

For the good of the bees – Bonn Science Shop supported the formation of a local network for bees and their keepers

On 15 and 19 February Bonn Science Shop invited Bonn's citizens to participate in a workshop on „Beekeeping in Bonn – Challenges and Solutions“. In cooperation with Bonn's city lab ‚BonnLAB‘ and the ‚Open Knowledge Lab Bonn‘ beekeepers and non-beekeepers had the opportunity to jointly work on solutions for their questions and challenges. 35 committed beekeepers, computer scientists and citizens took the chance to exchange, network and work on concrete action plans for the coming months.

During the first meeting on a Wednesday evening the participants discussed several topics and questions related to their hobby or profession of beekeeping. The brainstorming resulted in many highly interesting topics for the following discussions at the tables. To offer high-quality educational courses and advisory services for people interested in becoming a beekeeper was seen as an important aspect to secure a sustainable interest in beekeeping. The importance of a local network of beekeepers and other actors from the region related to the topic was also emphasized. One table discussed the different elements of a bee strategy for Bonn for which an online platform could be a first step.

On the following Sunday afternoon the participants continued to work on three of the suggested topics in groups. „We are inspired by the commitment and ideas of the beekeeper-community“, said Norbert Steinhilber from Bonn Science Shop, „We gathered many motivated people with various professional and institutional background and knowledge, most of them are (hobby) beekeepers, were beekeepers or want to become beekeepers. Some of them just want to contribute with their knowledge to help bees or beekeepers. The result is great: We laid the foundations for an online platform, discussed options for a service for beekeepers and developed a scientific question to be forwarded to researchers.“

Already on Wednesday evening, the idea of a bee strategy for Bonn had inspired the workshop participants. On Sunday these thoughts were pursued and a group of 7-8 people discussed how the elements of such a concept could be structured and locally bundled. Damian Paderta of the Open Knowledge Lab Bonn discussed with the group how an internet-platform / website could look like and what features it could have: „A platform focusing on bees and beekeepers in the region should fulfill different functions: It should link beekeepers and people interested in the topic, bundle local information about the stakeholders and habitats and offer an added value. Especially during bee-season such a platform can deliver useful information for the public. We laid the foundation during the workshop and hope to be supported by others interested in the topic“. According to the participants, the platform should provide a visual map that could display local actors but also the locations of the hives. Moreover, the platform should list the educational offers of local beekeepers associations as well as projects from the region, bundle useful information related to the topic bees and beekeeping and provide information for citizens interested in supporting bees. A first prototype of an open data map was programmed during the workshop. In the follow-up the participants will vote for a domain name.

A second group determined the requirements and implementation steps for the foundation of a service for beekeepers in Bonn and its surrounding. Besides honey processing this service could comprise the cleansing and disinfection of hive frames. A centralized service for these tasks would save the beekeepers' time and effort and thus create room to keep more bee colonies to contribute to a greater biodiversity in the region. The biggest challenge would be the economic viability. As a solution a cooperative approach or structure was discussed.

The biggest enemy of bees is the varroa mite which causes the death of bee colonies during winter. For a long time beekeepers have been searching for effective and sustainable solutions to fight this parasite that develops within the brood. A shortened breeding period could prevent the development of the mite. A third group thus discussed the option to initiate a breeding and selection process through a research project with the support of a light sensor installed in the broodcomb to measure the breeding time. A member of the senseBox team from the University of Münster attended the workshop and showed possibilities to technically implement a mini sensor in the comb. As a result of this discussion and experimentation, a team consisting of beekeepers, technicians and a master student from the University of Bonn committed themselves to develop a prototype for this measurement and test its applicability. If the measurements are successful, the idea could be taken to researchers to be followed up.

Bonn Science Shop, BonnLAB and Open Knowledge Lab Bonn showed with this unconventional event format, that the cross-linking and networking of actors and groups with various backgrounds and different knowledge can lead to creative ideas and solutions. A network was formed and participants agreed to meet again after a two months-time.