

# LANLP41

## Monitor and maintain a honey bee hive



---

### Overview

This standard covers the monitoring and maintenance of a honey bee hive.

The aim is to ensure the maintenance of the hive to produce of strong healthy force of bees for the production of honey.

If you are working with chemicals or machinery you need to be appropriately trained in line with current legislation, and hold a relevant award where appropriate.

You must carry out your work in a way which will consider any impact on the natural environment and enhance its nature and conservation.

This standard is suitable for those involved in monitoring and maintaining a honey bee hive.

# LANLP41

## Monitor and maintain a honey bee hive

---

### Performance criteria

*You must be able to:*

- P1 identify whether the conditions are appropriate for the hive to be opened
- P2 use beekeeping equipment and Personal Protective Equipment to open the hive safely
- P3 identify the normal appearance of brood comb
- P4 identify different types of adult bees within the colony
- P5 identify the contents of the cell within a comb
- P6 identify the brood
- P7 check for the presence of pests, diseases and disorders
- P8 perform the beekeeping activities at correct times and in accordance with organisational procedures and legislation
- P9 reassemble the hive according to specification
- P10 maintain suitable levels of hygiene and bio-security
- P11 deal with waste safely and correctly in accordance with legislation
- P12 maintain effective communication with colleagues and others involved in or affected by the work
- P13 maintain records as appropriate
- P14 carry out all work in accordance with relevant environmental, health and safety legislation, animal health and welfare legislation, risk assessment requirements, codes of practice and company policies

# LANLP41

## Monitor and maintain a honey bee hive

---

### Knowledge and understanding

*You need to know and understand:*

- K1 the different components of a bee hive and how they are assembled and used
- K2 the management needed to cope with changes in seasons, geographic localities, weather conditions, the timing of the flowering of forage plants and sources of undesirable nectar
- K3 how to manipulate bees to enable opening of the hive for maintenance
- K4 the process involved in breeding honey bees
- K5 how bees respond to perfume and other scents
- K6 the benefits of using supers when required
- K7 the different adult bees within the colony and their specific job
- K8 the anatomy of a bee and the stages of the life cycle
- K9 how the bees behaviour can help to regulate the environment within the colony
- K10 how plants and bees are mutually beneficial to each other
- K11 how bees collect pollen, nectar and water and their uses in the hive
- K12 how honey is made and why you get different types of honey
- K13 the methods used by bees to communicate e.g. food sharing, dancing, scenting and vibration
- K14 nutritional value of honey to the honey bee colony
- K15 the correct time to remove honey from the colony
- K16 the importance of preventing robbing and how it affects the colony
- K17 the conditions leading to swarm and their dangers
- K18 how swarm and nuclei can be turned into a productive colonies
- K19 the reasons for comb renewal
- K20 the importance of reviewing the age of the existing queen and planning for the replacement
- K21 the advantages of marking and clipping queens
- K22 the correct procedures to take in the event of an emergency
- K23 different pests, diseases and disorders affecting colonies and how to detect them
- K24 importance of good hygiene practice in prevent contamination and cross contamination
- K25 how to deal with different types of waste produced by the activity
- K26 the importance of maintaining effective communication with those involved in or affected by the work
- K27 your responsibilities under relevant environmental and health and safety legislation, animal health and welfare legislation, codes of practice and company policies

# LANLP41

## Monitor and maintain a honey bee hive

---

### Glossary

Beekeeping equipment - hive, smoker, fuel, personal protective equipment, hive tool, queen excluder, feeder.

Adult Bees - Worker, Drone, Queen

Brood - Eggs, Larva, Sealed brood in combs

Cell - hexagonal section of a honey comb storing pollen, nectar and honey

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

Pests, diseases and disorders - Small hive beetle, Tropilaelaps, Varroa, Wax Moth, Tracheal Mites, 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

Emergencies - unhealthy brood, sting, swarm

Hygiene practice - protective clothing, hand washing, personal illness, cuts and wounds

# LANLP41

## Monitor and maintain a honey bee hive

<b>Developed by</b>	Lantra
<b>Version number</b>	1
<b>Date approved</b>	January 2013
<b>Indicative review date</b>	January 2018
<b>Validity</b>	Current
<b>Status</b>	Original
<b>Originating organisation</b>	Lantra
<b>Original URN</b>	LANLP41
<b>Relevant occupations</b>	beekeeper; farmer
<b>Suite</b>	Livestock Production
<b>Key words</b>	brood; comb; beekeeper; colony; worker; drone; queen; pollen; nectar;