

**Boštjan Noč**President, Slovenian Beekeepers' Association, Slovenia

## **Slovenian Beekeeping**

There are about 10,000 beekeepers in Slovenia and, considering that the population of Slovenia is about 2 million, this is a very large number. We have up to 200,000 bee colonies. This means that an average beekeeper has fewer than 20 bee colonies. There are few beekeepers with more than 100 bee colonies, but we have one of the largest beekeepers in this part of the world who has more than 2500 bee colonies. The Slovenian Beekeeper's Association is a non-profit professional organisation founded in 1873 by beekeeping societies in order to promote their common interests. The association connects most of the more than 210 beekeeping societies and associations in Slovenia. We have our own Beekeeping Centre in Brdo pri Lukovici that was mostly built through beekeepers' own voluntary work and contributions. We are proud of this centre and rightly so because, among other things, it also houses the headquarters of the Slovenian Beekeepers' Association that includes our public beekeeping advisory service, premises for beekeeping training, a laboratory for quality testing of bee products, an expert beekeeping library, the editorial office of our monthly journal *Slovenski čebelar* (*Slovenian Beekeeper*) that has been published continuously for more than 130 years and is the oldest professional journal in Slovenia, a shop with bee products,



Slovenia is a country in the heart of Europe known for exceptional landscape diversity, as it is where four geographical units meet and intertwine: the Alps, the Dinaric Alps, the Pannonian Basin, and the Mediterranean.

The clean environment and blooming meadows of Slovenia are perfect for honey bee forage

Maribor—View of Pohorje





Slovenian Beekeeping Centre in Brdo pri Lukovici

Beekeeping is a part of Slovenian national identity. We Slovenians like to identify ourselves with our Carniolan bee, of which we are rightly proud. Beekeeping is a part of our cultural heritage and rare are those who do not know our unique apiaries, our beehive panels, our licitar hearts and honey bread cookies ... Beekeeper's societies and associations have their own banners, beekeepers have their formal dress wear and a special line of casual wear. Our apiaries are real architectural "works of art" and represent a unique part of Slovenian architectural cul-

tural heritage. Once inside an apiary, a beekeeper's heart and soul are filled with joy. It is where Slovenian beekeepers spend

a great deal of time with bees, which they call their friends for good reason. Apiaries really are something special, they are filled with the scent of honey, propolis, and beeswax, as well as with the sound of humming bees, and there is nothing more beautiful to a beekeeper.

Slovenians are emotionally attached to bees. The well-known saying that beekeeping is the poetry of agriculture was created here, as well as the newer motto that to be Slovenian is to be a beekeeper. In short, beekeeping is something special in Slovenia.

In Slovenia, beekeeping also has an important social meaning as an agricultural activity. Bees accompany us throughout our lives. In childhood, the bee represents a symbol of hard work, thrift and care for others; in adulthood, we admire its efficiency, social order and frugality, and when growing older, it is beneficial for people to find new activities, hobbies and interest in something other than their job and housekeeping.



Beekeeping is also one of the hobbies that strengthen body and mind, since bees and caring for them are the best remedy for stress and all the afflictions we suffer from due to our fast-paced life.

In Slovenia, there are more than 22,000 species of living organisms, which places our small area among the richest areas in Europe in terms of nature. According to experts, Slovenia can be considered as a European biotic park which is also thanks to the autochthonous Carniolan bee.

Slovenia is the country of origin of the Carniolan honey bee that spread around the world because of its excellent traits.

In 1879, Pollmann described and named the bees he received from Carniola as a subspecies *Apis mellifera carnica*, also known as "kranjska čebela", "Carniolan bee" and "Krainer Biene".

A regular selection and an intensive breeding of bee colonies and queen bees has enabled us to preserve an autochthonous population of the Carniolan honey bee.

In declaration no. 42 of the Treaty of Accession to the European Union, the Republic of Slovenia ensures the implementation of all appropriate normative measures for the preservation of the indigenous bee race *Apis mellifera carnica*.



Queen bee with attending bees (photo: Franc Šivic, Slovenia)

In 2004, the Slovenian Beekeepers' As-

sociation was given the status of a recognised breeding organisation in beekeeping. In Slovenia, beekeeping is only allowed with the Carniolan bee *Apis mellifera carnica*, which is a subspecies of honey bee *Apis mellifera*.

The territory of the Republic of Slovenia is the native area of the Carniolan bee (*Apis mellifera carnica*). Bees can be registered in the stud book for Carniolan breeding bees on the grounds of established typical traits.

With the intention of preservation and selection of our Carniolan honey bees, we have more than 300 queen breeders that breed purebred queens and production queens.

Slovenians are emotionally attached to bees. The well-known saying that beekeeping is the poetry of agriculture was created here, as well as the newer motto that to be Slovenian is to be a beekeeper. In short, beekeeping is something special in Slovenia.







Piran (photo: Slovenian Tourist Board)



Bela krajina (photo: Slovenian Tourist Board)



Goričko (photo: Slovenian Tourist Board)



Ljubljana (photo: Slovenian Tourist Board)



Breeding station Rog Ponikve, registered purebred queen mating station in Slovenia in 2017

We do not have vast foraging sites in Slovenia. An average production of honey is less than 20 kg per colony. Despite being small, our country has a very diverse climate, which allows us to produce more monofloral honey. Diverse ground composition, relief and climate, as well as their interaction, results in an exceptional ground and biotic diversity. This small country with pristine nature where it is possible to admire breath-taking mountains, lush green forests that cover as much as 60% of the complete area, clean rivers and lakes, blossoming meadows as well as the underground world of numerous caves, the sea and many other things, hides a real treasure of a rich plant and animal world.

Acacia, linden, chestnut, spruce and fir honey are our monofloral and the most recognisable honeys.

We are proud of three European certificates, namely "Slovenian honey with protected geographical indication", "Kras honey" and "Kočevje forest honey". Most of the beekeepers pour honey into "our" Slovenian honey jars that have been used since 2007. Recently, a growing number of beekeepers are opting for ecological beekeeping and producing ecological honey.



Slovenian honey with protected geographical indication





Honey Night perfume

Sparkling mead



Slovenian jars in three sizes

Apart from honey, many beekeepers produce pollen, some of them royal jelly, and quite a number of them honey drinks, too. Slovenian beekeepers are very innovative, so every day, there are more bee products available in various gift packs. Different sets of bee products such as honey, royal jelly and pollen or honey with chocolate, honey with beetroot, honey with eastern purple coneflower, honey with spruce tips and perfume with Slovenian honey bring added value to the market.

Our speciality of which we are especially proud is sparkling mead that Slovenian beekeepers make using the Champagne method.

We Slovenian beekeepers are pleased that we have made people realise how important it is to consume bee products from their local area. We are also delighted that Slovenians are increasingly using bee products from Slovenian beekeepers. The information that the use of our honey has more than doubled in the past ten years—from less than 1 kg to more than 2 kg per inhabitant—is a good one.



Slovenian apiary with Slavko Avsenik and Anton Noč in the typical regional costume of Upper Carniola next to it (photo: Franc Šivic, Slovenia)

The Slovenian apiary is just as special a characteristic of Slovenia as the famous hayrack. Apart from providing a home for the bees, it also serves as a decorative element in many orchards and embellishes our surroundings.

Considering that just being near an apiary positively affects a person's well-being, we can say that its purpose is not only to provide a home for the bees—it is also therapeutic. By breathing in the air in the apiary, it is possible to treat stress-related diseases and respiratory diseases such as mild asthma. When the beekeeper opens the back panels of the hives, the propolis aerosol, an excellent natural antibiotic, is released into the air.

An apiary is a building or a room where hives are placed together under one roof. Apiaries became indispensable in working with stacks of beehives. The most appropriate apiary is an outbuilding made of wood. We choose wood because this material allows us to create the most favourable living conditions for bees. Wood enables us to set up a relatively simple and affordable prefabricated and portable building, taking into account that we may have to move the apiary occasionally. Material and design-wise, wooden apiaries are the most suitable for most of our environment in terms of type of settlements and landscape. Wood is partly substituted by stone only in the Karst and coastal areas of Slovenia.

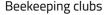
We have been dedicating special attention to our youngest ones. For ten years now, we have organised the Honey Breakfast. We have also started an initiative for the European Honey Breakfast and numerous European countries already participate.

In order to educate children about beekeeping and the importance of bees, beekeeping clubs are organised at almost half of primary schools.

On the occasion of the Honey Breakfast that has taken place every third Friday in November for 10 years now, on the initiative of the Slovenian Beekeepers' Association, beekeepers visit children in kindergartens and schools. They eat the traditional Slovenian breakfast with them (honey, milk, butter, bread and apple) and talk about bees. Also on the initiative of the Slovenian Beekeepers' Association, the Government of the Republic of Slovenia has proclaimed this day Slovenian Food Day.









Koželj beekeeping museum

## **Apitourism**

Recently, we have devoted our efforts to developing apitourism. We have started certifying apitourism. We gladly share our experience with other countries by heading the Apimondia commission for apitourism.

In Slovenia, apitourism represents a transformation of the rich Slovenian apiculture into a unique travel experience. It contributes to a higher quality of life, educates people and develops a high degree of respect and responsibility towards the natural, cultural and social environment. It presents Slovenia as a healthy destination, a country of hospitable people and, above all else, a homeland of excellent beekeepers with rich apiculture and centuries-old beekeeping practices developed by our beekeepers with their gentle beekeeping. The philosophy of this relatively new branch of tourism is built around respecting natural laws; the functioning and the purpose of bees can be compared to the functioning and the purpose of people and their putting values such as belonging, organisation, diligence, respect and harmony into practice.



Beekeeping is a song for the heart that connects people and brings them joy ...

Slovenian beekeepers are proud and satisfied that, especially in recent years, we have been supported by the government, especially the Ministry of Agriculture, Forestry and Food of the Republic of Slovenia, starting with Minister Dejan Židan, that has been supporting our projects and helped us carry them out in Slovenia and abroad.

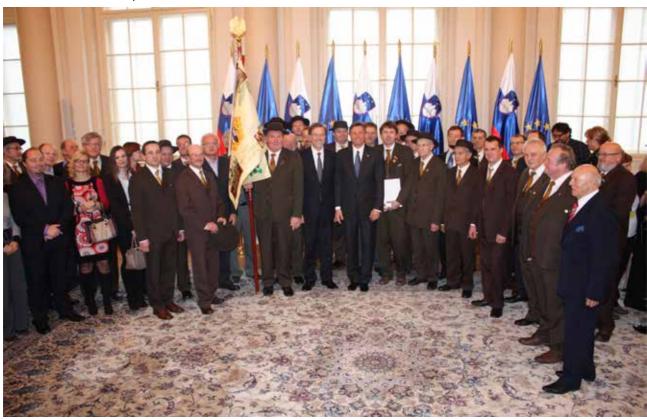
Slovenians have beekeeping in their genes and Slovenian beekeepers only continue the tradition of our ancestors. We pass on our mission to the younger generation and raise awareness about the significance of beekeeping among the general public.

The Slovenian beekeeper is valued and respected in Slovenian society and our duty is to preserve this!



Flag-bearers at the first beekeeping celebration in Breznica in 2003

The President of the Republic of Slovenia, Borut Pahor, awarded the Slovenian Beekeepers' Association with the Silver Order of Merit for its exceptional contribution to preserving and developing beekeeping in Slovenia on the occasion of the 140<sup>th</sup> anniversary of its existence.





The Honey Queen

Slovenian beekeepers devote a lot of attention to promoting beekeeping and raising public awareness about bees and beekeeping. The wish for additional recognition encouraged Branko Bratinščak to introduce the initiative for a Honey Queen. Slovenia thus has a Honey Queen; from 2016 to 2018, this flattering title belongs to Mateja Šoštarič.

The Honey Queen is the ambassador of Slovenian bee-keeping, Slovenian honey and bee products. The mission of the Slovenian Honey Queen is to raise public awareness about the importance of local bee products in our diets, a healthy lifestyle and local self-sufficiency. She introduces Slovenian beekeeping traditions, apitourism and Slovenian cultural heritage to people at home and abroad, presenting Slovenia as a land of beekeepers.

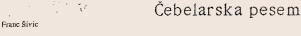
Slovenian beekeepers are unique in many aspects, so they have also had their beekeeping anthem called The Beekeeper's Hymn since 2002. The author of the lyrics is the well-known Slovenian beekeeper Franc Šivic, while the music is the work of the renowned musician Slavko Avsenik and his son, Slavko Avsenik Jr. The beekeeping anthem is sung by numerous choirs and the musical notation is suitable for the zither and for brass bands. After all, beekeeping is the poetry of agriculture and the song of the soul ...

Since 2015, the Slovenian Beekeepers' Association has had a male chamber choir consisting of beekeepers from all around Slovenia. There is no other choir of this kind, at least not to our

knowledge. While Tone Krivec was its initiator, Anton Tomec is in charge of coordinating the choir and its activities. The choir regularly attends important beekeeping events and performs at festivals. The Slovenian beekeepers wish that other countries had this type of choirs as well so they could meet at festivals of beekeeping choirs.



The male chamber choir of the Slovenian Beekeepers' Association regularly performs at Beekeeping Days ApiSlovenia in Celje visited by over 5000 beekeepers















## The Beekeeper's Hymn

Heaven lit with golden light Sending us the powers Ends the shadows of the night Waking up the flowers.

Warm and tender sunny rays kiss the bees awake They fly out, buzzing loud Away is the freezing dew Looking for nectar with golden spectra And sweet honeydew.

> Bees love the flowers gay Love the flowers neat Bees love the flower's prey Love the flower's sweet.

Buzzing is the sweetest song For bees young and old For the bee teachers, sweet bee preachers

Standing at their dear hive Patiently waiting, they are vibrating Humming with their dearest love.

From flower to flower and every hour Bees are working and dancing too From flower to flower getting the power For their sisters and for you.

From flower to flower, buzzing high Bees gather the sweetest load From flower to flower, they now fly For to make our honey gold.

Slovenian beekeepers attach great importance to raising public awareness about the need to plant melliferous plants in public and agricultural spaces, as well as in gardens and on the shelves at home. We wish that public areas would only be planted with nectar-bearing trees and other honey plants. We have carried out several campaigns and one of them was organised together with the Medex company in 2015 with the name "People plant, bees pollinate!". We have presented lime tree saplings to the President of Slovenia, the entire Government, the archbishop and Slovenian municipalities. In 2017, we talked about the meaning of planting honey plants with our youngest ones and gave sunflower seeds and a lime tree sapling to every primary school in Slovenia.

The Slovenian Beekeepers' Association adopted a good practice of certain Slovenian municipalities and encouraged all municipalities to offer a melliferous tree to every newborn child. Many municipalities have already joined this project. The goal of Slovenian beekeepers is for every Slovenian to plant at least one nectar-bearing tree!



Prime Minister of the Republic of Slovenia Miro Cerar and all the ministers of the Slovenian government planted lime trees to support the campaign of planting nectar-bearing trees in Slovenia



The municipality of Žirovnica has offered melliferous trees to its newborns twice already

There are quite a few expert institutions working in the field of beekeeping in Slovenia. We have specialists for bee health working within the National Veterinary Institute of Slovenia, experts in selective breeding of the Carniolan honey bee and in assessing the effects of acaricides on honey bees and varroa mites and the effects of nosema at the Agricultural Institute of Slovenia, and experts in honey bee product quality, genetics, and biological analysis of bee behaviour at the Biotechnical Faculty.

Slovenian beekeepers are world-renowned for our hospitality and openness. We like to show our well-kept beekeeping premises and various beekeeping museums to our guests as well as prepare bee product tastings for them and talk about beekeeping in general. We enjoy presenting our activities to fellow beekeepers from Slovenia and abroad and to the Slovenian and foreign public.

Slovenia is the homeland of numerous acknowledged beekeeping experts, starting with Anton Janša and Peter Glavar. Dr Filip Terč, the pioneer of modern apitherapy, also worked in Slovenia, which is why apitherapy has a special place in Slovenia.



**Anton Janša** is known as the pioneer of modern beekeeping and one of the greatest experts on bees. The academically trained painter worked as the first beekeeping teacher at the Habsburg court.

He was born in Breznica pri Žirovnici. In 1769, he started actively dedicating his time to beekeeping, because he had been interested in bees and everything connected to them since his early childhood. His family had more than a hundred beehives and it was where neighbours gathered and talked about beekeeping and farming.

He gained recognition with his lectures that revealed his very precise knowledge of bees. He wrote two important books in German: *Treatise on the Swarming of Bees* (1771) and *A Complete Guide to Beekeeping*. After he died, Maria Theresa issued a decree obliging all beekeeping teachers to use his books.



Peter Pavel Glavar was an illegitimate son of the noble Pietro Giacomo de Testaferrata from Malta. He was especially interested in beekeeping, which is why, in 1776–1778, he translated Janša's *Treatise on the Swarming of Bees* and included his findings and thus became the author of the first Slovenian technical book, although the Agricultural Society of Ljubljana has never published it. With his texts, he strived for the development of beekeeping in Carniola and for establishing beekeeping cooperatives and a beekeeping school at Lanšprež castle.



Filip Terč—a pioneer of modern apitherapy

Life and work of Filip Terč, a Czech doctor from Maribor, who used his love of bees to create a new form of medical therapy—apitherapy.

He was always searching for new possibilities for treating his patients. He used bees and bee products, especially honey bee venom, as the basis for discovering new treatment options. He described his clinical experience in expert medical literature which earned him a flattering nickname, "the Father of Apitherapy". When 30 March, the birthday of Filip Terč, was proclaimed World Apitherapy Day, his professional efforts were properly rewarded.