



## A guide on how to make a scaled model of a GREEK BEEHIVE, LANGSTROTH type

Created by Georgia Safouri



## The Melissa Project

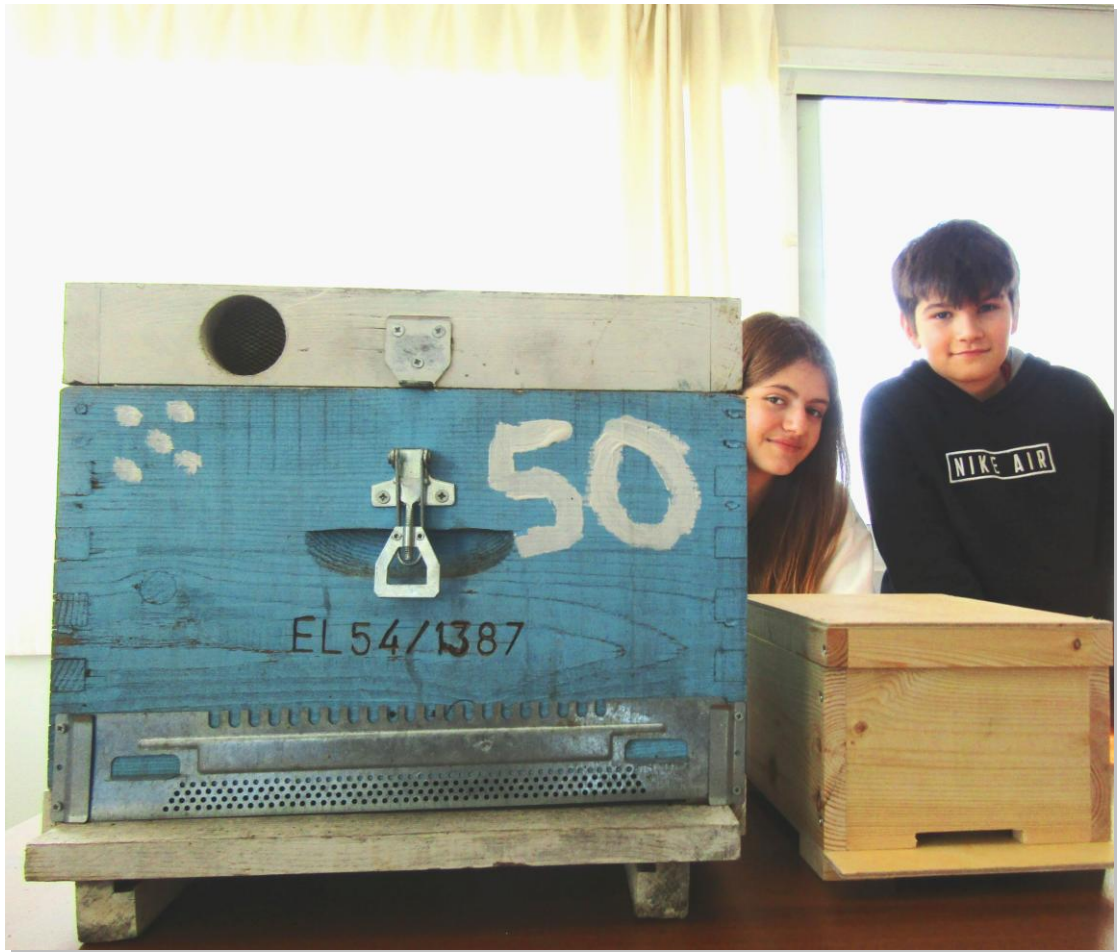
As part of **MEUSSA**, an Erasmus+ funded project, this guide is intended to teach students how to make a scaled model of a Langstroth, the most common Greek type of, beehive.

The **LANGSTROTH BEEHIVE** (aka **Standard beehive**) was introduced in the mid-20<sup>th</sup> century in Greece and has been popular ever since, because in Greece beekeeping is nomadic, and this type of beehive is easy to transport.

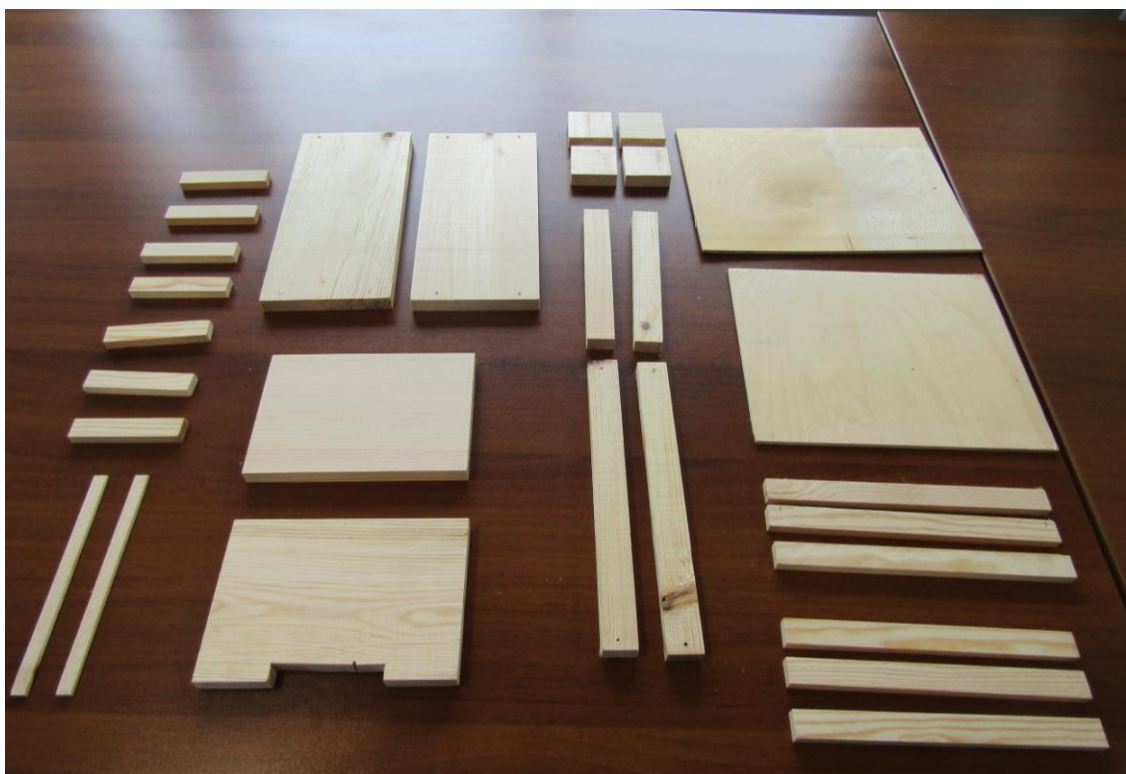
## **MATERIALS and EQUIPMENT** used for the model making of one Greek beehive, Langstroth type

	FOR A GREEK BEEHIVE MODEL
	number of items & dimensions
<b>FOR THE BOX</b>	
2 pinewood pieces (long sides)	2 (25.5 x 12 x 1.5 cm)
2 pinewood pieces (short sides)	2 (17.5 x 12 x 1.5 cm)
4 pinewood pieces (feet)	4 (5 x 5 x 1.5 cm)
1 PLYWOOD base (floor)	1 (28.5 x 20.5 x 4 mm)
2 pinewood pieces (ledge for the frames to sit on)	2 (17 x 1 x 0.5 cm)
<b>FOR THE TOP COVER</b>	
2 pinewood pieces (long sides)	2 (25.5 x 2.6 x 1.5 cm)
2 pinewood pieces (short sides)	2 (17.5 x 2.6 x 1.5 cm)
1 PLYWOOD (roof)	1 (25.5 x 20.5 x 4 mm)
<b>FOR THE 3 FRAMES</b>	
6 pinewood pieces	6 (22.4 x 2 x 1 cm)
6 pinewood pieces	6 (20.5 x 2 x 1 cm)
12 pinewood pieces	12 (9 x 2 x 1 cm)
<b>WOOD SCREWS</b>	
12 wood screws big	12 (3.5 x 30)
12 wood screws small - for the 2 pieces of plywood	12 (3.5 x 16)
1 STAPLE GUN (heavy-duty)	1 STAPLE GUN (heavy-duty)
1 HAND-HELD POWER DRILL	1 HAND-HELD POWER DRILL
1 PENCIL	1 PENCIL
1 small HAND SAW to cut the RECTANGULAR entrance of the hive	1 small HAND SAW
Acrylic colours/ exterior house paint/ exterior polyurethane/ marine varnish - optional for the décor	

Here are the real-size Greek beehive and the model beehive



Here are all pieces for the Greek Beehive model assembly



## **INSTRUCTIONS** for the assembly of the Langstroth model beehive

### FOR THE BOX:

- 1) **Cut the rectangular entrance to the hive – using the hand saw**



- 2) **Staple the 2 ledges to the 2 short sides – using the staple gun**

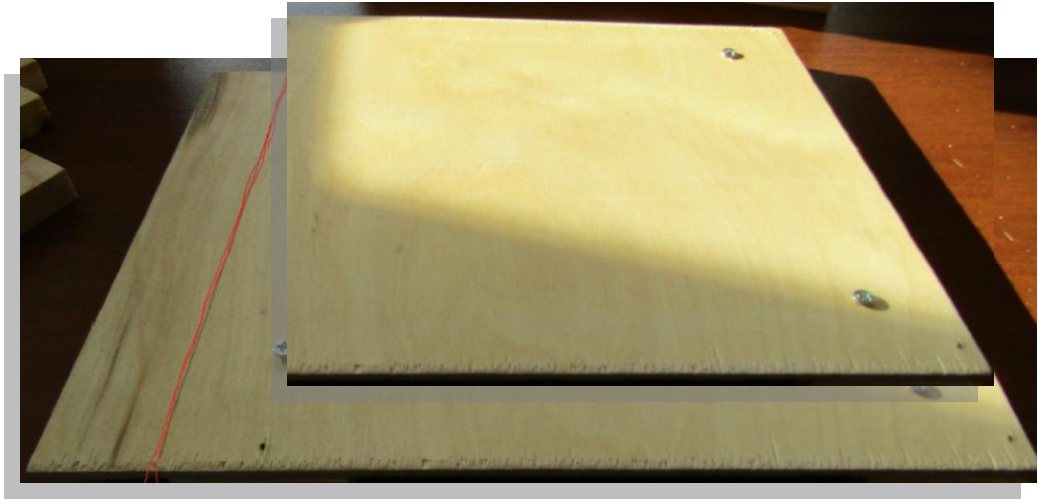
**The ledges**



**Staple one of the two ledges opposite the entrance**



- 3) **Mark with a pencil the end of the short plywood (roof) on the long plywood (floor)**



- 4) **Attach the 4 feet to the long plywood, until the marked line – using the drill**

(one small screw for each foot / 4 small screws total)



- 5) **Join the 4 sides to each other – using the drill**

(one big screw on each of the 4 corners of the two long sides / 8 big screws total)

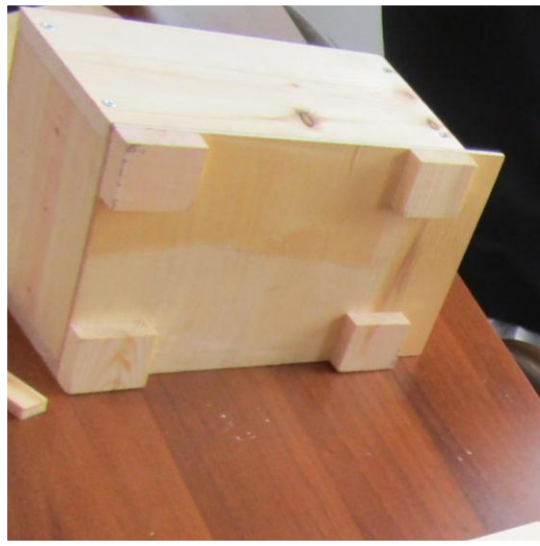


- 6) **Attach the floor-with-the-feet on the 4 joined sides of the box – using the drill  
The feet are facing upwards!**

(one small screw on each inside corner / 4 small screws total)



**The entrance slot should be facing the floor!**



**FOR THE TOP COVER:**

- 7) **Attach the 4 feet to the long plywood, until the marked line – using drill**  
(one big screw on each corner / 4 big screws total)

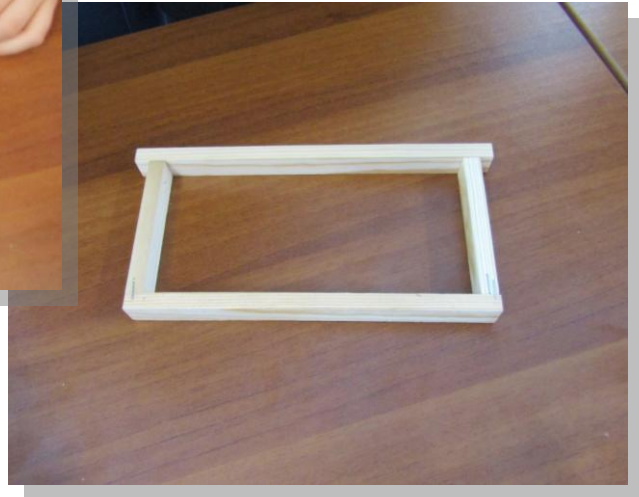
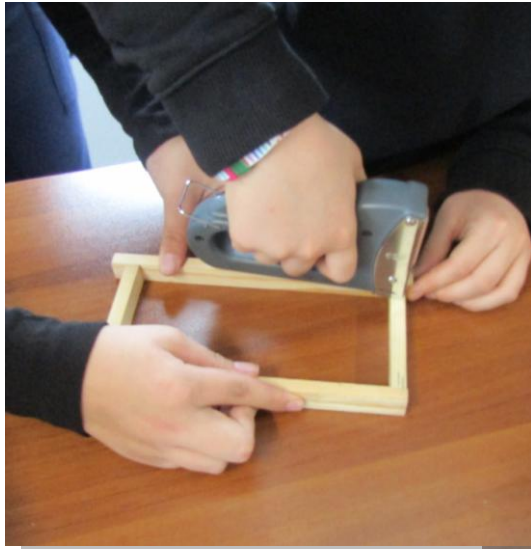


- 8) **Attach the roof to the rectangular made – using the drill**  
(one small screw on each of the 4 corners / 4 small screws total)



**FOR THE 3 FRAMES:**

- 9) **Join the 4 pieces together – using the staple gun**



- 10) **Have the frames sit on the ledge inside the box, on the two short sides of the box**



**GOOD LUCK TO 'MELISSA' BEEHIVE MODEL MAKERS!**