In 2015 we focus on some of the participants of C.S.I. Pollen in Europe. Here is portrait #1

CSI Pollen Austria – Focus on citizen scientist



Name: Vinzenz Lässer

Region: Vorderbregenzerwald

Vorarlberg, Österreich



Mister Lässer, how did you become a beekeeper?

I am keeping bees since 1986, since 1994 I am chairman of our local beekeeping club in Riefensberg. Only from stories, I know that my grandfather was a beekeeper too. My father in law convinced me that beekeeping would be a great hobby for me. He was a small farmer, and as it was in previous times, he had a few colonies in a bee house. He believed that a public servant, which I am, has enough leisure time for beekeeping. Therefore, right after I married my wife Margret, I bought the first colonies and built a small bee house.

Which bee race do you keep? In which hive types?

I started with Kuntzsch and Zander sized frames. Since three years my bees live in self-made langstroth boxes. I prefer beehives without rabbet, as they are more easy to produce and allow more flexibility in giving the bees more space. In my way of beekeeping, I usually remove the lowest of three supers in March. That is also the way I renew the colonies' combswax. Every year, I prepare one colony for queen breeding. I breed *Apis mellifera carnica* either from my own line or from a breeder from the neighbouring village. Some of the queens I bring to a carnica mating station ("Lecknertal"). I also have good experience in making splits and providing them queen cells close to emergence. Although, the most fascinating for me is a natural swarm of one of my 15 colonies.

How would you describe the environment of your apiary, what kinds of forages are available for your bees?

I live in Riefensberg, which is part of the nature park "Nagelfluhkette". The most important trees in our mixed forest are fir, spruce, beech, acer, ash, lime and the endangered elm tree. There are some residential areas including village centers. I took a picture of the village Hittisau, where I have my beehouse, and you can see the Gottesackerwände, still covered with snow, und on the right the Hohe Ifen. The plateau

between Gottesacker and Hohe Ifen, is a beautiful and very interesting natural area, comprised mostly of mattock (karst). Some mountain pastures have no access roads. Hikers can experience a huge flower diversity, including the Alpenrose (*Rhododendron sp.*)

The fir trees sometimes provide an excellent forage for our honey bees. The honey is dark, viscous and very tasty, our customers like it very much. A colony can gather up to 40 kg. Unfortunately, the development of honey dew producers (Lachninae) is strongly depending on weather, so that this forage is sometimes completely lacking. According to a befriended beekeeper and expert, the frequency of honey dew from fir trees has took a turn in the last 50 years to the worse. Nowadays, two consecutive years without any forage from fir trees may happen.



In front the municipality Hittisau, behind the "Gottesackerwände" covered with snow.



The "Hohe Ifen" from south side with my two daughters in front. Maria and Bettina, real honey lovers.





Regarding generally high losses of honey bee colonies this winter in Vorarlberg, I am rather happy that all my colonies were alive and healthy on 9th of April, and that I could find eclosing honey bees. Many bees can already be found in the upper super.



Egg oviposition of the honey dew producer "grüne
Tannenrindenlaus (*Buchneria*) in
October 2014. Unfortunately,
heavy rain and wind reduced their
frequency, so we do not expect a
good fir tree harvest in 2015.

Another nectar and pollen source are dandelion flowers. Unfortunately, this flower – like many others – are more and more reduced because of intensive agriculture. Fruit bearing trees have also decreased in the last 30 years by about two thirds. In last years microscopic pollen analysis of the C.S.I. Pollen samples I was surprised by the large amount of pollen from plantain (Plantago).

What do you think about C.S.I. Pollen, what is your special interest?

Since I participate in this investigation, I intensively care about the pollen diversity available for our honey bees. Recently I planned and took care of a booth of the Vorarlberg beekeepers association at the spring fair in Dornbirn. We presented a show case full with the amount of pollen a honey bee colony needs in a year (see photos). Visitors were very interested and surprised how much it is. By the way, for the show case I did not collect pollen, but rather produced it from small stones of granite. I sieved it and coloured the stones with different colours. Even experienced beekeepers did not see the difference. To determine the annual pollen need, I did not only search the literature, but also used data of colleagues from the Pollenvereinigung Bodensee-Allgäu. One liter of dried pollen pellets = 630 gram. The volume of the show case is 55 liter, which corresponds to an annual need of 35 kg. A quarter liter is about 170 gram, 10% of that amount I have counted. So the volume of our show case contains about 6.156.000 pollen pellets. Although the show case contains a core of styrofoam —I still needed about 20 kg of stones. The dyeing took one and a half days.





Which kind of pollen trap do you use?

On the C.S.I. Pollen website (http://bienenstand.at/c-s-i-pollen/photos/), I saw that some other beekeepers also had problems with external pollen traps. That is why I constructed my own internal pollen trap. Since then, no clustering of bees occurred any more.



Two wooden strips help the bees reaching the internal pollen trap.





We fly for C.S.I. Pollen!