

Title	Demonstrate knowledge of, and carry out, hive manipulations for queen bee rearing		
Level	4	Credits	8

Purpose	<p>This unit standard is intended for people working in a queen bee rearing context.</p> <p>People who are credited with this unit standard are able to: demonstrate knowledge of beehive manipulations and nutrition; and carry out hive manipulations for queen bee rearing.</p>
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Classification	Agriculture > Apiculture
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Available grade	Achieved
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Guidance Information

- 1 Legislation and standards relevant to this unit standard includes but is not limited to:
 - Agricultural Compounds and Veterinary Medicines Act 1997;
 - Animal Products Act 1999;
 - Biosecurity Act 1993;
 - Biosecurity (National American Foulbrood Pest Management Strategy) Order 1998;
 - Food Act 2014;
 - Food Standards Code and Food Standard: Tutin in Honey 2016;
 - Health and Safety at Work Act 2015;
 - and any subsequent amendments.
- 2 Definition

Workplace procedures refer to the policies and procedures on safety and operation set down by the employer or organisation.
- 3 References

Frost, Elizabeth, *Queen Bee Breeding: Ag Guide – A Practical Handbook* (NSW Agriculture, 2016).

Goodwin, Mark, *Elimination of American Foulbrood Disease Without The Use of Drugs: A Practical Manual for Beekeepers* (Otaki, New Zealand: National Beekeepers Association of New Zealand Inc., revised edition 2018) (also referred to as *The Beekeeper's Manual*).

Goodwin, Mark and Taylor, Michelle, *Control of Varroa – A Guide for New Zealand Beekeepers* (Wellington, New Zealand: New Zealand Ministry of Agriculture and Forestry, revised edition 2007).

Woodward, David R. *Queen bee: biology, rearing and breeding* (Balclutha, New Zealand: Telford Rural Polytechnic, 2007).

All references are available from Apiculture NZ, PO Box 25207, Wellington 6146, New Zealand or email info@apinz.org.nz ph + 64 4 471 6254.

- 4 For the purposes of assessment:
- evidence for the practical components of this unit standard must be supplied from the workplace;
 - evidence for Outcome 2 must be presented in accordance with workplace procedures.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of beehive manipulations and nutrition.

Performance criteria

- 1.1 Describe procedures for preventing a hive from swarming.
- 1.2 Describe the sequence of steps in order of priority, when producing a nucleus hive.
- 1.3 Develop a procedure for uniting two hives.
- 1.4 Describe the procedure for marking and caging a queen.
- 1.5 Describe the nutritional requirements of the queen bee and the hive.
- Range food groups, supplementary feed, feed balance, royal jelly.
- 1.6 Describe nutritional requirements of cell builder hives.
- Range carbohydrate, protein.
- 1.7 Describe recording procedures.
- Range seasonal apiary manipulations, hive manipulations, outcomes, time frames.

Outcome 2

Carry out hive manipulations for queen bee rearing.

Performance criteria

- 2.1 Carry out a hive division or split.
- 2.2 Unite two hives together.
- 2.3 Carry out the marking and caging process for a queen bee.
- 2.4 Feed a cell builder hive.

2.5 Maintain records.

Planned review date	31 December 2025
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	24 January 2019	31 December 2022
Review	2	24 September 2020	N/A

Consent and Moderation Requirements (CMR) reference	0052
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact the Primary Industry Training Organisation standards@primaryito.ac.nz if you wish to suggest changes to the content of this unit standard.