December 2023. Report from Fermanagh Beekeepers' Association

December has been a quiet month in beekeeping in Fermanagh. The main worries seem to have been ensuring that hives were withstanding the onslaughts of heavy rain, with more frequently repeated inspections of crown boards, and protecting hives from pine martin attack. The pleasure and relief when we see fresh cappings underneath the open mesh floors, which signify that the bees are still alive, gives a bright spot in the middle of what can often be depressing and discouraging weather. The progress of the cluster within the hive can be observed from the position of the debris underneath.

Winter buds on quince japonica

Vibernum in full bloom

As we move into January, the usual checks, mentioned last month, must be carried out, with particular attention being paid to hefting as the demands of increased brood rearing impact on the stores in the hive. The queen will be gradually increasing her rate of laying eggs which hatch into tiny larvae and worker bees will be using the pollen stored in the hive to manufacture brood food in their glands as they visit the cells containing the ever-hungry larvae with each individual larva being fed, on average, every 43 seconds! This means an increasing demand on both honey and pollen. Bees, in common with other pollinating insects (many of whom do not store pollen), much prefer fresh pollen so we should encourage all our neighbours and friends to plant as many spring bulbs and early flowering shrubs as possible. If hives feel light in comparison with pre-Christmas levels, then fondant can be fed. It can be quickly placed either over a feed hole in the crown board, protected by cling rap or a shallow plastic container, or directly over the brood nest and under the crownboard as a flat pate. In either case, ensure that the fondant is already shaped and flattened before opening the hive. Bees should not be asked to deal with liquid feed at this cold time of year as it requires bees to separate from the heat of the brood nest for longer periods and it requires energy to make it ready for consumption or storage. I like to be sure that my bees really do need fondant before I give it to them. I prefer that they should be using up their winter stores, leaving cells free for the queen to lay in. As I re-read this, I note the word 'increasing' is repeated many times, demonstrating the exponential growth of life in our apiaries early in the year.

Storing of honey was discussed last month and the process of getting honey from its crystallised state into liquid form so that it can be jarred ready for distribution, either for use in the home, or as gifts for friends or for sale, is the next step. The honey has to be heated and it is simple to set up an old chest freezer with a thermostatically controlled heating system of some type. The freezer can be divided into smaller compartments if needed using sheets of polystyrene foam to give the needed volume. The thermostat is very important. If honey is heated to too high a temperature it loses much of its antibacterial and antioxidant properties. According to research done in the University of Tennessee, if honey heated up to 37°C it loses nearly 200 components, some of which are antibacterial. As the temperature increases, more beneficial components are destroyed. There is a substance, HMF (for the masochists amongst us, full name hydroxymethylfurfural) which increases as honey is heated and its measurement can be used as a method of determining the temperatures to which honey has been heated (usually in commercial treatment of honey). It is not harmful in itself but indicates the quality of the honey as a valuable food source. My own experience of overheating was salutary. One winter, I had used the heating unit and thermostat in a second freezer to melt and strain wax, temperature setting over 63°C. I forgot to change the thermostat to the lower temperature when I transferred it back to my honey heater and when I checked I had 25kg of carmellised honey. An expensive mistake I never repeated.

Once the heating cabinet has been prepared, the bucket/s of honey can be opened and any dross which has come to the top during the crystallisation process can be scraped off. The bucket is sealed again, placed in the cabinet and left until all the crystals have melted. My own preference is to set the thermostat at 35°C (enzymes will not be destroyed at this temperature) and leave the bucket of honey for about 4 days until all the honey has become liquid. Another option is to have the thermostat set in the low 50°sC but only leave it for a couple of days. Liquifying the honey takes patience and the next step must not be started until all the crystals have disappeared.

A settling tank takes much of the labour out of the next stages. It is so called because it is tall and slim, ideal for the rapid rise of any air bubbles through the warm honey, and it has a good quality tap at the bottom for ease of filling honey jars. The tank must be sterilised and dry before it is used. The honey is strained through a very fine cloth (again clean) from the bucket into the settling tank, where it is left in a warm place for at least 2 days for the air bubbles to rise to the top. My warm place is the freezer with the thermostat lowered to around 20°C. The air bubbles will appear on the surface of the honey and to prevent as much of this as possible from getting into the jars, carefully put some cling wrap on top of it before jarring the honey.

Jars for bottling should be sterilised and warm and the room chosen clean and dust (and pet hair!) free. When filling, hold the jar at an angle so that the warm honey runs down the side, collecting as little air as possible. When full, the tap will give an instant cut off, reducing stickiness. Put the lid on immediately and don't forget that lids also should be flawless. If the honey is for sale through a commercial outlet, check the weight every so often. Lastly the labels are added and they must, if the honey is for sale, by law, carry certain information. They must have the word 'Honey', country of origin, name and address of the producer (house number and postcode will suffice), lot number, best before date and weight in metric. This latter must be of a certain size e.g. that for 200g – 1kg is 4mm high. In addition you may include the type of honey if it contains at least 75% of specified type and the local area as a selling point –'buy local' being the mantra. One of the most attractive names given to honey was devised by one of our most established beekeepers, 'Hedgerow Honey,' which evokes images of our Fermanagh countryside wonderfully.

We are producing a valuable and desirable food and we want it to be as attractive and perfect as possible.

Vibernum in full bloom

If, after reading the above and realising that the work of producing honey is an all year round activity, you think that you would enjoy beekeeping, then consider joining the 'Introduction to Beekeeping' course, tutored by Jackie Barry, which is starting in February. For more details, visit the Cafre web-site https://www.cafre.ac.uk/ , type 'beekeeping' in the search box and this will lead to a full description of the course. The course gives a basic knowledge of equipment needed, the honeybee itself and how to care for it, including the practical element of handling bees.

The next meeting of Fermanagh Beekeepers' Association is the Annual General Meeting on Thursday 25th January 2024 at 7.00pm in the Enniskillen Hotel. Please note the change in time and venue. This will be followed by the Annual Dinner at 8.00pm. Those members and their friends wishing to attend the dinner should contact Lorraine with their food choices for starter, main course and dessert before January 18th .