Beekeeping Report – 10 November 2026

Thank you for your interest in the Dark Honey Bee.

With regard to the Dark Honey Bee, it must be acknowledged that in French-speaking Switzerland, many beekeepers have gradually, and in some cases completely, replaced it, often without sufficiently well-founded reasons. This is because high honey production and a good harvest do not really depend on the bee subspecies itself, but rather on the strength and size of the colony, the availability of forage resources and, above all, weather conditions, which play one of the most important roles. Misconceptions, sometimes questionable claims, and the attraction of importing non-native subspecies, together with artificial selection, have contributed significantly to this development.

Regarding the current situation of beekeeping, I do not necessarily share the alarmist view that the sector is experiencing a general decline. In my opinion, a significant proportion of the difficulties encountered are more closely related to management problems, competition between apiaries and a lack of knowledge-sharing. Some beekeepers have sometimes kept their methods as closely guarded secrets, particularly for commercial reasons, with the aim of selling training courses relating to beekeeping and apiary management.

It is also important to distinguish between the actual decline of a colony and the natural biological life cycle of the honey bee. Worker bees have a relatively short lifespan, which varies according to the season and their function. They are continuously replaced by new generations resulting from successive rounds of egg-laying. Nevertheless, some people still question the disappearance of worker bees without always taking this natural renewal process into account. At times, they even compare their lifespan with that of a queen, which can live for several years.

Regular monitoring of colonies is obviously essential, as is taking action when predators or parasites threaten their balance. When appropriate care is provided and colonies have sufficient food resources, their development and survival should not present insurmountable difficulties.

In Switzerland, the discussion surrounding the decline of bees has also contributed to an increase in the number of apiaries being established. This development has sometimes been encouraged by commercial interests, particularly the sale of beekeeping equipment, but also by the desire to produce and harvest more honey.

However, this increase in the number of colonies has an important consequence: competition for food resources between bees. When the density of apiaries becomes excessive in relation to the available nectar and pollen resources, colonies may struggle to build up sufficient reserves to ensure their own survival. Professional beekeepers are also affected by this issue. They must additionally contend with competition from hobbyist beekeepers, most of whom, in many cases, already have another profession or an independent source of income.

Added to this are questions relating to the management of our environment and forests. Nature conservation should not be confused with the systematic prevention of human intervention in natural environments. Our forests require thoughtful, sustainable and appropriate management, which calls for the involvement of qualified professionals.

Certain restrictions and opposition to forestry work have sometimes made this management more difficult, even though diverse and properly maintained forests can provide habitats and essential resources for numerous species, including pollinators.

In some regions, bees therefore depend primarily on the resources provided by agricultural crops, meadows and forest areas that still retain sufficient diversity. The availability of these resources depends in particular on agricultural practices, mowing schedules and plant diversity. Sensible meadow management, allowing plants sufficient time to flower, is therefore important for pollinators.

Finally, I believe there is a genuine problem concerning the distribution of responsibilities and interests in the management of Switzerland's natural resources, particularly with regard to timber and forests. Certain decisions and restrictions can limit the ability of professionals to carry out their work, even though forestry management requires knowledge, experience and work adapted to the realities of the local environment.

Regarding Breeding and Possible Selection

Another important aspect deserves attention: bee behaviour, and more specifically aggressiveness, which can sometimes change within a colony or an apiary.

One should not simply accept a colony of bees just because a beekeeper tells you that their bees are gentler than everyone else's. I have heard precisely this kind of statement reported in my own neighbourhood. Of course, improvements can be made within one's own apiary by managing colonies according to their behaviour, selecting desirable characteristics and gradually replacing queens whose characteristics are unsuitable.

It is important to understand that bee aggressiveness is not necessarily linked to a particular subspecies. It depends on several factors, including genetics, the origin of the queens and the drones with which they have mated, as well as environmental conditions and beekeeping practices. Crossbreeding between different populations can lead to variations in behaviour, including an increase in defensive behaviour in certain colonies.

Genetics therefore plays an essential role. A queen passes on a significant proportion of her colony's behavioural characteristics, while the drones involved in her fertilisation also contribute to the genetic makeup of future worker bees. This is why the origin of breeding stock should not be overlooked and why the characteristics of colonies should be carefully considered when carrying out any selection.

It is also important to consider that external factors can intensify defensive reactions: a lack of food resources, unfavourable weather conditions, repeated disturbance of the apiary, pressure from predators or parasites, as well as the general condition of the colony. A particularly aggressive colony is therefore not necessarily the result of poor genetic selection.

When breeding bees and preserving different bee populations, particular attention should also be paid to the way artificial swarms are formed and new queens are introduced.

For example, when creating a package of bees from a Carniolan colony (Carnica) in order to introduce a young, newly mated queen from another population, such as a Dark Honey Bee originating from St. Gallen, certain precautions can considerably improve the chances of success.

In particular, it is preferable to collect a substantial proportion of very young bees, together with emerging brood and sealed brood that is close to hatching. Young worker bees, which have not yet developed such a strong attachment to their original colony and its organisation, are generally more receptive to accepting a new queen and gradually integrating into a new population. The emergence of new workers also helps to establish cohesion within the colony over time, through the chemical signals and pheromones associated with each new generation.

Conversely, creating a package containing bees of very different ages and origins, particularly when it includes a large proportion of foragers, can make the integration of a new queen more difficult. These bees already have established landmarks, habits and a well-developed social organisation. This can lead to difficulties in integration and cohesion between the different groups of bees, even when these processes are not necessarily visible to the naked eye.

When carrying out a transition or replacing a queen, particularly as part of a programme to preserve and maintain a particular bee population, it may also be beneficial to move the colony and make it queenless before introducing the new queen. When carried out correctly and when the conditions for acceptance are favourable, this method can improve the chances of success. However, any existing queen cells and the biological condition of the colony must be taken into account. The outcome depends in particular on the method used, the age of the bees and the quality of the introduced queen.

This approach can be particularly interesting when changing from one bee population to another, for example from Carniolan bees to the Dark Honey Bee. In this case, creating a package consisting mainly of very young bees collected from brood frames is an interesting approach. Young worker bees are generally found on frames containing brood, whereas foragers tend to gather on the outer frames, near the hive entrances and, when supers are installed, in the honey supers as well.

It is therefore important to be able to identify the different age groups and categories of bees within a colony in order to collect bees in a way that is appropriate to the intended objective.

In my opinion, breeding and selection should never be limited solely to the pursuit of higher honey production. They should also take into account gentleness, resilience, adaptation to local climatic conditions, development capacity and the overall behaviour of colonies.

Preserving the Dark Honey Bee requires, in particular, carefully managed mating and a selection process that respects its biological characteristics and its adaptation to our environment.

The objective should not be to systematically seek a different or supposedly superior bee, but rather to preserve and improve the qualities of our native populations within specifically targeted geographical areas, while avoiding damage to their genetic heritage.

One example worth following is the canton of St. Gallen, as well as Savoy in neighbouring France. Proper management cannot be achieved without guidance, information and advice, together with the establishment of clearly defined and targeted conservation zones.

Furthermore, regardless of how gentle your colonies are considered to be, I strongly recommend that you never take unnecessary risks when working at the apiary. Some people occasionally inspect their colonies without protective equipment because they believe their bees are sufficiently docile. I strongly advise against this practice. The intention is certainly not to spread fear, but simply to encourage caution and common sense.

A single bee sting, depending on where it occurs, can sometimes have significant consequences, regardless of whether you are an experienced beekeeper or not. One aspect that is not always given sufficient attention is precisely the location of the sting, which can play a considerable role in the body's reaction and immune response, particularly at the level of antibodies.

Beekeeping experience should never lead us to underestimate the risks. Caution remains essential, even when dealing with colonies renowned for their gentleness.

Conclusion on the Management of Natural Environments

Nature conservation does not simply mean preventing all human intervention. Above all, it requires a thorough understanding of natural balances, together with responsible, sensible and sustainable management of the resources and environments around us. In my opinion, genuine environmental protection lies in finding the right balance between preserving biodiversity and carrying out thoughtful human intervention.

Nature conservation does not simply mean preventing all human intervention. It also involves understanding natural balances and ensuring responsible management of the resources and environments around us. We should also remember that excessive numbers of managed honey bee colonies can compete with wild bees for food resources.

Regarding the Coexistence of Managed Honey Bees and Wild Bees

It is also important to consider the coexistence of our managed honey bee (Apis mellifera) and the numerous native wild bee species found in Switzerland. Our country is home to more than 600 species of wild bees, including bumblebees, mason bees, mining bees and many other solitary bees. All of them play an essential role in pollinating our natural flora and certain agricultural crops.

Competition for food can indeed arise when the density of apiaries becomes too high in relation to the available floral resources. Due to their numbers and foraging capacity, managed honey bees can then exert pressure on the floral resources that are also required by certain wild bee species, particularly specialised species. This situation deserves particular attention in sensitive natural environments and in areas where food resources are limited.

The aim is not to set beekeeping against nature conservation, but rather to find a reasonable balance between the number of colonies kept and the actual capacity of the environment to provide sufficient food for them.

Some examples of wild bees found in Switzerland:

- Bumblebees (Bombus): including earth bumblebees, field bumblebees, red-tailed bumblebees and garden bumblebees.
- Mining bees (Andrena): solitary bees, often nesting in the ground.
- Mason bees (Osmia): including the red mason bee.
- Leafcutter bees (Megachile): bees that cut pieces of leaves for nest construction.
- Furrow bees (Halictus and Lasioglossum): small solitary bees or species with relatively simple social organisation.
- Silk bees (Colletes): ground-nesting bees, some of which specialise in particular flowering plants.
- Masked bees (Hylaeus): small wild bees with characteristic pale facial markings.

- Digger bees (Anthophora): wild bees often recognisable by their rapid flight.
- Carpenter bees (Xylocopa): large bees that nest in dead or decaying wood.
- Melitta bees (Melitta): bees that specialise in collecting pollen from certain plants.

This overview presents some of the main genera found in Switzerland and does not constitute an exhaustive list of native species.

To explore these issues in greater depth, I strongly recommend consulting the scientific publications of the Federal Office for the Environment (FOEN), info fauna and Agroscope, particularly the Red List of Bees of Switzerland published in 2024.

These documents provide a better understanding of interactions between species, their food requirements, their habitats and the potential consequences of excessive apiary density. It is important that decisions made in beekeeping should also be based on this scientific knowledge, in order to preserve both our managed honey bee and the diversity of wild pollinators.

Regarding Tree Management and the Renewal of Vegetation

It must also be accepted that certain trees need to be felled when they are in a worrying state of health, are severely declining or pose a danger to their surroundings. The management of our forests and wooded areas should not be guided by a systematic opposition to tree felling, but rather by a reasoned assessment of each individual situation.

A tree that can no longer fulfil its role in the long term or that represents a safety risk may sometimes need to make way for a new generation. Nature has a remarkable capacity for renewal, particularly when conditions for regeneration are favourable.

I have observed this particularly in the Gruyère region, where willows have been propagated from cuttings along a stream. In just two years, some of these young trees have already reached a height of approximately three metres. This example clearly illustrates how rapidly certain native species can establish themselves and grow when soil and moisture conditions are favourable.

This does not, of course, mean that all old or declining trees should be systematically removed. Old trees, cavities and deadwood also provide valuable habitats for numerous species. It is therefore necessary to distinguish between trees that genuinely require intervention and those that can continue their natural life cycle without presenting a danger.

Intelligent forest management should make it possible to ensure safety, renew woodland stands and preserve the habitats essential to biodiversity at the same time.

The objective should be to encourage diverse vegetation composed of tree species suited to their environment, while allowing natural regeneration or, where necessary, targeted planting and propagation from cuttings.

Nature conservation also means having the ability to support the renewal of nature rather than systematically seeking to freeze its current state.

1. FOEN – Wild Bees in Switzerland: “Wild and Valuable”.

https://www.bafu.admin.ch/dam/en/sd-web/8aThY7Muii7a/city4bees-for-a-sustainable-coexistence-between-honeybees-and-wild-bees-in-cities.pdf

https://www.bafu.admin.ch/en/

An overview of the more than 600 native wild bee species.

Here are also some additional documents and references for anyone wishing to explore these issues in greater depth:

https://www.protea-tech.com/beekeeping-education-in-jesus-christ/

I wish you all the best in your studies. Take good care of yourself and those around you. Guide, inform and advise them as well. Thank you once again for your interest, and I extend my very best wishes for your continued success.

The Angel of the Eternal - J H S