Curious about bees,
the secrets of the hive, pollination,
or interested in beekeeping?

There is a beekeeping association on your doorstep.

Carlisle Beekeepers Association

Carlisle Beekeepers Association was established in 1931.
The association aims to
promote and further the craft of beekeeping,
and advance the education of beekeepers in
maintaining the health of their colonies.

Today our aims are much the same as they were then.

We currently have around 50 members from
North Cumbria and Southern Scotland.

Summer Meetings

Carlisle Beekeepers Association have a
teaching apiary used for summer meetings.

We also run a beginners courses
and help new beekeepers to get started.

The association encourages all members
to train for and enter the
BBKA practical assessment exam.

Winter Meetings

Winter
meetings are held in
Houghton Wildlife Trust

The winter programme includes talks,
demonstrations and workshops
on various aspects of the craft.

The association holds an annual honey show,
with many members also competing
in the Cumbria County Honey Show.

Public Relations

Cumbria Beekeepers Association aims to
educate the public of the importance of bees
the environment and the value of bees
to agriculture in their role as pollinators.

The association attends local shows
and provides displays on all aspects of beekeeping.

Carlisle Beekeepers Association

If you would like to know more
about keeping bees,
or need any more information
please contact:

Chairman

Robin MacLeod,
The Shielding,
Capon Tree Road,
Brampton,
CA8 1QL

Tel ~07732 456015
randjmacleod@btinternet.com

Secretary

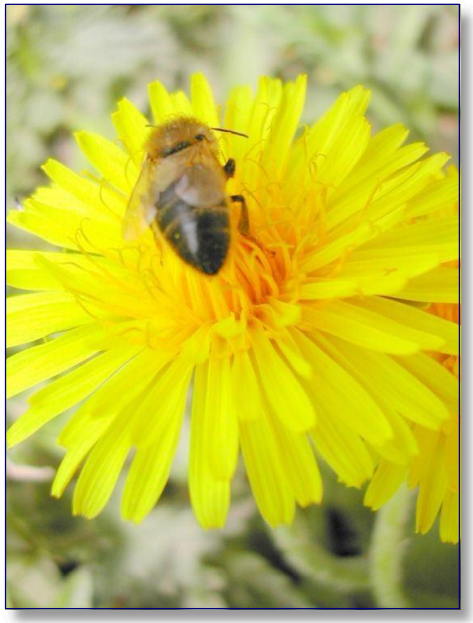
Emma Keir

Tel ~ 016973 52114

carlisle.beekeepers@gmail.com

www.carlisle-beekeepers.co.uk

Carlisle Beekeepers Association



a local branch of

Cumbria Beekeepers Association

members of

Honey Bee Social Structure

Bees live in a large social family group, with three interdependent castes of bees in each hive; each of the castes is essential to the successful existence of the colony.

The Queen

The queen is the largest, and only fertile female bee in the colony; her purpose is to lay eggs and keep the hive together. She mates with 5-10 drones on a mating flight shortly after she has emerged. The queen will then spend the majority of her life laying up to 1500 eggs per day.

The queen lives for about 2-4 years, during which time she will be looked after worker bees. The workers clean and feed the queen, and in exchange receive queen substance from the queen. It is the queen substance that keeps the colony working well together. A hive that loses its queen will become disorganised, may become aggressive, and unless it can quickly raise another queen will soon die out.

The Worker

The worker bees are the other female caste; they do not normally lay eggs, and if they do they are infertile. Worker bees live for about 6 weeks in the summer, and perform a range of tasks in their short life.

The first role of the worker bee is hive nurse; they start by cleaning cells, and then move onto feeding the queen, drones and brood. Later workers progress to receiving nectar and pollen from foraging bees, building honeycomb and looking after the hive. Workers then become hive guards, and last of all go out foraging for the hive.

Bees have a long proboscis which the foraging workers use to collect nectar, pollen and water for the colony. These raw materials are brought back to the hive, and processed by young worker bees.

Carlisle Beekeepers Association

The Drone

The drones are stingless male bees; they are larger than workers, but shorter than the queen. The drone's body is much rounder, and it has much large eyes. Hives would normally have a few hundred drones, but hives with no drones often appear agitated. The drone appears to have a single main function, mating with the queen, but they also seem to have a calming affect on the colony.

The Beehive

Bees in the natural state will set up a hive in a hollow tree or other similar space. The bees want a dry and preferably draft free home, and one their predators can not get into. Man has been making artificial bee hives for over 300 years, but the modern bee hive dates from the early 19th century, and in particular the work of the Reverend L L Langstroth. Beekeepers had developed hives before this, but he developed the moveable frame system which is still used today.

The Modern Hive

The hive contains up to 60,000 bees, each having a role in the smooth running of the hive, which is divided into two sections – the honey supers, on top and the brood chamber, or nursery, underneath.

Honey Super

The honey super contains 10 frames on which the bees build honeycomb to store honey The frames can be removed one at a time when the comb is full of honey.

Queen Excluder

The queen excluder is a mesh with holes that allow the worker bees through to the honey supers, but keeps the queen in the brood chamber below.

Brood Chamber

The brood chamber also contains honeycomb, but its frames are usually deeper than the honey super and are used for egg laying and brood rearing, plus the bees keep pollen and some honey close to the centre of the nest.

In the Hive

Hive temperature is maintained at about 34°C. The bees eat more honey to provide energy to warm themselves in cooler times, and in warmer weather, they bring water into the hive in their honey stomachs and use their wings to fan moisture off the honeycomb to reduce the temperature.

Bees zealously guard their hives against intruders, with the older workers doing guard duty at the hive entrance. The main intruders are other insects, including bees from other hives that may be short of honey, and, of course, beekeepers.