



# Keeping bees in Slovenian AŽ Bee Hive

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Experiences of first year keeping bees  
in an AŽ hive and a brief history and  
background of Slovenian beekeeping.  
By MARC MAYHEW APRIL 20, 2023



# What is an AŽ hive

Fixed Space

Leaf frames

Inspected from the back



# Fixed Space

Traditional Slovenian AŽ  
hive has two chambers

Honey harvested  
throughout the season

Creativity needed for  
extra space

# Leaf frames

Frames fit in hive  
like books on a  
shelf

Bee space  
maintained by  
manufactured  
frame spacers

Only lift one frame  
at a time

Frame Design

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Coved top and bottom

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Rest on steel rods

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No top or bottom





# Hive inspected from the rear

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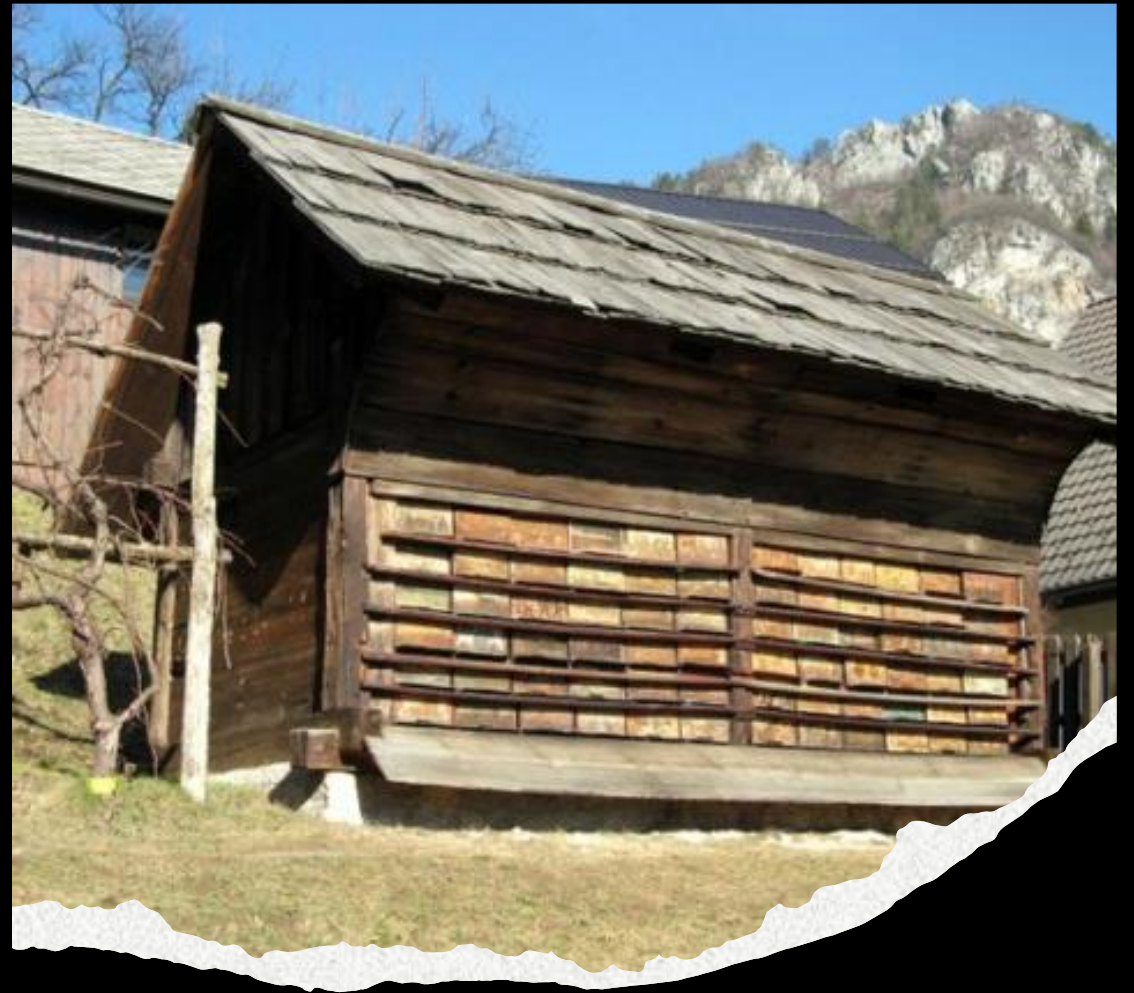
Hive is built like a cabinet

Less disturbance of the bees

Compatibility with bee house

# History of Slovenian Beekeeping and hives

How did the AŽ hive come to be



Bee houses-  
the foundation  
of Slovenian  
beekeeping

A structure to keep several beehives  
close together

Offers bees protection from elements

Allows inspection in nearly any type  
of weather

Increased winter survival



Bee houses- have adapted into very functional spaces for the beekeeper

Honey processing house

Apitherapy

Bee beds





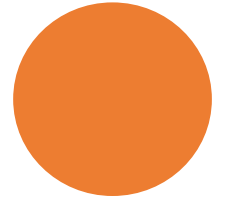
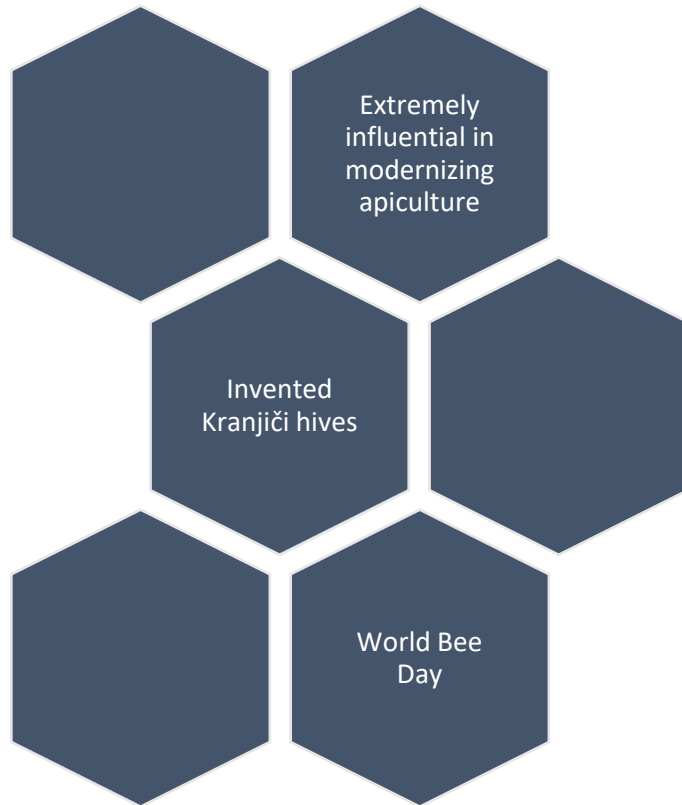
Bee house  
concept existed  
long before  
modern hives

Log hives, skeps

Kranjiči hives

AŽ hives

# Anton Janša





Kranjiči Hive



# Invention of the AŽ hive

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Anton  
Žnideršič

Adapted from  
rear opening  
Alberti hive



# Why Slovenian hives evolved into the AŽ hive

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Foundation of bee house

Harsh winters in high elevation

Short intense nectar flow

Carniolan bee



Mobile Apiary in  
Slovenia

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A woman is shown in the bottom left corner, smiling and looking towards the camera. She is painting a wooden beehive. The beehive has several horizontal sections. The top section is painted with a brown, stone-like pattern. The middle section features a landscape with green rolling hills, a blue sky with white clouds, and a white house with a red roof and several windows. The bottom section is painted with a red background and a yellow sun. To the right of the beehive, there is a paint palette with various colors of paint. The background is a cluttered workshop or studio with various tools and materials.

# My Experience with AŽ hive

Research, building the hive and first year with bees



# How I started with an AŽ hive

- Online resources (see appendix for links)
  - Facebook groups
  - YouTube (limited info)
- “A-Ž Beekeeping with the Slovenian Hive” by Janko Božič
- Zoom lectures

# Hive construction

- Requires a little bit of woodworking experience and some more advanced tools
  - Table saw/ router
- Can purchase (suppliers in appendix)
- Good lesson for me in thinking about bee space

# Populating with bees

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- Swarm
- Package
- Split/Nuc





Interchange with  
Langstroth  
Equipment

# Building up the hive

- Reversible frames
- Two Queens
- Less bearding (ventilation)
- Multiple entrances



# Adding a bee house



# Inspecting the hive

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No heavy lifting

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Less disturbance of the bees

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Can inspect brood chamber without disturbing upper chambers or vice versa

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Bees seem more docile

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Frame stand

Harvesting  
Honey

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Langstroth sized  
frames

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Lower moisture  
content from  
ventilation



## Pests in the Hive

Small hive beetles seemed more prevalent

Many spaces for them to avoid bees

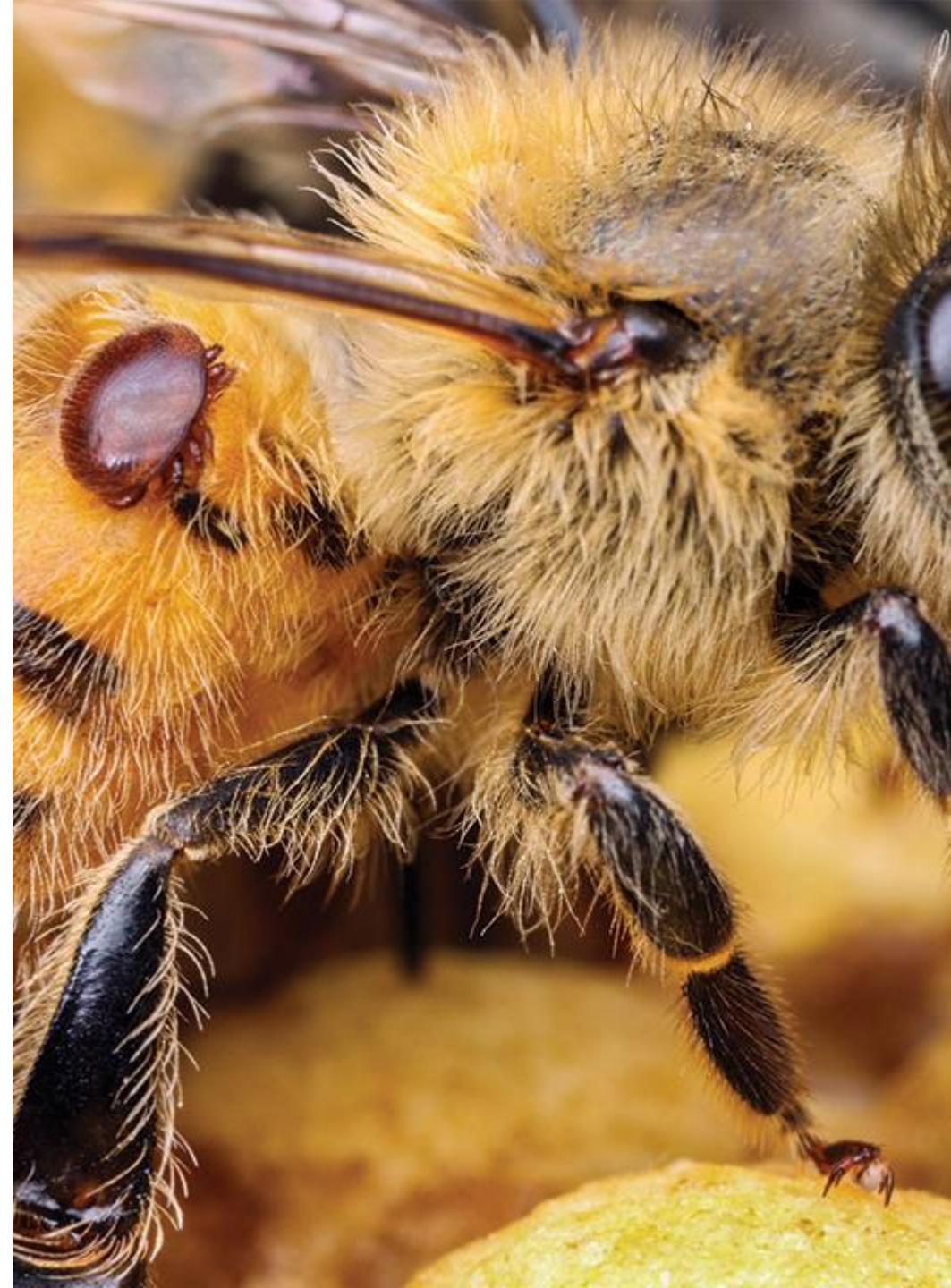
Almost all of the same methods for trapping small hive beetles can be used in the AŽ hive

# Varroa treatment

Again, almost all of the same treatments can be used

- Amitraz hangs between frames
- Formic Pro pads rest on top of the frames (in between steel rods)
- Oxalic acid vapor through the back door vent.

No noticeable difference in mite loads



# Overwintering

Slovenia has a very high rate of overwintering success (~10-15% winter loss nationally)

Slovenian beekeepers typically try to overwinter colony in one chamber

As bee's population decreased in the fall, I set up the bottom chamber for overwintering (added 6 frames of honey)

I also saved 4 frames in "reserve"

Had to add the 4 frames and feed a bit of syrup in March

Overwintering  
ideas for the  
future

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Possibly overwinter two colonies  
in each hive

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Efficiency of heating

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Could build up much faster in  
spring to capitalize on black locust  
flow

# Swarm control

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Splitting/Hive increase

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Moving frames of brood above the queen excluder

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“make sure they have space and something to work on to keep them out of trouble”

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Reversing frames (discourage drone brood and queen cells)

# Resources

- Equipment
  - [AZ Hives North America \(Hives, frames, tools\)](#)
  - [Maine bees \(Hive, frames\)](#)
  - [Precious Beehives \(frame, hardware kits, plans\)](#)
  - [AZ frame spacers](#)
- Facebook groups
  - [AZ hivers](#)
  - [AZ hive creators \(DIY and hive building\)](#)
  - [Slovenian AZ hive advocacy](#)
- Books
  - [A-Z Beekeeping in Slovenian Hive \(Janko Bozic\)](#)

Questions?

