

Preface

Participants, instructors and assessors should take note of the conditions as laid down in the Award Handbook.

This programme is for guidance and is not to be taken as a rigid syllabus. To indicate the content appropriate to young people with varying degrees of knowledge and experience, it is arranged under three headings: 'For beginners', 'For those with some knowledge' and 'For the more advanced', and participants are free to select as broad or as restricted an aspect of this skill as they wish, but appropriate social and cultural aspects are to be covered.

NATURE

BEE-KEEPING

Introduction

This activity should include as much practical work as possible preferably undertaken with others through a group or club. The social aspects of the programme should be covered in group discussion, and where appropriate, the social implications of food production and of aesthetics should be included. Participants should also show some understanding of the historical development of this activity and its relevance to other groups in a world-wide society. A comparative study should be made of the social behaviour of bees with the social behaviour of man. The historical background to bee-keeping and allied subjects such as mead should indicate cultural development at Gold level.

Young people must recognise that in keeping of bees they undertake responsibility for its well-being. It is essential too, that before acquiring bees they gain sufficient knowledge to look after them properly. **Young people must know what the legal requirements are in New Zealand regarding the keeping of bees.**

For assessment, each individual is to produce evidence of regular application to the activity over the required period. This may take the form of some kind of record, such as a diary, log book or sketch book.

For beginners:

Award participants should:

- 1 Know the reasons underlying the design of the hive used by them.
- 2 Know the natural history of the honey-bee.
- 3 Know the occupants of the hive in summer and in winter.
- 4 Recognise:
 - (a) queen, worker & drone.
 - (b) queen, worker & drone cells.
 - (c) queen, worker and drone cells.
 - (d) brood, honey and pollen cells.
- 5 Know the value of bees to man and their place in nature. Pollination and its importance.
- 6 Know how to subdue bees. Manipulate a stock, or a nucleus.
- 7 Know about the supply of water, and how it is used by the bees.
- 8 Know about food and feeding.
- 9 Have a knowledge of the nature of a swarm.
- 10 Know the definitions or meanings of terms commonly used in bee-keeping.
- 11 Have an outline knowledge of removing and extracting surplus honey.

Skill Section

- 12 Assist in the management of bees through spring, summer and autumn seasons and keep a diary of all operations.

For those with some knowledge:

Award participants should:

- 1 Be able to "nurse" a nucleus up to full stock.
- 2 Manage a colony of bees. Assemble frames and sections and fit foundations.
- 3 Be able to take and hive a swarm. (It will seldom be practicable to include this in a test, but if possible, the instructor should certify that participants have at least given assistance in taking and hiving a swarm).
- 4 Know signs of disease and actions to take.
- 5 Have a knowledge of the principal nectar producing plants in the district, and the sources of both honey and pollen. The times of flowering should be noted in a notebook or diary.
- 6 Understand processing honey and beeswax. Care of honey.
- 7 Observe the plants actually being worked by the bees, noticing the time of day, temperature and weather, and whether gathering nectar or pollen or both.
- 8 Record all the work done in a notebook or diary.

For the more advanced:

Award participants should:

- 1 Have been actively engaged in running an apiary during the stipulated period and should be capable of carrying out all the ordinary manipulations with a fully developed colony of bees.
- 2 Have an elementary knowledge of the natural history of other bees and social wasps.

Award participants should have a knowledge of:

- 3 Setting up an apiary. Desirable sites.
- 4 The features of the modern Langstroth hive as listed in the catalogues.
- 5 Swarm control methods. Transplanting queen cells. Introducing queens.
- 6 Uniting and transferring bees.
- 7 An outline of queen rearing methods.
- 8 Prevention of and dealing with fighting and robbing.
- 9 Diagnosing and treating adult bee diseases.
- 10 Diagnosing brood diseases. Action to take.
- 11 Feeding for emergency and for winter.
- 12 Honey - granulation, fermentation, bottling, labelling.
The nectar-bearing plants and their relation to the nature of the local soil and sub-soil.
Times of flowering recorded as observed.

In addition, Award participants should:

- 14 Observe the behaviour of bees when foraging.
- 15 Learn first aid in cases of severe stinging.
- 16 Appreciate the importance of accurate recording of work and observations.