



HOW TO CREATE „BORT“ HIVES AND LOG HIVES

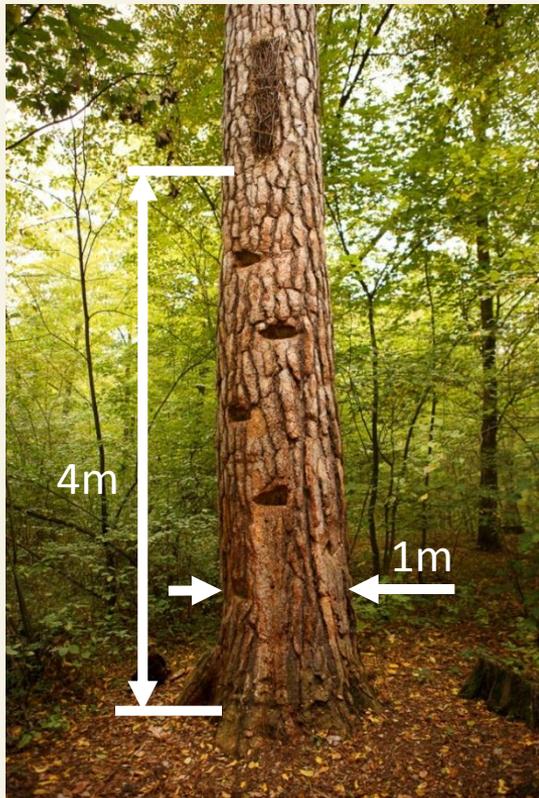
Some principles

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Dimensions of traditional tree hives

BORT hive in living trees

A tree is measured at the height of the human breast. Polish beekeepers recommend a minimum of 1m in diameter. In Switzerland we will test whether we can use a minimum of 80cm in diameter.



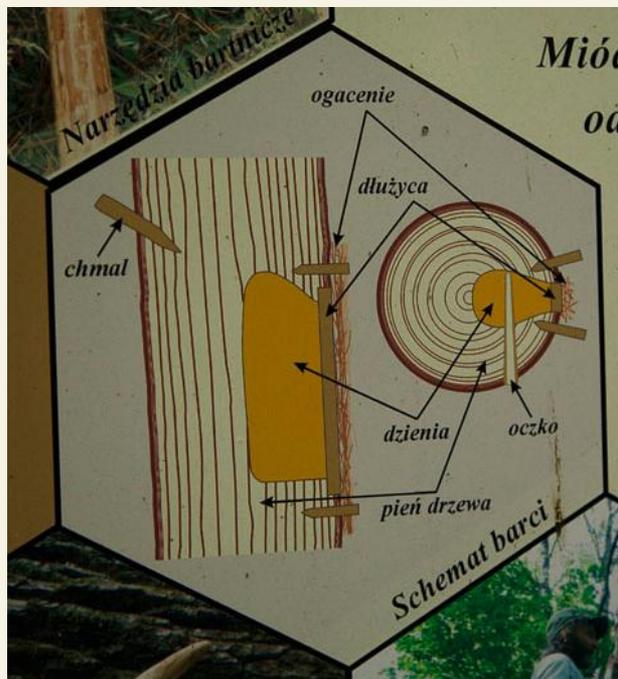
Log hive with dead wood

A log hive can be built smaller, as the hive doesn't need to be as stable as the living tree. A diameter of around 55-60cm is enough.



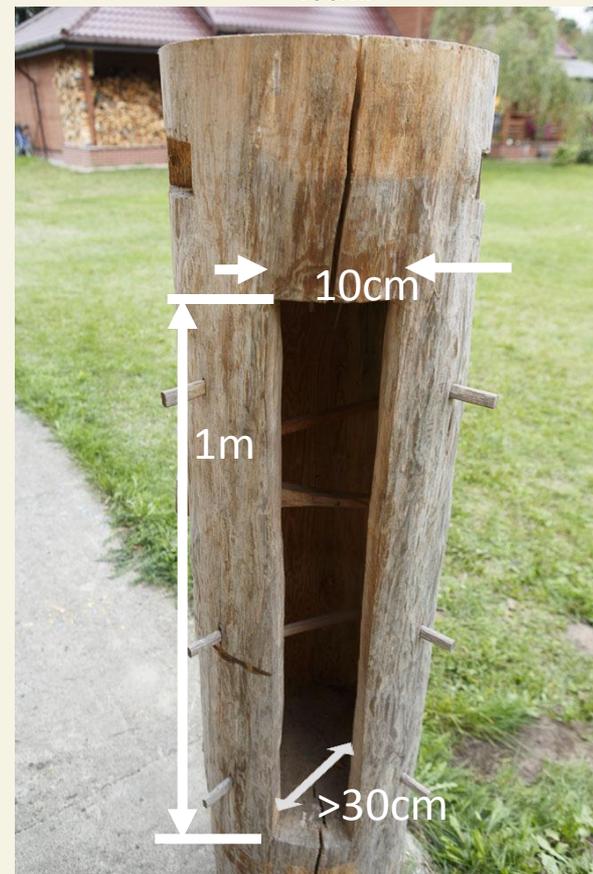
Dimensions of traditional tree hives

Schematic vision of a BORT hive in a very thick tree



Dimensions of the brood nest for BORT hives and log hives

We recommend a minimal inside diameter of around 30-40cm.



How to choose the right tree

- If your tree is not vertical, you might climb up on the topside, having your operations access underneath



- Try not to choose the part of the tree with the most branches. To hollow the tree might be very difficult.
- Neither the bees' entrance nor the operations access should be aligned towards west or north. Choose east and south, if possible.
- Choose trees in areas where you know that the food supply is good (depending on the kind of trees and on the forest glades).
- At the height of about 2 meters, the tree is exposed to the biggest forces. Don't make your cavity there.

What kind of trees should be chosen

We know that it works on the following trees:

- Pines
- Fir trees
- Chestnut
- Oak

Lots of other trees need to be tested:

- Linden tree
- Larch (seems to be difficult to work with according to Polish experience)
- Beech tree (most easily to find in Switzerland)
- Etc.

The very first cut

Use a motor saw for the very first cut



Cut out a wooden piece of the tree



Tree beehives are usually created in autumn and dried out during winter. Please leave your hive open during winter, otherwise it might decay.

Preparations for digging the hole

The very first cut from a fixed platform, using the motor saw



Cutting steps from a mobile platform, with an axe



Digging the hole

Holing the brood nest



Opening the bees' entrance



Original tools from Russia

This tool is called
«Dechsel»
in German and
«adze» in English.

No name found
for this tool so far.
It's a kind of a big
chisel.
(Piesznia in Polish)

Practical advice for these tools:

Long and thick shaft

Maximum weight of the metal tool

Minimum width of the cutting edge (up to 3-4cm)



Swiss-made copies of the original tools

Buy a wooden handle, take a metal pipe and a piece of the pickaxe

Buy one of the modern pickaxes with a weight of about 3.8kg

Total costs: approx.
230 Euros



Your blacksmith/forgers/toolmaker will help you with this.
Otherwise you can order the tools from [FreeTheBees](https://www.freethebees.com).

Original Tools copied in Poland



Blacksmith-made tools for carving hive's chamber

With tool number 2 you can refine the surface inside the cavity.

Total cost of the three tools (1 to 3) produced in Poland:

150 Euros

Other useful tools 1/2



Cutting lines helps for the manual work!



A big chisel helps for cutting next to the entrance



Other useful tools 2/2

- Cultivation howler
[See video](#)



- Your howler needs to be as narrow as possible, otherwise its use is very limited.
- Expensive tool of approx. 650 Euros without the motor saw.

Preparing for the bees

- Original tree cavities in Poland are started with some pieces of wax-comb, nailed with wooden nails to the roof of the cavity.
- On the one hand, this attracts the swarms in spring.
- On the other hand, you can give the combs a direction in order to maintain and harvest easier.



Swiss Law Compliancy

For better attraction of swarms, combine the original method with the law-compliant method.

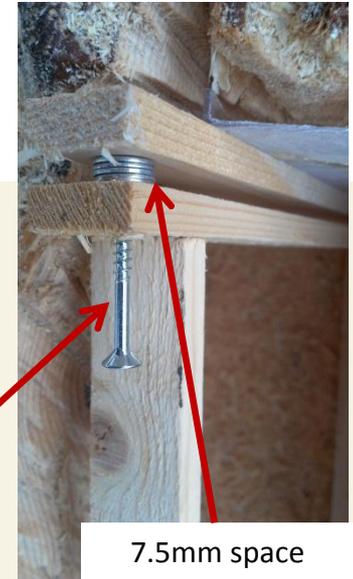


In Switzerland every hive needs to be officially controlled for brood diseases. Therefore, the Swiss bee inspectors want to see the brood-cells.

For Swiss compliancy reasons, we recommend placing in the middle a single mobile frame with a wax stripe on the top.

As bees glue every open space with wax and/or propolis, a fixed frame and a mobile frame with a space of about 7.5mm in between need to be built.

Against the roof we might build another support with a space of around 7.5mm for putting in varroa treatments like for ex. thymol treatments.



One screw in front to fix the mobile frame

7.5mm space between fixed/mobile frame

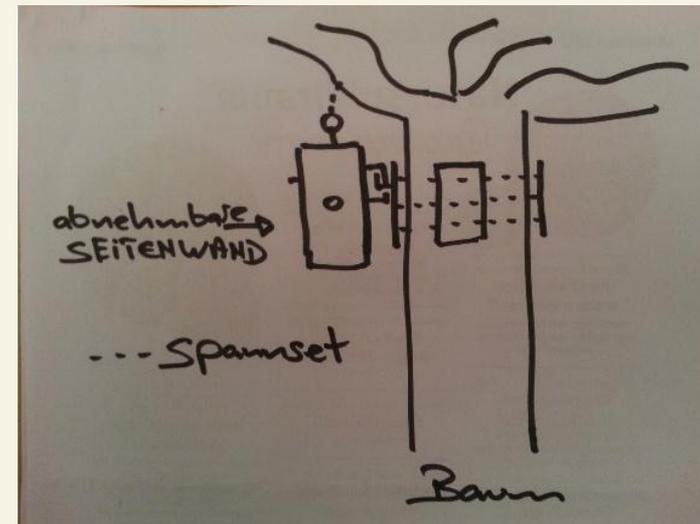
Open space on top for treatments



Hanging up log hives

There are plenty of ways to hang up log hives.

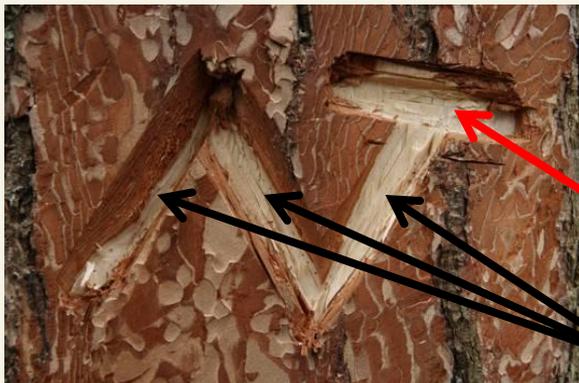
Please consider: The tree is growing, the diameter isn't stable and might thus damage or burst the rope!



Don't forget about the traditional signature



Every tree beekeeper has his own signature. The student takes over the master's sign and creates an additional line.



Student's attachment

Master's sign

