



Le Butineur

Pollinium, créateur de biodiversité



30

- Beehive history -

Dear honey

Newsletter of bees of ADELAC

Winter 2020

Committed to protect biodiversity, ADELAC invests in sponsorship of bees. Come and get an inside peek of the incredible life of foraging bees. If you are a nature lover, you will certainly enjoy it.



- Beehive history -

When bees are in slow motion, beekeepers follow suit!

Winter is, undoubtedly, the easiest season for a beekeeper. His winter motto may be: Do not disturb!

Since bees need tranquillity to face these cold and wet months, a beekeeper will only inspect the hive from a distance. This does not mean, however, that he too can go into total hibernation even if the temptation is great. Because there is always something to do to prepare for the spring.

He may need to repair damaged beehives, clean and disinfect his equipment, inspect the frames that were built to remove the unwanted wax or propolis growths, tidy up ... such tasks are probably not so enjoyable, but they will make things easier in the spring.

Among these winter duties, there is one that may become particularly rewarding later on : it consists of garnishing bare frames with sheets of embossed wax. The place will quickly fill with the sweet smell of heated wax, which will remind the bee-



© PetarPaunchev - AdobeStock

keeper of the pleasant smell of the beehive during the hottest days of the year when he opens the hive in direct sunlight.

It is such an exhilarating and motivating memory.



© Nitr - AdobeStock

Is honey too expensive? Beside its healing properties, it is hard work, both for the bees and the beekeeper, so we can better understand why this 100% natural product is sold at a high price.

Did you know that to produce a kilogram of honey bees must visit between 7 and 7.5 million flowers and travel 400 000 kilometres, which is equal to the distance from the Earth to the Moon? Or are you aware that the French production of honey is declining? It has gone down from 32 000 tonnes in 1995 to 10 000 tonnes in 2019. The reason - the use of pesticides, the lesser presence of flowers, pollution, the development of predators and parasites, bad weather conditions ... The consequence: In order to survive, the beekeepers have to adapt their prices and count on a few exceptional years such as the summer of 2020.

Because of its taste and nutritional qualities since the dawn of time, compare to other food, honey really stands apart.



– Bees and men –

A necessary "diapause"

Each winter, bees and the entire hive are at rest. Contrary to popular belief, bees do not sleep during winter - they save their strength. During the cold months, they consume the honey they put aside during the summer months. They organize collectively to regulate the temperature of the colony which is maintained between 20 °C and 35 °C. Winter bees have a longer lifespan which will allow them to pass the baton on to new generations of worker bees in spring. The queen stops laying, she too is restoring her strength. The males, whose trade is not essential in winter, are chased away from the hive.

This phase of developmental arrest during unfavourable times is called diapause. It is an

adaptive mechanism that makes it possible to resist and survive or synchronize with the cycle of the seasons when the environment becomes harsh.

How about us ? Are we wise enough to take a break and rest? It doesn't look like it. We need a global pandemic to impose a kind of diapause on us in our frantic race for growth, profit and more! We need to save our strength for the "world after"!

Henri Duchemin,

a beekeeper, a sociologist and a founder of Mèlilot Consulting
For more info, please click on <http://melilotconsulting.com>



© kosolovsky - AdobeStock

– Beehive history –

Life... frames....

There are usually nine frames in a classic hive. Bees use them to raise their young, store their provisions and just live. Initially, these frames are simple rectangles of wood which are as big as the interior of the hive. The beekeeper will add thin stainless steel threads to them which will be used to hold a sheet of embossed wax. To do this, he will slightly reheat the wires, most often by means of an electric current, and the sheet, which comes above, is embedded on the wires. Once in the hive, the bees

will spread the wax to create their honeycombs.

In nature, bees obviously do not have these frames because they only serve to facilitate the work of the beekeeper. As they are removable, they allow him to control the colony without destroying its work. If they did not exist, the swarm would produce its own, in a rather oval shape.



© Antony Yorck Studio - AdobeStock

Brief

Proverbs and sayings

« *To the sick, honey is bitter* »

Seneca

ODOURS

An American study, recently published in Science Advances, sheds light on the origin of the olfactory signature specific to each hive. We knew that each colony has its own scent which allows it to repel intruders at the entrance to the hive. We now know that it is the microbiome, intestinal bacterial flora of bees, which influences the cocktail of cuticular hydrocarbons exhaled as an olfactory signature.



Necotinoids continued ...

On 27 October, the Senate finally voted for the return of necotinoids, the "bee-killer". On 30th, the bill was adopted by the National Assembly. Article 1 exceptionally allows sugar beet growers to use seeds treated with necotinoids until 2023 despite the ban imposed in 2018.