

Setting up an Observation Hive

Type: Thornes wall-mounted hive – 1 deep and 2 shallow

1. Glaze the Hive

When the hive arrived, it was unglazed, so 4 sheets of glass were ordered from the local glaziers to the measurements provided (2 per side – it's double-glazed) – I was however unable to fit these as they seemed to be too big for the beading to close properly. After getting the glass trimmed, and having another go at fitting the glass, I ended up breaking 3 of the panes when the hive door swung open unexpectedly



**** Tip – drop the assembly off at the glaziers, and ask them to fit it from the start – it costs no extra ****

2. Prepare the hive site



Upper shelf to prevent hive from tipping forward

I decided to house the hive in my shed, and drilled a hole in the wall for the bees to enter/exit. There is actually a pipe which protrudes from the back of the hive which needs to be poked through the hole in the shed wall which is not visible in the photograph. The hive bottom then needs to rest on something, and be prevented from tipping forward.

- I screwed a lower and upper shelf between 2 vertical joists in the shed
- A hole was drilled for the pipe.

By turning the hive sideways, it is possible to hook the upper end of the hive **behind** the upper shelf, then poke the pipe through the hole, and rest the lower edge of the hive on the lower shelf.. Slide vertically, and the hive is firmly in position, yet can be removed when necessary.

Lower shelf to support the weight of the hive

**** Tip – when you design the support and housing for your hive, it helps if it is removable without major effort, to allow you to take it to the apiary ****

3. Fill with frames/bees

Shallow:

- Choose 2 shallow frames, full with capped stores from other hives in the apiary.

**** Tip - Ideally these would not be Hoffman frames as the self-spacing edge gets propolised to the glass. ****

Deep:

I wanted to watch the bees raise a queen, so was not looking to populate the hive with a queen.

Steps:

- Take the hive to the apiary – ensure end of pipe is plugged with foam
- Place hive on the ground, with the door open, next to the donor hive
- Choose a deep frame with brood of all stages, definitely some eggs, but mostly capped brood.
- Transfer into the hive.
- Shake in nurse bees from the donor hive (about 3 frames-worth)
- Close up (unfortunately a lot of crunching can happen at this point)
- Take back to the new observation hive site, and place in position.
- Feed
- Remove foam plug at the end of the day

***** Tip – if possible choose frames which are evenly drawn – to discourage brace comb building *****

After 2 days, a few queen cells were under construction. Later on in the week, piping was heard, and hatching was subsequently witnessed. The emergent queen (Queen Diamond, as she hatched on the Queen's Jubilee weekend) lasted until late summer. It was then observed that a supersedure cell had been built. When the new queen hatched, the old queen remained in the hive for at least a month, both mother and daughter laying side-by-side. (See picture below)



4. General Management

It's very easy to observe exactly what is going on in your hive at all times – brood/ eggs/ wagging/ hatching /laying/ queen/ stores/ room....

Some points to note:

- It is necessary to keep an eye on stores, and feed syrup/pollen substitute via the hole in the top as and when necessary.
- In early Spring, wrap the hive in insulation to help preserve heat if brood present
- The bees have sturdy wire mesh ventilation holes in the hive – these are frequently propolised over. Seeing as though the shed interior temperature could have risen if the rain had stopped, I thought ventilation advisable. I frequently had to clear the mesh by poking a matchstick into the grills
- By the end of the summer, the bees had covered a lot of the inside glass surface with wax. This was unavoidable. Moving the bees to a nuc. for the winter allows the hive to be thoroughly cleaned.
- Attempts to photograph the activity in the hive through the glass was generally unsuccessful due to reflections