Swarm Trapping / Bait Hive (© My Beekeeping Kit 2020)

Swarms will fly out a hive or wild nest on a warm sunny morning, settle somewhere nearby and wait for the scout bees to identify a suitable new location in some cavity, normally about 30 - 40lt, but will settle for as little as 20lt, in the apiary that might be an empty hive or nuc box. Once located the swarm will move in and may remain depending on whether it proves suitable or not. If they remain they will quickly build comb using the honey they loaded up with at swarming, it's hard work and a big investement so if they don't like the new location they will move on to another. The reasons for them not remaining can be: space; air flow; weather proofing; security an so on. A successful swarm trap should ensure it's attractive to a swarm and will encourage them to stay.

Trap Design

Every beekeeper has their own preferred type and method of trapping swarms, and of the many designs and ideas on swarm traps, some are good, some not so much. Basically the swarm is looking for a cavity to build a nest in that is big enough, secure and weather proof, so any container that answers those requirements should and probably would do, and the swarm will not discern between a purpose built trap and any other cavity. The main issues for the beekeeper is catching the swarm, keeping it, then transferring it to a hive without fuss, and that is where the need for good design comes in. For example a skep hung in a tree makes a good trap, but transferring the swarm once it has built comb on to the skep body presents problems. Once a swarm has settled, it wants to build comb (they came prepared!) and while a nuc box filled with frames of new foundation or drawn comb may attract a swarm, they may not stay because there is not enough 'dead space' cavity for them to build in. The answer is a carefully designed trap that has the right smells, cavity, dead space in which to build comb, and frames to get the comb in the right place (five frames is suitable). You can use a nuc box (this will be less then 30lt), or a purpose made box similar to a nuc but with a 7.5 - 10 cm extended lower area of dead space below the frame bottoms. The centre frame should be empty drawn brood comb, either side of this the frames should be completely empty or have a small starter strip of wood or foundation (its an idea to wire this beforehand to support the new brood comb), then the frames on the outsides should have fresh wired foundation. The swarm will build first on to the empty frames or starter strips, then on the outside frames.

Baiting The Trap

The smell of beeswax and fresh empty brood comb can be enough to attract a swarm but using swarm lure will increase your chances, also rub wax from brood comb onto the insides of new traps. You can use commercially available swarm lure or you can make your own: Virgin Queen Tincture; Slum Gum; Fresh Lemon or Lime Peel; or Lemongrass Essential Oil which is a favourite containing the citral and geranoil that is emitted from the bees nasonov glands, one drop on each inside wall and one drop at the entrance is enough to get the scouts interested. To re-bait the trap use a little lure around the entrance only, inside the trap will retain its smell for a considerable time. Don't overdo the lure, too much becomes a repellent!

Placing the Trap

Set the trap mid April to end of July in locations where swarms are likely to go or pass through, some areas are known locally for swarms and are a good choice of location. Chose a predominant tree on a woodland edge with an open outlook (bees navigate by sight and use significant trees as landmarks and will always have bee traffic). Set the trap about 4.5 m (15ft) up from the ground facing the direction of the setting sun, with partial shade during the day to avoid overheating. The higher up the tree the better but lower levels 3m or less can be successful. Caught swarms should be left for a week or so to settle before transferring to the apiary, and only transfer to a hive when the swarm has produced brood. Re-deploy a successful swarm trap as soon as the bees have been hived, the trap will have a 'swarm smell' which is a good lure as you will get.