

### **Slovenia**

Slovenia is a country in Central Europe, located just east of Italy and south of Austria.

Beekeeping is done a bit differently here.







The Landscape of Slovenia

For over a thousand years (since the last Ice age) the peoples of Slovenia have been keeping bees. The bees were first kept in the simple logs "gums" that they were found in. Over the centuries the hive box developed into what it is now the **AZ hive**.



In the 18th century, **Austrian Empress Maria Theresa** founded a beekeeping school in Vienna, the first teacher of beekeeping at this school was the Slovenian **Anton Janša** (1734-1773). He was famed as a great theorist and practitioner in beekeeping.

Exceptional credit for developing Slovenian beekeeping also goes to the priest and teacher **Peter Pavel Glavar** (1721-1784). He was regarded as the best educated beekeeper in the then Slovenian lands. Many of his tips are still heeded by beekeepers today.

One of the most famous Slovenian beekeepers was **Anton Žnideršič** (1874-1947). It is he who developed the AZ hive house and hive box that is so widely used today in Slovenia..

### The Honeybees of Slovenia

The Carniolan bee, Apis mellifera carnica is the native honeybee to this country, is the only bee allowed to be kept in Slovenia. This bee does well in the environment of the mountains of Slovenia where winters are longer and colder and summers shorter and hot.

Carniolans are object oriented, so living in the AZ hive houses where hives are right next to one another they always come back to their individually colored hive. They don't tend to drift like their Italian cousins do. They also have a lower robbing tendency.



Carniolans will slow down production when food stores get low.

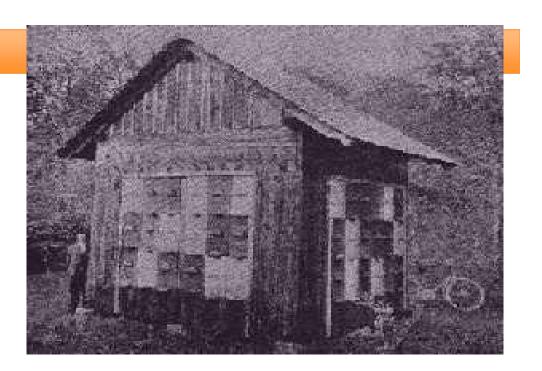
Overwinter in smaller clusters and build up faster in the early spring.

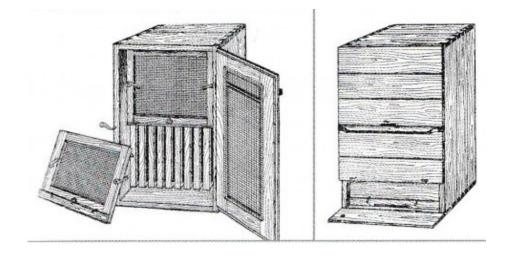
Have the longest tongue of their species allowing them to forage on a wider variety of flowers.

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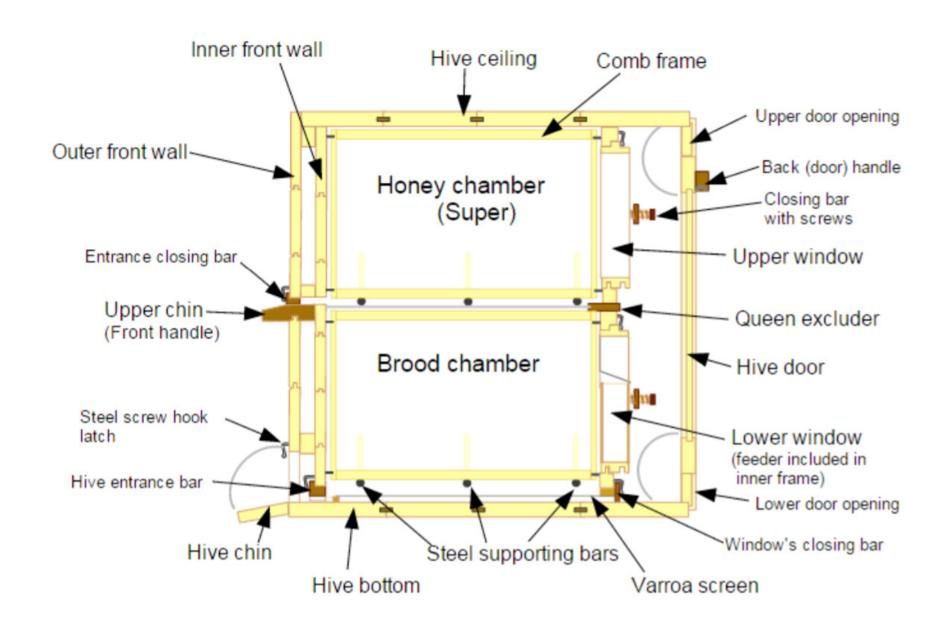
# Anton Žnideršič (1874-1947)







#### The AZ hive





#### The AZ hive houses

The "bee houses" that they are found all throughout Slovenia in were developed by Alberti-Žnideršič. (AZ) The AZ hives are designed to fit into these houses, being exposed on one side if the hive box only.

Theses "bee houses" are also built onto trucks, for easy transportation to "chase the flow"





### The AZ hive houses









Typical AZ bee houses found throughout Slovenia



### **Outside of the AZ hive**

The front of the hive that is exposed to the outside has two openings for the bees to access both levels.

Both openings can be closed up easily when the hive box need to be moved.

The front is the only part of the hive that needs to be painted when this hive is placed inside of the

"AZ bee house".





The hive fronts can be painted any color, pattern, or design that you may like.

Early hive box fronts were painted in folksy artwork that showed religious themes, fables or local folklore.









Early AZ hives had a variety of differently painted designs put upon them. May designs were of local folk lure or religious themes. Today most of the hives are painted single colors or with simple floral designs on them. Religious depictions were banned in the early 1900's

The older decorative hive fronts are highly collectable and are sought out by locals as well as tourist.

A thriving industry of creating these decorative fronts and "antiquing" them has developed to meet the demand.







### **Inside of the AZ**



The unique feature of this hive box is that it opens from the back. No lifting at all.

This makes inspecting the colony much easier on the beekeeper and the bees.







#### Inside of the AZ hive

The frames rest on metal bars utilizing bee space to keep the bees from propolizing or building burr/brace comb along the tops, bottoms and in between.

AZ frames are narrower and taller than the standard Langstroth Deep frames. They are wired vertically as opposed to horizontaly.

Standard foundation needs to be cut down to fit into these frames.



#### Inside of the AZ hive

The exterior door has ventilation flaps on the top and bottom to allow additional air to flow into the hive.

There are two screened wire doors on the inside that keep the bees in place, allowing for ventilation.

The interior screened doors have feeding boxes added so feeding the bees is an easy process





#### Inside of the AZ hive

The interior of the hive has removable queen excluders on the top and screened bottom boards on the bottom.

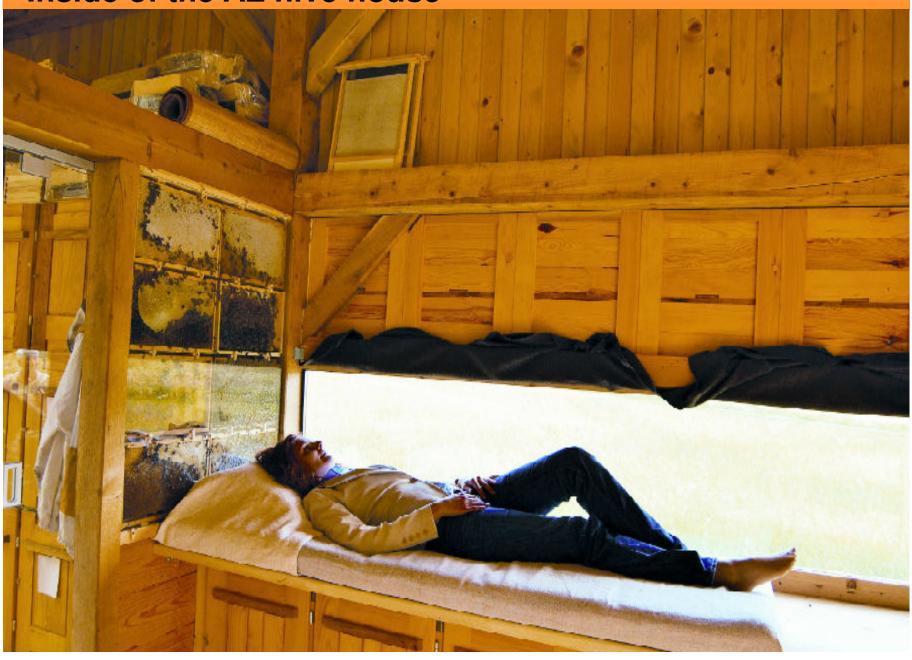
A solid board can be slid in between as well to keep two colonies (NUCs). Or just to start new colonies, then removed once the colony gets larger.

On the inside front of the hive box and on the inside of the screened doors are metal spacers that keep the frames at the exact distance apart.











### Three sizes of the AZ hive



They are available in twenty and thirty frame configurations as well as 2 frame NUC sizes.

### The AZ hive advantage

This type of hive box is nothing "new" it is however a new concept to American beekeepers.

The **advantage** is that it can be set into a "bee house" of any size and be opened from the back. This allows the beekeeper to inspect the bees in any weather.

No more heavy lifting of supers or brood boxes.

The boxes stack together side to side. Top and bottom allowing for the bees to be protected from harsh winter winds and cold. Thus conserving heat loss.

Feeding is also done on the inside, which prevents any type of robbing stimulation from other colonies.

Treatment of Varroa is the same as with a Langstroth type hive.

Can be easily moved since they are a one box hive.





### The AZ hive dis-advantage

Only two or three levels hive boxes are currently available

They are non standard sizes. You cannot easily exchange frames from a AZ hive to a Langstroth type hive. Nor fit the two type together evenly.

Standard foundation does not readily fit. Proper sixed foundation isn't available yet.

They are also non adaptable to langstroth supers. The top is solid. So additional supers cannot be added. (unless modification is done)

Smaller overall design is not advantageous to our longer more abundant honey flows in the US.

Swarming can be an issue with the smaller size. (note the bee skeps kept in front of the hive houses.)

Cost is about the same for a comparable Langstroth set up.





### **AZ** hive summary

This hive is just another way of beekeeping that will work for some and not for others.

It does require more monitoring to keep bees from swarming in the 2 stack hive box.

Not compatible with langstroth frame sizes

Its not readily available (yet)

Its neater, keeping all the colonies in one "decorative building" that can also double as the honey house. As opposed to having langstroth type hives in a open apiary

Almost bear proof, in that bears can only access the front of the hives. No toppled over hives or expensive electric fences.

It would appeal to older beekeepers as not having to lift heavy supers anymore. also being able to inspect the bees in any weather condition if the hives are kept inside of the bee house

#### The AZ hive resources

Currently there are no commercial operations manufacturing these type of Bee hives in the United States.

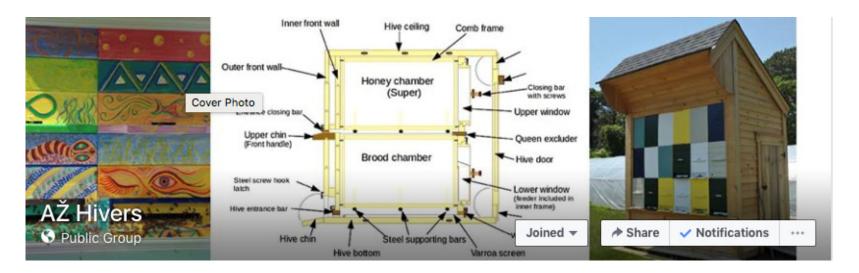
There is a Agent for the Slovenia Manufacturer in New Hampshire. Their email address is: beeslovenia@gmail.com

Suzanne Brouillette
Slovenian Beekeeping
321 Chesham Rd
Harrisville, NH 03450
603-499-3730
<a href="http://www.slovenianbeekeeping.com">http://www.slovenianbeekeeping.com</a>

You can order direct from the manufacturer in Slovenia at: <a href="http://www.logar-trade.com">http://www.logar-trade.com</a>

Logar trade d.o.o.
Poslovna cona A 41
SI-4208 Šenčur, Slovenia
Tel: 00 386 4 25 19 410
info@logar-trade.si

#### The AZ hive Facebook



#### **AZ Hivers** public group

This is an educational group pertaining to Slovenian AŽ hives and AŽ beekeeping; please keep the posts specifically related to AŽ hives. We are here to offer guidance, to share and to gain knowledge. We have a "no commercial posting" policy, however, if you are a specialized supplier/manufacturer/importer of AŽ hives, we allow limited posts in line with current discussions. Sharing of relevant educational information, events & materials is encouraged.

### The AZ hive Facebook



#### **Drebbieville Hives**

http://www.drebbievillehives.com/

A single man operation in Georgia that is building theses hives to langstroth sizes.

