Pointers to Better Beekeeping

Giving the Bees More Space

One area of beekeeping where most of us were lacking in the past was in the quality of brood combs to be found in our hives. Now that we are dealing with varroa and are carrying out frequent and detailed hive inspections we should try to improve this situation.

All frames showing any serious amount of drone comb should be culled. Any frames with large holes in them likewise. But how often do we look critically at the other frames in the brood chamber. We have all been advised in the past to replace two or three frames in the brood chamber each year. How many of us do so and if we do how do we go about it?

Brood frames suffer from a variety of defects, which reduces their effective size to the bee. The first and last frames in many brood chambers are often in poor condition. They may have large holes in them or be badly drawn. The outside of the frame may be unused or unusable.

Occasionally we find mould growth on the outer frames of weak colonies. Slugs may have entered the hive and they can cause an amount of damage to good comb. Bees seem to dislike using frames after the slugs have damaged them.

The bees as we all know will remove some of the wax from the bottom or sides of frames. The reduction may be small on each frame but in the context of the eleven or twelve frames in the brood chamber may be a considerable reduction in space available to the colony.

Over the life of a frame many cells become unavailable to the bees. They may be clogged with excessive amounts of pollen or granulated honey. The bees may ignore them for other reasons not obvious to us.

Don't give the bees frames that a mouse chewed a hole in the belief that the bees will fill it. When you are looking through your bees check the brood area and note if the bees are using all of the frame that they might be using. If they are not why not?

In general if you have to ask yourself a question about the quality of a frame it should be discarded.

Why do we put up with so many poor quality frames in our hives and what can we do to redress the situation.

The main reason we don't do enough is because we seldom have enough new good frames of drawn comb built specially for the purpose of replacement. We may depend on replacement frames recovered from colonies that died out. Often the replacement frame is only marginally better than the one being replaced.

Placing frames of foundation in the brood chamber as a matter of course is a hit and miss solution. Bees need certain conditions to build comb and just because you give them foundation does not mean that they will build it out.

I had a beekeeping friend who adopted this method every year and often we would find the foundation untouched a month or more later. Then the foundation can become stale and buckled so that when the bees do get around to building comb the result may often be no better than that which was removed.

The solution is to get the bees to build replacement combs and to keep them carefully until they are needed. When we remove the honey we still have high bee populations in our hives and if the flow is over they are to some extent redundant. Why not give them a brood chamber of frames with fresh foundation and a gallon of syrup.

They may bring the syrup down into the brood chamber to begin with especially if we have left them short after the removal of the crop. However a second gallon should get them building comb.

Some colonies are better at this job than others. Do not worry if they begin to ripen and cap some of the syrup in these frames. If you keep an eye on progress you should be able to remove frames as they are drawn. It does not matter that the frames are not fully drawn out. Once they are placed in the brood chamber as replacements they are available to the bees for brood rearing or food storage and if needed the bees will build them out further.

I have found that the bees do an excellent job of comb building at this time and you will have good quality combs to replace the old worn out frames. The frames you get will all be worker comb and should not have any holes in them. If we did have good replacements we would not put up with poor quality frames in out hives.

Remember we do not need to get all our colonies building out foundation. One or two colonies should be able to provide for the requirements of most of us.

There may be a great run on your good comb the first year but if you make a start you will find that you are far more critical about your frames and will need less of them the following spring. You will also find yourself renewing frames during the season when you find any that are coming to the end of their useful life.

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