LANLP41 SQA Unit Code H5BB 04

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.

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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

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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 hep 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 swam 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

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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

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