

# Patterson's Page

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There is hardly an article written about swarming that does not contain a variation on: "swarming is the only means of colony reproduction". This seems to be one of the standard throwaway beekeeping statements that does not appear to give much thought to there being much more to a swarm than simple reproduction. I believe that understanding and observation are important in beekeeping and you can learn a lot from looking at and dealing with a swarm.

The character of swarms has changed since the pre-varroa days to the point where newer beekeepers can be confused, especially if they have not been taught or read about what they see.

## Pre-varroa

In a wild colony the first swarm, called a 'prime swarm', is headed by a fertile queen, with any secondary swarms, called 'casts', being headed by one or more virgin queens. Before varroa, if you came across a prime swarm with one or more virgins instead of a fertile queen it was probably as the result of something a beekeeper had or had not done. There were two common causes:

1. The queen may have had clipped wings and got lost when the colony first swarmed and they had swarmed several days later with one or more virgins or
2. The original queen had been removed by the beekeeper and the colony had swarmed with one or more virgin queens that had emerged from swarm or emergency cells.

In the past I always found that swarms to be healthy and vigorous. You could throw a swarm into a hive, clip the queen's wing and, if it stayed there, it would do well with little attention needed for the rest of the season apart, perhaps, from adding supers. On many occasions during a nectar flow I have had a swarm fill out a full brood box of foundation in a week. The queen, if fertile, would start laying within a day and would usually do well, but she may have been superseded at the end of the season. They had to in the wild, otherwise, they would not build up into a colony that had a good chance of surviving their first winter.

## Post-varroa

Since the arrival of varroa the behaviour of swarms has changed considerably, with some of the problems that the newer beekeeper sees not being found in books. Where at one time a colony would only swarm with a good queen, there are now a significant number of large swarms that have virgin or fertile queens who fail, 'disappear' or are superseded soon after hiving; sometimes leaving the swarm hopelessly queenless. I think the reason is because the queen is often failing in the colony it has come from and the colony has built a small number of supersedure cells. If the colony is strong and the weather fine, the bees will probably swarm, rather than supersede in the normal way. For more information on this see <http://www.dave-cushman.net/bee/queenperformanceproblems.html>. There are a growing number of tiny swarms with fertile queens, which I think may be coming from collapsing colonies, but these bees usually look 'sick'.

## General

There has always been the view from some quarters that swarms should not be taken or given to beginners as their first colony. There are usually two reasons given, firstly the possibility of disease, secondly that you do not know what the temper is like. I have always disagreed with this view, as I have seen many beekeepers start with swarms, often with less problems than those who buy a nucleus from an 'approved source'.

The only diseases that are likely to be a problem with a swarm are the two foul broods and in over fifty years of beekeeping I have only known of one swarm where EFB (European foul brood) was transmitted. That was where a fairly inexperienced beekeeper collected a swarm from a local EFB 'hotspot', but I have known of many colonies that have been sold with foul brood.

Why would it be likely that a swarm would be more of a problem temper-wise than a nucleus taken from the same colony? But, I do not understand why beginners should always have very docile bees. How are they going to learn how to handle a 'touchy' colony if they are not exposed to one?

They get into the habit of handling 'soft' bees that do not sting and this just delays dealing with problem bees for several months and they will not be prepared for this. In my view it is far more useful for a beginner to learn from hiving and managing a swarm than from buying a nucleus where the bees just sit there and teach you nothing.

I understand there is an outside chance of a swarm taking foul brood with it in infected honey, but there is a well-known procedure to reduce the risk. Hive a swarm on foundation, not drawn comb, so that any infected honey is used to produce wax, rather than being stored in the comb. Do not feed the swarm and isolate it from other colonies by placing it some distance away. If you are short of space, then face the entrance in another direction.

I suggest an experienced beekeeper helps a beginner and inspects a few days after hiving the swarm to see the state of the queen, giving a new one if needed. Give the brood close examination at every inspection and weekly for a couple of brood cycles. If it is clear of disease, gradually move the colony to its permanent position. The beginner should see the swarm develop into a full colony under supervision. They should then have their first bees at little cost, they should be healthy with a good queen and have learnt a lot in their first few weeks of beekeeping. With a bit of luck they may have helped collect it too; what a brilliant way to start beekeeping?

When you collect a swarm have a close look at the bees. You should not see varroa, but if you do, it is likely that the swarm has come from a colony with a failed queen, where there is no brood for varroa to be in, so they are on the bees.

Have a look at individual bees. If they are 'shiny', there is a chance they may have a heavy virus load and may have come from a colony heavily infested with varroa. They should all appear to be busy, not lethargic. As you can see, there is more to swarms than simply being a means of reproduction.