment should be thoroughly inspected and inventoried at least once per year



## Visitor log

1. User:
  - all beekeepers
2. Frequency of use:
  - as required
  - under normal conditions, depends on beekeeper preference
3. Reasons for recording this information include:
  - business management
    - helps protect operations from disease between bee yards and between operations
  - bee biosecurity
    - it is part of overall management to improve bee biosecurity
    - it provides a record which can help with the traceability of disease spread
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: page 48
  - CBISQT: none
  - this template is an adaptation of Bee Biosecurity Standard form 10.0 (page 152)
5. General comments:
  - if needed, keep a copy in the bee truck(s) for visitors to sign when entering bee yards, also keep a copy by the entrance of the honeyhouse
  - all beekeepers, regardless of operation size, may at some time face quarantine conditions that will require a visitor log to be kept
  - in a non-quarantine situation, some beekeepers may choose to have all visits recorded whereas others would not see a benefit
  - during time of heightened biosecurity risk or under quarantine conditions such a record should be continuously used



## Bee: colony assessment

1. User:
  - all beekeepers
2. Frequency of use:
  - the frequency of assessment will depend on the size of the operation, beekeeper preference and their reason for doing the assessment (e.g., checking for disease, suitability for breeding)
3. Reasons for recording this information include:
  - business management
    - it helps new beekeepers should get familiar with these sorts of assessments to learn more about their bees
    - it helps beekeepers detect disease before it becomes widespread in hive, bee yard or is spread to neighbouring bee yards
    - it is a management tool to assist with scheduling hive activities (e.g., when to treat, feed, super, split, move frames, re-queen)
    - it is a tool to help reduce the amount of medication used
    - the information in the table is useful for queen selection
  - increased honey production
    - it is a tool to increase honey production by knowing what management (e.g., when to treat, feed, super, split, move frames, re-queen) is needed for each hive
  - communication
    - it can serve as a communication tool between beekeepers and staff
  - bee biosecurity
    - it helps to trace disease in colonies
    - it is part of overall management to reduce disease loads and spread through bee yards
  - food safety
    - it is part of overall management to reduce potential contaminants in honey
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 27-39
  - CBISQT: none
  - this template is an adaptation of Bee Biosecurity Standard form 2.0 (page 133-135)
5. General comments:
  - beekeepers with many colonies may need to alter this template if a random selection of hives in a bee yard is assessed rather than all colonies,
  - beekeepers may find it useful to photograph their colonies/frames if there are any questions or odd findings. Images can then be compared with those of healthy colonies/frames, and emailed to experts (e.g., provincial apiarist, extension staff, bee inspector) if there is a question about disease presence or declining colony health.
  - beekeepers may find it handy to keep a few blank paper copies of this template (or their equivalent) in their bee truck/vehicle for crews to communicate and record odd or unexpected bee behaviour
  - one reviewer suggested using colour markers (e.g., push pins) on hives to indicate queen age

Bee: colony assessment

| person responsible for this record:   |         |         |         | form reference #: |         |         |         |
|---|---------|---------|---------|-------------------|---------|---------|---------|
| bee yard # / location   | hive #: | hive #: | hive #: | hive #:           | hive #: | hive #: | hive #: |
| assessment date<br>d/m/y  |         |         |         |                   |         |         |         |
| colony moved from another location since last assessment y/n                                      |         |         |         |                   |         |         |         |
| queen presence and condition  |         |         |         |                   |         |         |         |
| # queen / swarm cells   |         |         |         |                   |         |         |         |
| brood pattern<br>p = poor a = acceptable vg= very good  |         |         |         |                   |         |         |         |
| colony strength<br>p= poor f=fair, s = strong, c = crowded  |         |         |         |                   |         |         |         |
| comb building<br>p = poor a = acceptable vg = very good   |         |         |         |                   |         |         |         |
| aggressiveness (jumping, stinging)<br>l= low a = average h= high                                  |         |         |         |                   |         |         |         |
| winterability<br>p = poor a = acceptable vg = very good   |         |         |         |                   |         |         |         |
| dead bees on bottom boards approximate # n = none f=few s=several e = excessive                   |         |         |         |                   |         |         |         |
| mite levels<br>l= low a = average h= high   |         |         |         |                   |         |         |         |
| drone cells<br>n = none f = few s = several e= excessive  |         |         |         |                   |         |         |         |
| cleanliness<br># cells cleaned out of 100 cells killed with liquid nitrogen after 24 hours        |         |         |         |                   |         |         |         |
| bee behaviour<br>normal / abnormal (bees not flying, lethargic, disoriented, crawling, twitching) |         |         |         |                   |         |         |         |
| sufficient honey and pollen reserves until next inspection? y/n                                   |         |         |         |                   |         |         |         |
| honey production:<br># frames of honey stores, hive weight, kg of honey                           |         |         |         |                   |         |         |         |
| honey production trend<br>up. down, steady  |         |         |         |                   |         |         |         |
| pollen production:<br># frames of pollen stores, kg of pollen                                     |         |         |         |                   |         |         |         |
| describe frame additions, removal and exchange  |         |         |         |                   |         |         |         |
| required beekeeper action<br>e. g., treatments, feed  |         |         |         |                   |         |         |         |
| Initials  |         |         |         |                   |         |         |         |



## Bee: colony genetics

1. User:
  - beekeepers who are interested in managing genetics within their operation
2. Frequency of use:
  - the frequency of assessment will depend on the size of the operation, beekeeper preference and their reason for doing the assessment (e.g., checking for disease, suitability for breeding)
3. Reasons for recording this information include:
  - bee management
    - reduced reliance on external sources for bees (i.e., reduces bee biosecurity risk)
    - it is a tool for breeding bees to local conditions (e.g., increased honey production, winterability)
    - it is a tool for breeding bees to beekeeper preference (e.g., gentleness, disease resistance)
  - financial management
    - it is a tool to reduce susceptibility to disease and use of medication (and fewer food safety concerns and increased bee biosecurity)
    - it is a tool to help increase honey production by breeding for honey production
  - bee biosecurity
    - bees can be bred for disease resistance
  - food safety
    - if there is less need for medication, there is a reduced likelihood of honey contamination
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 13-19
  - CBISQT: none
  - this template is an adaptation of Bee Biosecurity Standard form 1.0 (pages 128-134)
5. General comments:
  - beekeepers should keep the information updated if they determine that genetics and queen breeding is vital to their operation
  - small operators who produce only enough honey for household use may not find this template useful
  - one reviewer suggested using colour markers (e.g., push pins) on hives to indicate queen age is an easy method for seeing age of queen in the hive
  - beekeepers may find it handy to keep a few blank paper copies of this template (or their equivalent) in their bee truck/vehicle
  - the frequency of recording hive genetics will depend on the size of the operation, and beekeeper preference for tracking bee genetics

Bee: colony genetics

|   |        |        |        |                   |        |        |        |
|---|--------|--------|--------|-------------------|--------|--------|--------|
| person responsible for this record:   |        |        |        | form reference #: |        |        |        |
| bee yard # / location   | hive # | hive # | hive # | hive #            | hive # | hive # | hive # |
| stock   |        |        |        |                   |        |        |        |
| type<br>(p = package bees; n = nuc; sw = swarm capture; sp = split; u = united)   |        |        |        |                   |        |        |        |
| acquisition date<br>(d/m/y)   |        |        |        |                   |        |        |        |
| queen # or tag colour   |        |        |        |                   |        |        |        |
| queen installation (d/m/y)  |        |        |        |                   |        |        |        |
| source /strain<br>(e.g., parent colony or name of supplier)   |        |        |        |                   |        |        |        |
| how colony was removed from operation<br>( sp = split, u= united, o = sold or given away to other beekeeper, d = destroyed, x = died) |        |        |        |                   |        |        |        |
| date of colony removal<br>(d/m/y)   |        |        |        |                   |        |        |        |
| comments  |        |        |        |                   |        |        |        |
| initials  |        |        |        |                   |        |        |        |

## Bee colony log

1. User:
  - all beekeepers
2. Frequency of use:
  - as required
  - will need to be updated whenever there is a change in the bee yard
3. Reasons for recording this information include:
  - bee management
    - helps to plan where to move colonies
    - helps to plan bee sales
    - to tool for queen selection
  - communication
    - it can be a communication tool for beekeepers and staff
  - bee biosecurity
    - part of overall management to reduce disease
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 31-34
  - CBISQT: none
  - this template is not an adaptation of Bee Biosecurity Standard or CBISQT forms
5. General comments:
  - this record can be an effective tool when used together with the bee yard map



## Bee: disease log (monitoring and treatment)

1. User:
  - all beekeepers
2. Frequency of use:
  - as required through season
  - beekeepers need to follow their provincial apiarist recommendations, and drug manufacturer instructions
3. Reasons for recording this information include:
  - bee management
    - it is a tool to help assess bee management methods (e.g., reducing disease prevalence)
  - financial management
    - it is a tool to help predict how much medication will be needed in upcoming year (i.e., up-front cost of operating)
  - bee biosecurity
    - it is part of overall management to reduce disease loads and spread through bee yards
    - it helps ensure correct protocol followed
  - food safety
    - it is part of overall management to reduce potential contaminants in honey
    - it helps ensure correct protocol followed
    - it provides a tool for tracing potential contaminants in honey
    - a tool for managing bee yards to help reduce likelihood of honey contaminants
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 18, 26-30, 35-49 and 108-117
  - CBISQT: pages 34-46 and 49
  - this template is an adaptation of Bee Biosecurity Standard form 1.0 (page 130) and form 3.0 (pages 136-140), and CBISQT forms 4.0.4 (page 128) and 4.0.5 (page 129)
5. General comments:
  - size of the operation and beekeeper's preference will determine whether individual hive records or over-all bee yard records are maintained
  - information should be kept updated
  - this log is intended to drug treatments which are not feed related
  - beekeepers may find it handy to keep a few blank paper copies of this template (or their equivalent) in their bee truck/vehicle
  - new beekeepers should:
    1. mentor with well-established commercial or hobby beekeepers to learn about, and have guidance for, disease monitoring and treatment
    2. join local bee club meetings and provincial associations to learn about diseases and how to monitor and treat them
    3. attend bee club and association meetings
    4. closely follow their provincial apiarist's recommended/required treatment options



## Bee: grafting log

1. User:
  - beekeepers who are interested in managing genetics within their operation
2. Frequency of use:
  - as required through season
3. Reasons for recording this information include:
  - bee management
    - keeps grafting schedule organized
    - reduced reliance on external sources for bees (i.e., reduces bee biosecurity risk)
    - it is a tool for breeding bees to local conditions (e.g., increased honey production, winterability)
    - it is a tool for breeding bees to beekeeper preference (e.g., gentleness, disease resistance) reduced reliance on external sources for bees (i.e., reduces bee biosecurity risk)
  - financial management
    - reducing susceptibility to disease: less medication (and fewer food safety concerns and increased bee biosecurity)
    - potentially increasing honey production by breeding for honey production
  - bee biosecurity
    - bees can be bred for disease resistance
  - food safety
    - if there is less need for medication, there is a reduced likelihood of honey contamination
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 13-19
  - CBISQT: none
  - this template is an adaptation of Bee Biosecurity Standard form 1.0 (pages 128-134)
5. General comments:
  - beekeepers should keep the information updated if they determine that genetics and queen breeding is vital to their operation
  - small operators who produce only enough honey for household use may not find this template useful
  - one reviewer suggested using colour markers (e.g., push pins) on hives to indicate queen age is an easy method for seeing age of queen in the hive
  - the frequency of recording hive genetics will depend on the size of the operation, and beekeeper preference for tracking bee genetics





## Bee: sales

1. User:
  - all beekeepers who sell bees
2. Frequency of use:
  - as required through season
3. Reasons for recording this information include:
  - bee management
    - it is a tool for traceability of bees
  - communication
    - it is aide in communication with customers
  - bee biosecurity
    - it is part of overall management to reduce disease spread through operations
    - it helps ensure correct protocol followed
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 13-49
  - CBISQT: none
  - this template is an adaptation of Bee Biosecurity Standard form 5.0 (page 145)
5. General comments:
  - with minor alterations the table can include financial information for each sale
  - beekeepers need to follow provincial regulations for bee sales

|   |                   |
|---|-------------------|
| Bee: sales  |                   |
| person responsible for this record:   | form reference #: |
| customer information:<br>customer name and phone #<br>order #<br>customer mailing/email address:  |                   |
| details:<br>date bees ordered (d/m/y)<br>order (queens, queen cell, nuc, package/ colony)<br>numbers needed<br>date bees required by customer (d/m/y)<br>details (e.g., requested stock, date bees needed, queen marking etc.)<br><br>comments re: order delays (e.g., weather, queen mating, disease)<br><br>outcome of communications with customer (e.g., order status with regards to delays, queen mating etc.)  |                   |
| shipping information:<br>invoice #:<br>name of staff who put together the order<br>name of staff responsible for shipping<br>If applicable: date, time and location of customer pickup<br><br>if applicable: shipping method<br>if applicable: shipping address<br>tracking number<br>shipper contact name and phone #<br><br>contact information of recipient if other than customer<br><br>date received (d/m/y)<br>problems during shipping (e.g., lost bees, broken package etc.) |                   |
| bee information<br>source bee yard#(s)<br>source hive #(s)<br><br>treatments applied before shipping<br><br>health history and status before treatments  (if applicable)<br>inspector name and inspection date (d/m/y) (if applicable)<br>documentation provided to customer (e.g., moving permit)  |                   |

## Bee yard: maintenance log

1. User:
  - all beekeepers, especially those with large seasonal staff
2. Frequency of use:
  - as required
3. Reasons for recording this information include:
  - bee management
    - help schedule and organize bee yard tasks
  - communication
    - it can be a communication tool for beekeepers and staff
      - the log can be used either to assign tasks to staff, or for staff to make note of what needs to be done in the bee yard
      - how it is used will depend on individual beekeeper needs and organizational style
  - bee biosecurity
    - helps ensure correct protocol followed
    - removal of equipment which might be contaminated with disease
    - a tool for managing bee yards to reduce disease
  - food safety
    - a tool for managing bee yards to help reduce likelihood of honey contaminants
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 76-81 and 122
  - CBISQT: pages 11-14
  - this template is not an adaptation of Bee Biosecurity Standard or CBISQT forms
5. General comments:
  - this tool may be especially beneficial when used together with a map of the bee yard to illustrate areas of particular concern (e.g., specific hives, tree branches which need to be removed) to staff
  - beekeepers may find it handy to keep a few blank paper copies of this template (or their equivalent) in their bee truck/vehicle
  - beekeepers may find a separate log for each bee yard makes more sense for their needs and organizational style



## Bee yard: map

1. User:
  - all beekeepers, especially those with large seasonal staff
2. Frequency of use:
  - as required
  - will need to be updated whenever there is a change in the bee yard
3. Reasons for recording this information include:
  - bee management
    - helps organize bee yard tasks (e.g., where to place colonies which are moved into the yard)
  - communication
    - it's a tool to help communication with inspectors (e.g., provincial apiarists, bee inspectors, crop insurance, extension staff)
    - it can be a communication tool between beekeepers and their staff
      - the map can be used either to assign tasks to staff, or for staff to make note of what needs to be done in the bee yard
  - bee biosecurity
    - a tool to help reduce disease in bee yards
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 31-34
  - CBISQT: none
  - this template is not an adaptation of Bee Biosecurity Standard or CBISQT forms
5. General comments:
  - this record can be an effective tool when used together with bee yard maintenance log and bee yard colony log, particularly for beekeepers who have a large seasonal staff
  - the format of bee yard maps (e.g., digital or hand drawn) depends on beekeeper preference and record keeping style
  - beekeepers should keep in mind that they need to be comfortable with whatever format is used because updated will be needed if/when changes are made to the bee yard
  - beekeepers may find it handy to keep a few blank paper copies of this template (or their equivalent) in their bee truck/vehicle

Bee yard: map

person responsible for this record:

form reference #:

bee yard number / location

date (d/m/y)

[ Put map here to show hive placement and numbers]

Bee yard: moving colonies  
(excluding for large pollination contracts)

1. User:
  - all beekeepers
2. Frequency of use:
  - infrequent
3. Reasons for recording this information include:
  - business management
    - provides a record of problems during transportation may help to explain if colonies do not thrive
    - keeps track of genetics within the operation
  - bee biosecurity
    - helps ensure correct protocol followed
    - it's a tool to help trace potential diseases between bee yards
    - it's a tool to record of stressors which may increase bee susceptibility to disease
  - food safety
    - helps ensure correct protocol followed
    - it's a tool to help trace potential contaminants in honey if there is exposure to contaminants during the move
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 23-24, 33 and 98
  - CBISQT: none
  - this template is an adaptation of Bee Biosecurity Standard form 4.0 (page 142)
5. General comments:
  - small scale operators who move a few colonies for pollination may want to use this template, or combine it with the one which follows for moving bees for pollination
  - small operators who produce only enough honey for house hold use may not find this template useful
  - records kept for moving colonies to fulfil large pollination contracts will differ from those kept to keep track of colonies that are moved to different bee yards within the operation for management or small scale pollination contracts
  - the "Bee yard: moving colonies (large scale operator with pollination contracts)" template is for beekeepers who move a large number of colonies for pollination contracts.
  - beekeepers may find it handy to keep a few blank paper copies of this template (or its equivalent) in their bee truck/vehicle





## Bee yard: moving colonies (large scale operator with pollination contracts)

1. User:
  - beekeepers who move a large number of colonies for pollination contracts
2. Frequency of use:
  - seasonal (depends on beekeeper and pollination contracts)
3. Reasons for recording this information include:
  - business management
    - it's a tool to keep track of colonies
    - it might help to provide explanation if colonies fail to thrive after returning from pollination
  - financial planning
    - it's a tool to help beekeepers determine if sending colonies for pollination in subsequent years is a sound financial decision for their operation
  - bee biosecurity
    - helps ensure correct protocol followed
    - helps to trace disease in colonies if contamination occurred during pollination contract
    - it is a record of stressors which may increase bee susceptibility to disease
  - food safety
    - helps ensure correct protocol followed
    - it's a tool to help trace potential honey contaminants
    - helps ensure correct protocol followed
    - part of overall management to reduce potential contaminants in honey
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 23-24, 33 and 98
  - CBISQT: none
  - this template is an adaptation of Bee Biosecurity Standard form 4.0 (page 142)
5. General comments:
  - small scale operators who move a few colonies for pollination to nearby crops may find the template "Bee yard: moving colonies (excluding for large pollination contracts) more suitable

| Bee yard: moving colonies (large scale operator with pollination contracts)   |  |                   |
|---|--|-------------------|
| person responsible for this record:   |  | form reference #: |
| contract information  | pollination contract reference number  |                   |
|   | pollination contact name and phone number  |                   |
|   | pollination details (crop, stocking rate/ha, location)   |                   |
| pre- pollination  | name of inspector and contact phone # (if applicable)  |                   |
|   | date of inspection (d/m/y) (if applicable)   |                   |
|   | result of inspection   |                   |
|   | original bee yard #(s) or location(s)  |                   |
|   | date moved (d/m/y) from original yard  |                   |
|   | # of colonies moved  |                   |
|   | bill of lading # (moving bees to pollination)  |                   |
|   | box identifying features (e.g., beekeeper#, colour code of lid/box)  |                   |
| transport to/during pollination   | type of transport used for delivery to pollination location (open deck, tarped, enclosed cargo)  |                   |
|   | was load shared with another beekeeper? y/n<br>If yes, name and phone number   |                   |
| post-pollination  | were the bees moved to different locations for pollination as part of the contract? y/n<br>if yes, and known: provide location details and names of other beekeepers |                   |
|   | date of return (d/m/y) from pollination  |                   |
|   | bill of lading # (returning bees from pollination)   |                   |
|   | type of transport used for return from pollination (open deck, tarped, enclosed cargo)   |                   |
|   | bee yard/ location of returned colonies  |                   |
|   | name of inspector and contact phone conducting inspection (if applicable)  |                   |
|   | date of inspection (d/m/y) (if applicable)   |                   |
|   | result of inspection (if applicable)   |                   |
|   | beekeeper concerns about biosecurity resulting from pollination contract   |                   |
|   | equipment comments (e.g., dropped boxes, equipment damage as result of pollination contract, bear damage)  |                   |
| bee comments (e.g., health and strength of bee colonies upon return)  |  |                   |
| general comments (e.g., customer complaints about colonies, public complaints, any documentation relating to complaints, concerns about traceability for biosecurity) |  |                   |

## Bee yard: off-hive disturbance record

1. User:
  - all beekeepers
2. Frequency of use:
  - as required
3. Reasons for recording this information include:
  - bee management
    - to assess costs of disturbance (e.g., equipment damage, bee losses)
    - this record may help explain unexpectedly poor honey yields or colony conditions
  - communication
    - having an account of disturbance for future reference if it is needed
    - a record of events and actions following a disturbance may be required for compensation
    - it may help with communication between landowner, applicators and beekeepers
  - bee biosecurity
    - it's a record of stressors which may increase bee susceptibility to disease
  - food safety
    - it's a tool to help trace potential contaminants in honey
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 76-81 and 122
  - CBISQT: pages 11-14
  - this template is an adaptation of Bee Biosecurity Standard form 6.0 (page 144), and CBISQT forms 1.0.1 (page 119) and 1.0.2 (page 120)
5. General comments:
  - all beekeepers will occasionally experience damage from off-hive pests (e.g., skunk, bear, ants, vandals) in their bee yards
  - keeping records (i.e., date, pest, and damage) helps with explain poor honey yield, potential honey contaminations or poor colony conditions
  - beekeepers may find it handy to keep a few blank paper copies of this template (or their equivalent) in their bee truck/vehicle
  - there are new programs in place (check with your provincial apiarist) to help facilitate communication between aerial applicators and beekeepers

| Bee yard: off-hive disturbance record   |                   |
|---|-------------------|
| person responsible for this record:   | form reference #: |
| bee yard # / location:  |                   |
| disturbance (e.g., extreme weather, fire, vandalism, pesticide. bear, skunk, racoon, cattle):   |                   |
| name of staff who first noticed effect of disturbance in bee yard:  |                   |
| date (d/m/y) of disturbance / when disturbance noticed:   |                   |
| pest (e.g., bear, skunk, racoon) disturbance (if applicable):<br>control product(s) / devices (if applicable)<br>products/ devices used:<br>effectiveness:  |                   |
| crop pesticide disturbance (provide known information) (if applicable):<br>applicator name / company<br>date (d/m/y) and time of spraying<br>weather conditions at time of spraying + / - 2 days<br>target pest<br>pesticide which was sprayed<br>distance between bee yard and sprayed field<br>cross reference form #(s) (e.g., honey or bee testing)<br>comments (e.g., bee behaviour) |                   |
| reported damage (if applicable):<br>contact name and information<br><br>date (d/m/y) and time of report<br>date of inspection (d/m/y) (if applicable)<br>outcome of inspection (if applicable)  |                   |
| damaged equipment (e.g., # of broken hives, frames) and queens:   |                   |
| estimated cost of damage (if applicable):   |                   |
| documentation (e.g., photos, witnesses) and location of files (if applicable):  |                   |
| follow-up to damage (e.g., electric fence installed, move yard, compensation):  |                   |

## Bee equipment inspection / inventory

1. User:
  - all beekeepers
2. Frequency of use:
  - annual (at minimum)
3. Reasons for recording this information include:
  - business planning
    - provides information needed for equipment retirement plans,
    - helps predict economic input needed for the next beekeeping season (i.e., how much money will be needed to replace or repair equipment)
    - helps to determine how much equipment is sellable and realistically predict the economic value of equipment determined by condition
    - aids in developing business plans which are needed for approaching financial institutions for loans
    - provides needed information for selling beekeeping businesses and inheritance planning
  - bee biosecurity
    - removal of equipment which might be contaminated with disease
    - part of overall management to reduce disease
  - food safety
    - helps ensure correct protocol followed
    - provides a tool for tracing potential contaminants in honey
    - part of overall management to reduce potential contaminants in honey
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 56-65 and 107
  - CBISQT: pages 9-15, 18, 27 and 29
  - this template is an adaptation of Bee Biosecurity Standard form 6.0 (page 146), and CBISQT form 1.0.1 (page 119)
5. General comments:
  - removal of disease ridden equipment is important to keep bees healthy in the bee yard as well as in other bee yards which are within flight distance
  - all hive equipment should be thoroughly inspected and inventoried at least once per year



## Facility cleaning and disinfection (facility and facility equipment)

1. User:
  - all beekeepers
2. Frequency of use:
  - as required
  - operations with a large honey packing component will clean and sanitize their facilities regularly while packing honey
3. Reasons for recording this information include:
  - business management
    - this record is part of CFIA registration requirements
    - maintaining equipment is an important to ensure the smooth running of the operation
    - well maintained equipment will have greater value if sold
    - it helps ensure the cleaning schedule is maintained
    - maintain staff accountability for facility and equipment cleaning
  - bee biosecurity
    - part of overall management to improve bee biosecurity
  - food safety
    - helps ensure correct protocol followed
    - provides a tool for tracing potential contaminants in honey
    - part of overall management to reduce potential contaminants in honey
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 74-75 and 124-126
  - CBISQT: pages 80 – 87
  - this template is an adaptation of Bee Biosecurity Standard form 7.0 (page 149), and CBISQT form 9.0.3 (page 146)
5. General comments:
  - keep a copy in each applicable room of the honeyhouse for easy updating
  - small beekeepers with temporary extraction facilities should review sanitation standards to ensure that they are producing honey which follows food safety standards





Facility: inspection (exterior)

1. User:
  - all beekeepers who maintain a honey processing facility
2. Frequency of use:
  - at least once a year
3. Reasons for recording this information include:
  - business management
    - this record is part of CFIA registration requirements
    - well maintained buildings will have greater value if sold
    - it helps ensure maintenance schedule is maintained
    - it helps maintain staff accountability for facility maintenance tasks
  - bee biosecurity
    - it is part of overall management to improve bee biosecurity
  - food safety
    - helps ensure correct protocol followed
    - provides a tool for tracing potential contaminants in honey
    - part of overall management to reduce potential contaminants in honey
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 68-80
  - CBISQT: pages 53-56
  - this template is an adaptation of Bee Biosecurity Standard form 2.6 (pages 121-122), and CBISQT forms 3.0.1 (page 124) and 9.0.1 (page 144)
5. General comments:
  - this template can be used together with the facility map to highlight areas of concern and assist with communication between beekeeper and staff about facility concerns
  - when building a new honeyhouse beekeepers should look at CFIA regulations (e.g., with regards to grey water)

| Facility: inspection (exterior)   |     |   |                   |          |
|---|-----|---|-------------------|----------|
| person responsible for this record:   |     |   | form reference #: |          |
| inspected building (i.e., honeyhouse, storage shed etc.):   |     |   |                   |          |
| name of staff carrying out inspection:  |     |   |                   |          |
| signature:  |     |   |                   |          |
| inspection date:  |     |   |                   |          |
|   | y/n | if no, comment on problem and list corrective actions | date (d/m/y)      | initials |
| perimeter strip (½ meter wide) established around building of stone, crushed gravel or short grass        |     |   |                   |          |
| refuse accumulated within 3 m of building (e.g., unused machinery, garbage, etc.)                         |     |   |                   |          |
| weeds are controlled  |     |   |                   |          |
| land drainage around building is adequate   |     |   |                   |          |
| dumpsters are emptied as required to prevent pest infestation, and surroundings are free of refuse/debris |     |   |                   |          |
| loading areas are paved   |     |   |                   |          |
| roadways and pathways are graded and drained  |     |   |                   |          |
| spring loaded self-closing doors are used   |     |   |                   |          |
| smooth structural materials that are impervious to rust, corrosion, and rot are used                      |     |   |                   |          |
| surfaces are easily cleaned   |     |   |                   |          |
| exteriors are maintained to deter pests   |     |   |                   |          |

## Facility: interior inspection

1. User:
  - all beekeepers who maintain a honey processing facility
2. Frequency of use:
  - at least once a year
3. Reasons for recording this information include:
  - business management
    - this record is part of CFIA registration requirements
    - well maintained buildings will have greater value if sold
    - it helps ensure maintenance schedule is maintained
    - it helps maintain staff accountability for facility maintenance tasks
  - bee biosecurity
    - it is part of overall management to improve bee biosecurity
  - food safety
    - helps ensure correct protocol followed
    - provides a tool for tracing potential contaminants in honey
    - part of overall management to reduce potential contaminants in honey
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 68-80
  - CBISQT: pages 53-56
  - this template is an adaptation of Bee Biosecurity Standard form 2.6 (pages 121-122), and CBISQT forms 3.0.1 (page 124) and 9.0.1 (page 144)
5. General comments:
  - this template can be used together with the facility map to highlight areas of concern and assist with communication between beekeeper and staff about facility concerns
  - when building a new honeyhouse beekeepers should look at CFIA regulations (e.g., with regards to grey water)
  - small operators with temporary extraction facilities should review sanitation standards to ensure that they are producing honey which follows food safety standards

Facility: interior inspection

|   |     |   |                        |
|---|-----|---|------------------------|
| person responsible for this record:   |     | form reference #:   |                        |
| name of staff carrying out inspection:  |     |   |                        |
| signature:  |     |   |                        |
| inspection date:  |     |   |                        |
| segregated storage areas are provided for:  |     |   |                        |
| receiving bees y/n  |     |   |                        |
| infected, infested, or suspect hives y/n  |     |   |                        |
| hives from different apiaries (wintering facilities) or destined for pollinating crops in pest-free areas y/n             |     |   |                        |
| bee repellents and farm chemicals (maintenance, sanitation, cleaning, off-hive pest control products) y/n                 |     |   |                        |
| storage and repairs of hive equipment y/n   |     |   |                        |
| medications/ treatments /feed supplements y/n   |     |   |                        |
| hive and processing equipment y/n   |     |   |                        |
| packaging materials and finished honey products y/n   |     |   |                        |
| toilet y/n  |     |   |                        |
|   | y/n | if no, comment on problem and list what needs to be corrected | date (d/m/y) corrected |
| no holes/crevices/leaks in building (e.g., walls, windows, screens)   |     |   |                        |
| all windows can be closed or have close-fitting screens that are in good condition  |     |   |                        |
| all doors are close-fitting and can be secured  |     |   |                        |
| one-way exit methods are used that allow bees to escape   |     |   |                        |
| lights are shatterproof or protected where necessary  |     |   |                        |
| lighting is adequate  |     |   |                        |
| pipes are intact (not leaking)  |     |   |                        |
| floor drainage is adequate (floor sloped, drain covers clear)   |     |   |                        |
| grey water and septic system separate   |     |   |                        |
| concrete floors are sealed  |     |   |                        |
| floors, walls and ceilings are free from refuse, spills, pests, etc.  |     |   |                        |
| smooth structural materials that are impervious to rust, corrosion, and rot are used                                      |     |   |                        |
| surfaces are easily cleaned   |     |   |                        |
| air circulation is promoted   |     |   |                        |
| facilities are bee tight and, ideally, insect and rodent proof  |     |   |                        |
| appropriate temperature- and humidity-controlled storage is provided  |     |   |                        |
| temperature and humidity are monitored  |     |   |                        |
| adequate ventilation and air circulation is provided in wintering facilities to remove heat, moisture, and carbon dioxide |     |   |                        |
| lighting is minimized in facilities where bees are stored   |     |   |                        |

Facility : maintenance (facility and facility equipment)

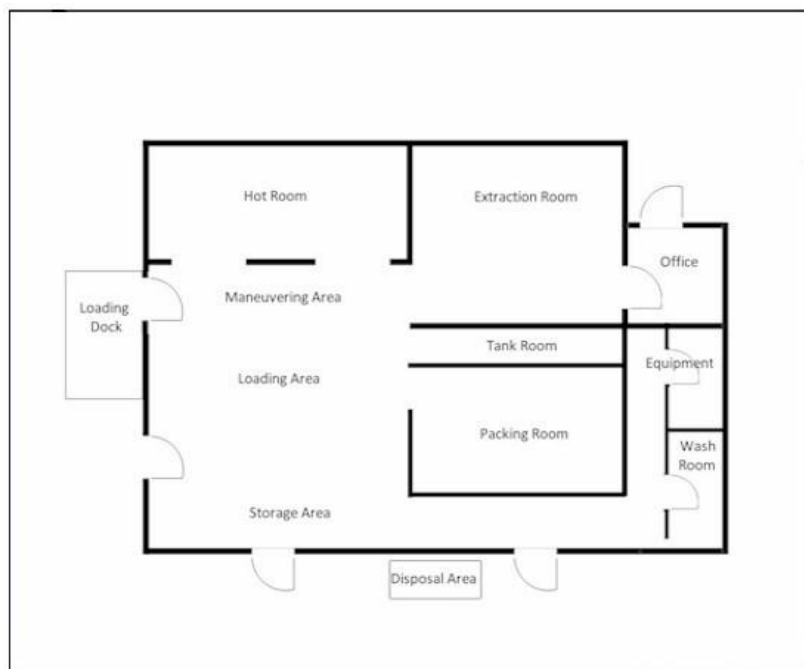
1. User:
  - all beekeepers
2. Frequency of use:
  - as required
  - generally equipment needs to be inspected and repaired before honey extracting or processing
3. Reasons for recording this information include:
  - business management
    - this record is part of CFIA registration requirements
    - maintaining equipment is an important to ensure the smooth running of the operation
    - well maintained equipment will have greater value if sold
    - ensure maintenance schedule is maintained.
    - maintain staff accountability for equipment maintenance
    - maintenance will help determine operational costs (e.g., cost replacement parts, new equipment)
  - bee biosecurity
    - it is part of overall management to improve bee biosecurity
  - food safety
    - it provides a tool for tracing potential contaminants in honey
    - part of overall management to reduce potential contaminants in honey
    - helps ensure correct protocol followed
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 72-76 and 122
  - CBISQT: pages 80 - 87
  - this template is an adaptation of Bee Biosecurity Standard form 7.0 (page 148), and CBISQT form 9.0.2 (page 145)
5. General comments:
  - keep a copy in each applicable room of the honeyhouse for easy updating
  - small beekeepers with temporary extraction facilities should review sanitation standards to ensure that they are producing honey which follows food safety standards



## Facility: map

1. User:
  - all beekeepers who maintain a honey processing facility
2. Frequency of use:
  - depends on how the beekeeper uses the map (see comments below)
3. Reasons for recording this information include:
  - business management
    - this record is part of CFIA registration requirements
    - it is a useful tool when planning alterations to the arrangement of supplies and equipment
    - it is a useful tool when planning renovations
  - bee biosecurity
    - it is part of overall management to improve bee biosecurity
  - food safety
    - provides a tool for tracing potential contaminants in honey
    - part of overall management to reduce potential contaminants in honey
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: none
  - CBISQT: pages 53-56 and 80-87
  - this template is an adaptation of CBISQT form 6.0.1 (page 131)
5. General comments:
  - facility maps can be used to highlight areas of concern and assist with communication between beekeeper and staff about facility concerns
  - beekeepers can mark the location of pest control products (e.g., bait stations, traps) on copies of the map with annotation to indicate when the trap/bait station was removed
  - facility maps can be used to mark the locate damage which needs to be repaired
  - facility map help with reduce cross contamination because it can indicate traffic flow patterns. If required the patterns can be changed to eliminate the possibility of cross contamination
  - beekeepers should consider keeping a copy of maps by doorways, with fire exits and locations of fire extinguishers clearly marked

# Facility : map



add scale here (m)

|                     |                 |
|---------------------|-----------------|
| Property Name       | Property Number |
|                     |                 |
| Legal land location | GPS coordinates |

Beekeepers : delete the sample image on the template and add own facility map



Facility: pest control

1. User:
  - all beekeepers
2. Frequency of use:
  - as required
3. Reasons for recording this information include:
  - business management
    - this record is part of CFIA registration requirements
    - it is a tool to help maintain staff accountability for pest control tasks
  - bee biosecurity
    - it is part of overall management to improve bee biosecurity
  - food safety
    - provides a tool for tracing potential contaminants in honey
    - part of overall management to reduce potential contaminants in honey
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 76-80
  - CBISQT: pages 80-87
  - this template is an adaptation of Bee Biosecurity Standard form 2.8 (page 122), and CBISQT form 9.05 (page 148)
5. General comments:
  - operators with permanent facilities may find it useful to use their facility map to show bait stations locations
  - regardless of operation size all beekeepers will occasionally have pest control issues in their facilities



Facility: potable water

1. User:
  - all beekeepers
2. Frequency of use:
  - yearly (at minimum)
3. Reasons for recording this information include:
  - business management
    - this record is part of CFIA registration requirements
    - it is a tool to help maintain staff accountability for pest control tasks
  - food safety
    - provides a tool for tracing potential contaminants in honey
    - part of overall management to reduce potential contaminants in honey
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: none
  - CBISQT: pages 28, 88-93
  - this template is an adaptation of CBISQT from 10.0.1 (page 149)
5. General comments:
  - all beekeepers who extract honey, regardless of operation size need to use potable water during honey extraction and cleaning of honey processing equipment
  - if garden hoses are used in temporary facilities, operators should ensure that they are certified to be used for potable water



Facility: waste disposal record (excluding feed and medication)

1. User:
  - all beekeepers
2. Frequency of use:
  - as required
3. Reasons for recording this information include:
  - business management
    - this record is part of CFIA registration requirements
    - it is a tool to help maintain staff accountability for waste disposal
  - bee biosecurity
    - it is part of overall management to improve bee biosecurity
  - food safety
    - provides a tool for tracing potential contaminants in honey
    - part of overall management to reduce potential contaminants in honey
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 53-55
  - CBISQT: pages 10, 23-24, 32, 44, 50,61-68,78 and 83-86
  - this template is an adaptation of Bee Biosecurity Standard form 6.0 (page 147), and CBISQT form 9.0.4 (page 147)
5. General comments:
  - keep records easily accessible for ease of updating.
  - all beekeepers need to check with local regulations to ensure correct waste disposal protocol for their municipality
  - in this handbook the disposal of feed and medication is recorded in the "Supplies: feed/medication inventory and disposal record" template



## Honey: customer complaint

1. User:
  - all beekeepers who sell honey
2. Frequency of use:
  - as required
3. Reasons for recording this information include:
  - customer service
    - follow-up on complaints to ensure that the problems is fixed and customers are satisfied
  - food safety
    - helps ensure correct protocol followed
    - provides a tool for tracing potential contaminants in honey
    - part of overall management to reduce potential contaminants in honey
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: none
  - CBISQT: page 101
    - this template is an adaptation of CBISQT forms 12.0.1 (page 152) and 12.0.2 (page 153)
5. General comments:
  - small operators who produce only enough honey for household use may not find this template useful

| Honey customer complaint  |                   |
|---|-------------------|
| person responsible for this record:   | form reference #: |
| date (d/m/y) of complaint   |                   |
| customer name and phone number  |                   |
| customer invoice #  |                   |
| how was complaint delivered (i.e., in person, through store, over phone, email etc.)  |                   |
| who received the complaint and initial response   |                   |
| complaint details   |                   |
| product description and lot id #  |                   |
| if applicable: government agencies contacted (e.g., provincial apiarist CFIA, PMRA): include names, phone # and date of contact |                   |
| if applicable: cross reference form #(s)  |                   |
| recall required y/n<br>if y<br>form cross reference #   |                   |
| method of customer follow up (face to face, phone, email, text)   |                   |
| date(s) of follow up  |                   |
| staff member responsible for customer follow up   |                   |
| comments: on follow up with customer  |                   |
| general comments:   |                   |



## Honey extraction log

1. User:
  - all beekeepers who intend to sell honey
2. Frequency of use:
  - as required
3. Reasons for recording this information include:
  - business management
    - this record is part of CFIA registration requirements
    - knowing how much honey was produced is important for financial planning
    - honey production is one way to determine if beekeeping management needs to be altered.
    - beekeepers need to supply honey samples to bulk buyers
    - beekeepers need to be aware of qualities of the bulk honey which they have in inventory in order to make sale and packing decisions
  - food safety
    - provides a tool for tracing potential contaminants in honey
    - part of overall management to reduce potential contaminants in honey
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: none
  - CBISQT: pages 57-69, 75-76 and 99-103
  - this template is an adaptation of CBISQT forms 1.0.3 (page 121), 7.0.3 (page 134), 7.0.4 (page 135), 7.0.5 (page 136) and 8.0.1 (page 137)
5. General comments:
  - all beekeepers, regardless of operation size should keep record of how much honey is extracted
  - any beekeeper who sells honey must keep honey samples from all lots/barrels which are sold
  - honey samples need to be kept for a minimum of 2 years
  - retention of samples are kept to protect the producer since most packers blends honeys for sale
  - the number of samples will depend on producer needs will depend on the producer but should always have enough to retain one sample
  - sample sizes should be a minimum of 250g



## Honey: packing log

1. User:
  - all beekeepers
2. Frequency of use:
  - as required
3. Reasons for recording this information include:
  - business management
    - this record is part of CFIA registration requirements
    - it is a tool for business planning (e.g., how much inventory is in stock and what it is worth)
    - it helps to predict when containers, labels need to be ordered
    - it is a tool for staff accountability for honey packing
    - it is a tool to help with traceability of problems in the packing line
  - food safety
    - helps ensure correct protocol followed
    - traceability of potential honey contaminants
    - helps ensure correct protocol followed
    - provides a tool for tracing potential contaminants in honey
    - part of overall management to reduce potential contaminants in honey
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: none
  - CBISQT: pages 68, 70-79, and 99-103
  - this template is an adaptation of CBISQT forms 1.0.3 (page 121), 8.0.1 (page 137) and 8.0.2 (page 138)
5. General comments:
  - keep the record up to date
  - all beekeepers, who sell honey need to keep honey samples from all lots of packed honey in case there is any need for testing that honey
  - honey samples need to be kept for a minimum of 2 years
  - sample sizes should be a minimum of 250g



## Honey: lab analysis and product recall report

1. User:
  - this template is not relevant to small scale operators who pack only enough honey for household consumption
2. Frequency of use:
  - infrequent
3. Reasons for recording this information include:
  - business management
    - this record is part of CFIA registration requirements
    - predicting short and long term effect of recall (including lost cost of honey, containers, manpower, and transportation)
    - records details on customer service after recall to maintain good relationship/ future sales
  - food safety
    - helps ensure correct protocol followed
    - provides a tool for tracing potential contaminants in honey
    - part of overall management to reduce potential contaminants in honey
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: none
  - CBISQT: pages 99-103
  - this template is an adaptation of CBISQT form 12.0.2 (page 153)
5. General comments:
  - keep associated records updated and relevant documentation handy and organized for easy reference

| Honey: lab analysis and product recall report   |  |                              |
|---|--|------------------------------|
| person responsible for this record:   |  | form reference #:            |
| date of initial concern (d/m/y):<br>details (e.g., reason for complaint / concern, contact information):<br><br>beekeeper honey sample id#'s associated with concern: |  |                              |
| lab analysis  | date sample submitted (d/m/y)                                    |                              |
|   | shipping info (e.g., tracking #)                                 |                              |
|   | lab contact info   |                              |
|   | sample reference #   |                              |
|   | outcome of analysis:   |                              |
| recall  | reason for recall  |                              |
|   | date (m/d/y) recall initiated                                    |                              |
| regulatory agency info  | contact information  |                              |
|   | regulatory agency documentation resulting associated with recall |                              |
| product information   | lot id#(s)   |                              |
|   | packed honey id#(s)  |                              |
|   | amount of product in stock                                       |                              |
|   | amount of sold product   |                              |
|   | amount of unaccounted product                                    |                              |
|   | associated form reference #:(s)                                  |                              |
| additional documentation associated with recall:  |  |                              |
| comments (e.g., disposal, outcome of recall) and associated form reference #:(s)  |  |                              |
| recalled honey  | customer name and invoice #s                                     | details of retrieved product |
|   |  |                              |
|   |  |                              |
|   |  |                              |

## Honey: receiving bulk honey shipment from beekeepers

1. User:
  - beekeepers who purchase barrels of honey for packing or bulk resale
2. Frequency of use:
  - as required
3. Reasons for recording this information include:
  - business management
    - it provides a record of bulk honey inventory and honey samples from purchased honey
  - food safety
    - provides a tool for tracing potential contaminants in honey
    - part of overall management to reduce potential contaminants in honey
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: none
  - CBISQT: pages 68, 71-72, 75-76, 78 and 102
  - this template is an adaptation of CBISQT forms 7.0.2 (page 132-133) and 8.0.5 (page 141)





## Honey: removing full honey supers for extraction

1. User:
  - all beekeepers
2. Frequency of use:
  - as required
3. Reasons for recording this information include:
  - business management
    - will keep track of yard honey production
    - record can be linked to other records (e.g., hive assessment) to help make management decisions
    - will help to schedule bee yard work for employees
  - bee biosecurity
    - it is part of overall management to improve bee biosecurity
  - food safety
    - provides a tool for tracing potential contaminants in honey
    - part of overall management to reduce potential contaminants in honey
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 32-34
  - CBISQT: pages 47-52, 60-63, 68 and 102
  - this template is an adaptation of CBISQT from 5.0.1 (page 130)
5. General comments:
  - novice beekeepers who produce honey for their household use should record how much honey each hive produces in order to better understand their bees, and the effect of their management and environmental conditions on honey production



Honey: sending bulk honey shipment to purchaser

1. User:
  - beekeepers who ship bulk loads of honey
2. Frequency of use:
  - as required
3. Reasons for recording this information include:
  - business management
    - it provides a record of bulk honey inventory and honey samples from purchased honey
  - food safety
    - provides a tool for tracing potential contaminants in honey
    - part of overall management to reduce potential contaminants in honey
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: none
  - CBISQT: pages 68, 71-72, 75-76, 78 and 102
  - this template is an adaptation of CBISQT forms 7.0.2 (page 132-133) and 8.0.5 (page 141)



Inventory: feed/ medication - inventory and disposal record

1. User:
  - all beekeepers
2. Frequency of use:
  - as required
3. Reasons for recording this information include:
  - business management
    - it is a tool for predicting upcoming expenditures
    - it helps with accountability for supply ordering
  - bee biosecurity
    - it is part of overall management to improve bee biosecurity
  - food safety
    - provides a tool for tracing potential contaminants in honey
    - part of overall management to reduce potential contaminants in honey
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: pages 50-55
  - CBISQT: pages 18-22, 30 and 34-46
  - this template is an adaptation of Bee Biosecurity Standard form 8.0 (page 150), and CBISQT form 4.0.1 (page 123)
5. General comments:
  - read and follow manufacturer's instructions for storage and disposal requirements of medications
  - check local regulations for disposal of medications
  - follow provincial apiarist's recommendation regarding all aspects of feed and medication



## Inventory: packed honey

1. User:
  - all beekeepers
2. Frequency of use:
  - as required
3. Reasons for recording this information include:
  - business management
    - this record is part of CFIA registration requirements
    - it is a tool for business planning (e.g., how much inventory is in stock and what it is worth)
    - it helps to predict when containers, labels need to be ordered
    - it is a tool for staff accountability for honey packing
    - it is a tool to help with traceability of problems in the packing line
  - food safety
    - helps ensure correct protocol followed
    - traceability of potential honey contaminants
    - helps ensure correct protocol followed
    - provides a tool for tracing potential contaminants in honey
    - part of overall management to reduce potential contaminants in honey
4. References to the Bee Biosecurity Standard and CBISQT:
  - Bee Biosecurity Standard: none
  - CBISQT: pages 70-79, and 99-103
  - this template is an adaptation of CBISQT forms 8.0.1 (page 137) and 8.0.2 (page 138)
5. General comments:
  - keep the record up to date
  - all beekeepers, who sell honey need to keep honey samples from all lots of packed honey in case there is any need for testing that honey
  - honey samples need to be kept for a minimum of 2 years
  - sample sizes should be a minimum of 250g







Inventory: supply inventory and disposal  
(excluding feed, medications, hive equipment and bees)

1. User:
    - all beekeepers
  
  2. Frequency of use:
    - as required
  
  3. Reasons for recording this information include:
    - business management
      - it is a tool for predicting upcoming expenditures
      - it helps with accountability for supply ordering
    - bee biosecurity
      - it is part of overall management to improve bee biosecurity
    - food safety
      - provides a tool for tracing potential contaminants in honey
      - part of overall management to reduce potential contaminants in honey
  
  4. References to the Bee Biosecurity Standard and CBISQT:
    - Bee Biosecurity Standard: pages 51-53 and 101
    - CBISQT: pages 17-33 and 75-76)
    - this template is an adaptation of Bee Biosecurity Standard form 8.0 (page 150), and CBISQT forms 2.0.1 (page 122), 2.0.2 (page 123) and 3.0.1 (page 124)
  
  5. General comments:
    - this template excludes information from feed and medications: form reference #: (\_\_\_\_\_)\*,  
hive equipment form reference #: (\_\_\_\_\_)\*, and bees: form reference #: (\_\_\_\_\_)\*
- \* beekeepers should enter the form reference numbers they use in their operations for easy cross-reference

