

Overview

This standard covers the establishment of a honey bee hive.

The aim will be to establish a strong healthy colony of bees for the production of honey.

This standard is suitable for those involved in establishing honey bee hives.

Establish a honey bee hive

Performance criteria*You must be able to:*

1. assess the risks associated with the activity to be carried out
2. wear suitable clothing and personal protective equipment (PPE)
3. identify an appropriate location for the honey bee hive
4. select, prepare, use and maintain **beekeeping equipment** safely and correctly
5. select the appropriate type of hive
6. confirm that the hive is correctly assembled, in accordance with requirements
7. position the hive on a suitable platform
8. acquire honey bees and a queen for the hive at the correct time
9. place the bees in the hive at the correct time, maintaining the safety of yourself and others and the health and welfare of the bees
10. place the queen in the hive maintaining separation until the colony has settled
11. maintain an ample supply of food until the worker bees establish a honeycomb
12. monitor the hive for signs of **pests, diseases and disorders** and take appropriate action if they are detected
13. maintain communication with colleagues and others involved in, or affected by, the activity
14. maintain good **hygiene practices** and bio-security
15. carry out all work in accordance with relevant environmental and health and safety legislation, beekeeping legislation, risk assessment requirements and codes of practice
16. maintain records of beekeeping activities

Knowledge and understanding

You need to know and understand:

1. how to identify hazards and assess risks
2. the type of clothing and personal protective equipment (PPE) suitable for **beekeeping activities**
3. the **beekeeping equipment** required and how to use it safely and correctly for **beekeeping activities**
4. how and where a honey bee hive should be sited and the factors that should be taken into account e.g. food source, risk to the public
5. the different types of hives and components and how they are assembled and used
6. the principles that govern the design of hives and frames e.g. the concept of bee space, and the main features of their construction
7. the different strains of honey bees and their characteristics
8. the different **adult bees** within the colony and their specific job
9. how to introduce the bees and queen to the hive in a way that minimises stress
10. the stages in the life cycle of a honey bee
11. the elementary anatomy and biology of a honey bee
12. how the bees' behaviour can help to regulate the environment within the colony
13. the **communication methods used by bees**
14. the make up of a nucleus and how it can be used
15. how plants and bees are mutually beneficial to each other
16. elementary botany and foraging for bee farming
17. the principles involved in feeding honey bees and why it is important that no honey boxes are in place when bees are being fed sugar syrup
18. the nutritional value of honey to the honey bee colony
19. the management needed to cope with changes in seasons, geographic locations, weather conditions, the timing of the flowering of forage plants and sources of undesirable nectar
20. where to find information on **pests, diseases and disorders** affecting honey bee colonies, including which are notifiable, and the action to take if they are detected
21. the potential impact of **pests, diseases and disorders** on bee health, the management of the colony and their economic effects

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22. the correct procedures to take in the event of an **emergency**
23. the importance of maintaining communication with those involved in, or affected by, the activity
24. the importance of maintaining good **hygiene practices** and bio-security and the methods for achieving these
25. your responsibilities under relevant environmental and health and safety legislation, beekeeping legislation and codes of practice
26. the need for relevant insurance
27. the role of professional organisations and associations
28. the records that need to be kept and the importance of completing them

Glossary

Adult bees:

- worker
- drone
- queen

Beekeeping activities:

- use of a smoker
- assembly of a hive
- removal of hive parts (roof, crown board, suppers, brood combs)
- collection of honey
- packaging
- food labelling
- cleaning hive components

Beekeeping equipment:

- hive
- smoker
- fuel
- personal protective equipment
- hive tool
- queen excluder
- feeder

Communication methods used by bees:

- food sharing
- dancing
- scenting
- vibration

Emergency:

- unhealthy brood
- sting
- swarm

Hygiene practices:

- protective clothing
- hand washing

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- personal illness
- cuts and wounds

Pests, diseases and disorders:

- small hive beetle
- tropilaelaps
- varroa mite
- wax moth
- tracheal mites
- Asian hornet
- nosema
- varroosis
- American foul brood
- European foul brood
- sac brood
- bald brood
- drone brood
- chalk brood
- amoeba
- starved colony
- chilled or overheated colony
- plant poisoning
- pesticide poisoning

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