# Federation of Irish Beekeepers Associations New Education Framework

# Introduction

The New Education framework is a 4-stage system. Stage 1 is a six module Introduction to Beekeeping course, run by individual associations. Participants will be awarded a certificate of attendance which enables them to progress to Stage 2 if they wish.

The New Education Framework is a two-fold system, Stage 1 and the 3 Logbook elements of the framework are designed to promote an experiential learning experience with an emphasis on the practical elements of beekeeping. The logbook system is Association lead relying on a network of experienced tutors to provide the learning environment.

Having completed Stage 2, students have the option to engage with study modules which examine elements of beekeeping at a higher level. There will be seven study modules available overall, throughout the initial phase of the New Framework.

# Stage 1 of the New Education Framework

## Introduction to Beekeeping

The Introduction to Beekeeping course contains 6 modules which can be delivered over any prescribed period.

- 1. Natural History of the Honeybee
- 2. The Honeybee Colony
- 3. Products of the Hive
- 4. Bee Keeping Equipment
- 5. Honeybee Health
- 6. Bees in the Environment
- This is an introduction to beekeeping and does not involve an apiary visit or handling of live bees.
- Each module is designed to be 50 minutes in duration with a question-and-answer session following it. This does not mean that questions cannot be taken during the session. Each module should be presented in power point format (or other accessible format) with a minimum of 10 slides per module.
- A Certificate of Attendance is available from the Federation for each association to award individually to persons who have attended this course. It is up to each association to determine the location, timing, and cost of the course for participants.
- Participants do not have to be a member of FIBKA to attend this course. This course is designed to be an introduction to beekeeping and to prepare participants to move forward to Stage 2 of the New Education Framework if they so wish.
- There is no exam for this stage, participant who wish to progress to Stage 2 must have a certificate of attendance.

Stage 1 New Education Framework Aug 2022 The Syllabus and content outlined below are the minimum requirements for each module. Individual tutors are free to add any additional material relevant to the module they feel appropriate.

# Module 1

## Natural History of the Honeybee

- A short history of beekeeping. Man's long relationship with honeybees, prehistoric honey hunters, other types of hives, skeps, natural hives
- Bees and wasps.
   The differences, and similarities between the two spices, eusocial insect behaviours
- How and what bees eat.
   A bee's relationship with flowers and plants, nectar, and pollen. A short look at how honeybees feed and how pollination occurs, how bees collect nectar and pollen and its value to the colony.
- How the seasonal changes affect bees.
   The natural build-up of a colony in spring through to the natural preparation of a colony for winter. The changing number of bees and the behaviours of the casts at each time of year.
- A look at the different plants and their availability throughout the year,
   This can be tailored to the location. The value of these plants to beekeepers and the foraging habits of honeybees

# Module 2

## The Honeybee Colony

- A look at who lives in the colony and the work they do.
   An introduction to workers, drones and queens, the physical differences and how to identify each caste and the role they play in the colony.
- The life cycles of the queen, workers, and drones.
   With a short introduction to the gestation periods of each caste and why knowing this is important.
- Healthy and unhealthy brood patterns.
   Images of healthy brood at different stages and a look at some unhealthy brood patterns.
- How a queen becomes a queen.
   A short introduction to what makes a queen with and image of a queen cell
- The colony and the Beekeeper
   An Introduction to opening a hive and what to look for, how to keep good records and their importance

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## Module 3

## Products of the Hive

1. Honey

An introduction to the process of how bees collect nectar, how it is ripened and stored in the hive, plants that are good for nectar collection

2. Humans and Honey

Honey in the jar, a very short look at processing honey and what makes a good jar of honey for human consumption.

3. Pollen

An introduction to how and why bees collect pollen, the importance of pollen to bees in rearing brood, the relationship between flowers and bees, what plants are good for pollen

- How and why bees make wax
   The uses of wax in the hive, the cost to the bees and the impulses to make wax
- Why and how bees collect propolis
   How bees use propolis in the hive, the propolis envelope and human uses for propolis

## Module 4

#### **Beekeeping Equipment**

- Basic personal protection beekeeping equipment.
   What makes a good bee suit? Choosing gloves and keeping yourself safe.
- The hive tool and smoker
   A look at hives tools and smokers, how and when to use them.
- 3. A Hive

A look at the different elements of a commonly used hive type, how they work and why they are needed, from the roof to the floor.

- The different types of hives available
   The pros and cons and what type might be best for you.
- Bee Space
   An explanation of bee spacing and the implications of the different hive types.

# Module 5

#### Honeybee Health

- Heathy Honeybees
   What healthy honeybees and healthy honeybee brood looks like
- 2. Good Colony Management The importance of hygiene and good colony management and what is involved with each.
- A short introduction to Varroa
   A look at varroa, what it does and a short explanation of how it can be managed
- 4. Pests and diseases of the beehive A short overview of the other main pests and diseases of the honeybee colony, and how they can be manged (*this is not a comprehensive approach to pests and diseases in the honeybee colony it is only meant to be a very brief introduction*)
- An integrated approach to happy healthy honeybees
   A look at an integrated approach to the health of a honeybee colony, good colony management, hygiene, keeping healthy bees, monitoring for disease, testing for disease, good records, thinking of the colony as a complete unit.

# Module 6

## Bees and the Environment

- Honeybees and other bees in Ireland
   A look at the honeybee as only one of many bees in Ireland, the native Irish Honeybee, to
   include a short look at the different lifestyles of Bumble bees and solitary bees.
- 2. Bees as pollinators

What is pollination, the value to the farmer, grower and environment. A short look at how bees pollinate plants and the relationship between plants and bees, how different bees pollinate different plant species, Crops in Ireland that require insect pollination

- The state of pollinator populations in Ireland The native Irish Honeybee, native bumble bee species and other populations, the effects of invasive species, habitat destruction and changing farming practices
- What the public can do to help bees and pollinators
   Pollinator friendly plants, use of pesticides, education and awareness, citizen scientist projects, report habitat destruction