MARCH 2011

# Taranaki Beekeeping Club

#### WHAT'S ON IN TARANAKI

Greetings! We are having a good spell of settled weather at the moment with lots of activity from the hives but unfortunately at this time of year, most of the summer flowering plants have done their dash earlier and there is not a lot to collect but nectar is still trickling in. Now, would be an ideal time to harvest your honey crop.

Choose a fine warm sunny day with little or no wind to break into the hive if you are not using "escape boards". The escape board is the easiest and most convenient way to harvest honey if it is all capped. Bees are very reluctant to leave unripe honey and you will not get a 'bee free' super if there are some frames with nectar there. This means that if you are going to use an escape board you will have to remove all uncapped honey from the super to the lower box. You could take capped frames from a lower box or replace the nectar frames with empty combs. Then your escape board should clear the honey of bees in 24 hours. The boards should ideally have two bee escapes in them, as one may become blocked and non-functional. Leave the boards only in place for 24 hrs. as bees have a knack of finding a way back to their stores and the scent will attract wasps and other pests.

Have all the gear you are going to need for the harvest beside the hive <u>before</u> you open it, with the smoker going. Be as quick as you can, especially if you have more than one hive, as robbing will quickly ensue, especially if you leave any uncovered honey in the vicinity. If you are only taking combs from the super that contain capped honey, push the others together into the centre of the super and fill the outside spaces with drawn comb.

In general the two bottom boxes are for winter stores for the colony so don't take any frames from them unless absolutely necessary. These are their winter stores and have to keep the colony alive until about August.

Remember before you take honey off, check for disease, check the quantity of pollen available for the winter and if you are taking off two or three honey supers from the hive, make sure that the reduced hive size is big enough to house all the bees overnight.

When it is a strong colony, bees may become overcrowded and form large clusters on the outside of the hive, with large numbers dying of exposure as the temperatures fall overnight. The Commercial Beekeepers have tapped into this resource and collection of surplus bees at this time of the year forms the basis of our thriving 'Package Bees' enterprise.

Remember to keep combs covered at all times and

extract as soon as possible after removal from the hive, as the honey is warm and will flow from the combs

better and faster. If you are straining honey in a muslin bag to remove wax and debris, keep it well housed, away from bees and ants and mop up any spillage as soon as it occurs. Don't try to extract in the carport or open garage as you are inviting trouble.



<u>Next club meeting</u> 21st March 2011

In the PLUNKET ROOMS

6.30pm

Next to New World Supermarket

Third Monday of every month

Honey will keep for a very

long time but only if you keep it in airtight containers. Different types of honey will granulate with different sized crystals, but you can crystallise your honey to a fine paste if you prefer it that way. (It then doesn't fall off the knife so readily.)

Monday 21<sup>st</sup>. is the next meeting of the Bee Club in the Plunket Rooms at 6.30pm. and we will be discussing the harvest, quality and quantity, and what we should be doing and what we should have done in the next three weeks and last three weeks.

We will also fix a time for the honey harvest from the Club Hives. Adrian.

#### How to attract honeybees

To encourage feral bees and bees from neighbouring hives, plant or encourage bee-friendly trees and shrubs on waterway margins, in windbreaks, along field edges and roadsides and in native scrub and bush.

Fortunately a number of shelter and erosion control plants have abundant flowers to feed bees so selecting multi-purpose plants is smart farming.

To find out what plants are best for bees in your region, go to the website: http://www. fedfarm.org.nz/treesforbees

To find out where to source the plants on this list, go to http:// www.plantfinder.co.nz or ask at your local nursery.



### **About Honey**

Since the earliest of days honey has been a source of food and energy. From the first food-gatherers to the ancient civilizations of the Egyptians, Greeks and Romans - records show the value of the bees and their honey.

Honey sold in shops comes from honeybees. The honeybee (Apis mellifera) was introduced to Australia in 1810 by Samuel Marsden who imported an unknown number of colonies from England although it is also reported that he brought the two (2) hives from Rio De Janerio not England. The early settlers attempted to use the honeybees for pollination of fruit trees but the first attempts to establish bee colonies failed. A second successful introduction was made in 1822.

The honeybee is a most amazing insect. Its family (hive) consists of:

- workers
- drones
- a Queen Bee

Bees collect nectar, pollen and water each day to take back to the hive so that future generations can live. The raw nectar comes from flowers. They mix this with secretions from their glands, thereby transforming it and after it is deposited in the comb, it ripens into honey.

Honey is primarily of vegetable origin. Its sugars are formed by a mixture of the sun, water and carbon dioxide in the air. Bees produce:

- honey to provide food reserves for the hive
- beeswax to make honeycomb (traditionally used for candles and cosmetics
- pollen to nurture their young (which when dried and preserved is a valuable nutrient
- propolis to seal their hive from wind and rain (which can be used as an antiseptic)
- bee venom (which can be used to relieve arthritic and rheumatic pains).

#### WHY HONEY?

Honey is a quick, safe and natural energy giver because its simple sugars are quickly absorbed into the blood stream. Honey contains many vitamins and minerals.

- Honey is made up of:
  - natural sugars 80% (mainly levulose, dextrose and glucose)
  - moisture 17%
  - mineral traces 3%

There are many recipes which use honey for flavour - there are probably more than 100 different ways honey can add flavour to a food.

The bee's value however is not confined to making honey. Honeybees also help our fruit and vegetables grow. Without bees trees and flowers may not make fruit, nuts or seeds and there would be no honey. Bees, orchards and market gardens

#### **Beekeeping Supplies**

Stephen & Fiona Bees-R-Us 685 Uruti Road, RD48 Urenui 4378, Taranaki, New Zealand Tel: +64 (0)6 752 6860 Email: bees@beesrus.co.nz are an essential part of our food chain.

When the bee gathers nectar her body becomes dusted with pollen. As she moves from flower to flower the pollen passes from male to female stigma and cross-pollination (or fertilization) takes place which leads to new seeds and plant regeneration.

# The Gathering

Honeybees need nectar, pollen and water to feed the hive and make their honey.

Beekeepers help the bees by moving the hives from time to time into areas where there is a good source of nectar and pollen. For example, where there are lots of flowers or blossoms as in an orchard or forest. Once the hives are in place some of the worker bees go out scouting. This is usually done in a radius of about one kilometre from the hives. The scouts then report back to the hive to indicate to the other bees where the nectar and pollen source is to be found. Sometimes, honeybees may have to fly several kilometres from their home to gather food supplies.

Bees cannot talk. Instead their language is one of vibration and aromas. For example, to indicate distance to other bees in the hive, the scout bee uses a loud buzz and a demonstration dance. Wings vibrating swiftly as the bee dances in a circle indicate that the find is within 100 metres of the hive. If the source is further away, the dance will be in the shape of a figure eight.

The direction in which the scout moves and at what speed also helps communicate to the others where the source is located.

Once the workers know where to go they set out to gather nectar and pollen, from sunrise to sunset. Busy bees have great stamina and carry big weights.

The nectar is carried in a special honey stomach, while the pollen is carried in separate pollen baskets on the hind legs.

## Making the Honey

Bees need two different kinds of food. One is honey made from nectar, the sugary juice that collects in the heart of the flowers. The other comes from the anthers of flowers which contain small grains called pollen, which differ from flower to flower.

The nectar provides the bees with honey for energy while the pollen is a source of protein. All the vitamins the bees need are contained in the various nectars and pollens. As the bee crawls inside blossoms in search of nectar, pollen sticks to small hairs that cover its body. When the bees grooms itself it moves the pollen to carry-bags on its hind legs.



The nectar is sucked from the flower and stored in a special honey stomach. When the bee is full she returns to the hive and passes the nectar by mouth to the honey making bees. This mixture is then transferred to a honey cell in the hive. The mixture then slowly converts into honey as its moisture content drops from about 70% in the nectar to less than 18% in the honey.