DIY: Eke/Clearer Boards

By Steve Davies (alias The DIY Slave)

An eke is basically a large picture frame with a variety of uses. Simple to build and so versatile, you don't even need to buy timber as these can be made from anything left over; I am still using up bits of an old Ikea bookcase I saved!

Hopefully, this article will guide you through making a basic eke then developing it into a clearer board.

The measurements used are for National hives but can be easily adjusted for any other type of hive.

Materials:

Approximately 1.8 meters of 50-80mm wood
46mm x 46mm plywood (5.5mm thick)
Approximately 1.8 meters of 20mm x 5mm stripwood
Panel pins
Wood glue

Method:

To build the sides, I generally use 20mm thick timber approximately 75mm in depth. Measurements aren't critical but it is advisable to use the same thickness as the hive. 75mm depth gives the bees room to cluster after exiting and, conveniently, will accept most feeders.

The overall size will be 46cm x 46cm and I tend to cut all four sides the same length but overlap them on one side (the exact length depends on the thickness of the timber I'm using). Sand down all cut edges.
Don't join them together just yet but it is advisable to compare with a super or crownboard to confirm it's the right size!

Next, cut a piece of 5.5mm plywood 46cm x 46cm and sand down all edges.

Assembly:
I use a belt clamp and this is my method:
• part fit two, 50mm panel pins or lost-head nails to one side of each length and put in place ready for assembly. Lay each length in position and along one short edge (other side of the nails). Connect all four sides together and clamp together. Drive home the nails and check the eke is square.

There are other clamps available that will do the job but, if you haven't got any, then assemble one side at a time without driving the nails fully home. Once complete, check for square then drive the nails home. A simple clamp can be made with any strong cord or rope but cannot be relied on to be square.

If you only want to make an eke, ensure it is square and wait until the glue has fully cured. Then drive in a third nail between the pairs of nails for added security. Fill in any obvious holes and paint/stain if required.

For a clearer board, as soon as you have put together the sides (two nails per side), run a thick bead of wood glue around the top edge. Put the 46mm x 46mm plywood on top then secure with 25mm panel pins. I put one pin in opposite corners first to align the sides and plywood before driving home the remaining pins (five per side, 16 in total). At this point, you can add a third 50mm nail to the sides.

Find the centre point of the plywood and then drill a large hole. Dave Cushman's web site states " a central 33mm hole in it" but "I wonder if the size of this hole is significant"? See also http://www.dave-cushman.net/bee/clearerboards.html

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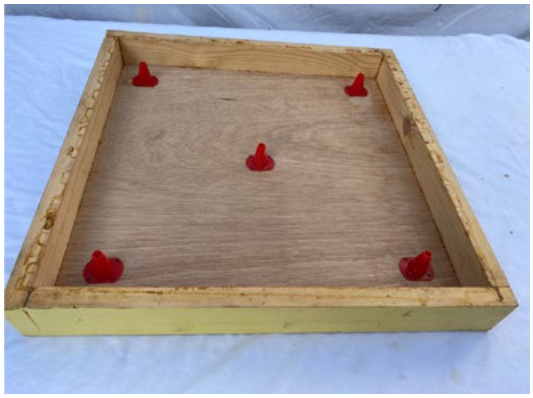
Next, pin the 20mm x 5mm stripwood around the upper edge. Do not glue this as you may curse yourself in years to come when you try to renovate the edge! Dave Cushman's web site has found that 25mm x 25mm edging stops the bees going up any brace comb and encourages them to go in one direction – down and out. I haven't tried this myself as I'm happy the way things work but you never know what will happen in the future.

The only thing left is to decide which clearer method you want as they are too numerous to mention.

I have tried three types, Round, Rhomboid and Canadian.



Please don't think they are in order of preference, they all work. The Rhomboid is best placed diagonally to allow the bees room to exit. It is surprising how many bees will be clustered under the clearer board but it shows they work 😊

Once the supers have been removed, leave the clearer boards in place as this will give the bees some extra space. When the extracted supers are returned to the hive, put the clearer board on top of the supers and you will automatically have a large number of bees moving down to clean out any remaining honey! 🐝