ARE **YOUR BEES GOING TO SWARM?**

Honey bees are born with the instinct to swarm when their colony is strong enough and other conditions are met. By swarming to a new location the bees are increasing the survival of their species which is a trait they have been expressing for a very long time.

Unfortunately many of the things that we beekeepers do to make our hives strong and productive are the very things that bring about the impulse of the bees to swarm. It is usually the strong hives that swarm not the weak ones.

Swarms are exciting to find if they come from someone else's hives but are not so nice when they come from our own hives. If you have not had a hive swarm you just haven't been keeping bees very long or maybe you didn't see it happen.

BELOW ARE SOME OF THE GOOD THINGS WE DO TO MAKE OUR HIVES STRONGER AND HEALTHIER BUTMORE LIKELY TO SWARM.

In the fall of the year we prepare the hives to be strong and healthy so they will be well populated in the springtime and able to build up quickly, in time for the nectar flow. This is a very important time of the year because the hive is starting to raise winter bees which are the ones that must make it through the winter and get the hive off to a good start in the spring.

Some beekeepers do many of the following things in the fall:

- ✓ Kill the mites with a miticide
- ✓ Check for a reasonable amount of brood for this time of year and observe the pattern
- ✓ Replace the queen if the brood patterns are not good or if she is getting old. We don't want her to die over the winter
- ✓ Feed all the 2:1 sugar syrup that the bees will take and do it before it is too late for the bees to convert it
- ✓ Consider medicating with Fumagilin to prevent Nosema
- ✓ Place an insulating ventilation board over the inner cover
- ✓ Place Styrofoam insulation on three sides of the hive and wrap it with tar paper
- ✓ Insert the tray under the screened bottom board
- ✓ Use a larger than the usual top cover with built-in insulation

If we have done all of the things listed above, our hives should be strong, healthy and well populated in the springtime <u>and we should not need to feed them</u>. They should be ready to bring in nectar and pollen.

IN THE SPRING TIME

During the winter, the bees will move up through the hive and in the Spring we will find them in the top brood super.

- ✓ The field bees will be bringing in pollen and nectar
- ✓ Maybe you are feeding syrup because the bees did not have enough food in the fall
- ✓ The bees will put the nectar or syrup into the cells that the queen needs for laying eggs.
- ✓ Most of the available drawn comb will be down in the lower brood super
- ✓ Does this sound like a problem?
- ✓ YES, IT IS! If the brood nest becomes crowded the hive will start planning to swarm.

Below are some of the signs that the bees are considering swarming

- ✓ Early drone rearing
- ✓ A large bee population
- ✓ Good brood rearing
- ✓ An aging queen or one in declining health that is producing less of the pheromones than normal
- ✓ The bees are restless
- ✓ Very little foraging
- ✓ Few eggs
- Several queen cells. The queen cells for swarming are found along the bottom of the combs in the brood area If we find many of the above we can be pretty sure the bees will swarm a few days after the queen cells are capped.

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WHAT WE CAN DO TO PREVENT THE HIVE FROM SWARMING?

Reverse the upper and lower supers.

Do this only after the brood has moved completely into the upper chamber. Don't split the brood nest by reversing too early. If we see too many of the tell- tale signs listed above it is probably too late for just reversing the brood chambers.

Once the bees have developed the swarm impulse and are committed to swarming, we cannot stop them unless we can make them think that they swarmed or if we break up the brood nest area with drawn comb as in 'checker boarding'.

To do this we can make a nucleus hive, a"nuc," or a "split".

Often a split is made by taking frames of brood, honey and bee bread from <u>one or two</u> strong hives and using it to start a new hive. The more frames brood and feed that you transfer, the stronger your new hive or nuc will be.

Making nucleus colonies and splits are topics for other discussions.

Be sure to add a honey super. It is better to put it on too early than too late.

If we are not familiar with these processes now would be a good time to start learning about them.

Did you know that:

- ✓ Most swarming takes place in May and June.
- ✓ Swarms usually leave the parent hive between 10:00 AM and 2:00 PM.
- ✓ Swarming usually occurs during nice weather often after a period of bad weather.
- ✓ The old queen goes with the swarm.
- ✓ About 50 to 60% of the bees will leave with the swarm.
- ✓ Sometimes there are "after swarms" which are much smaller in size and weaken the parent hive even more.
- ✓ The hive always leaves at least one capped queen cell before the swarm departs.
- ✓ It is generally a waste of time to cut out the queen cells because the bees will just make more and other procedures must be undertaken as soon as possible. Cutting out swarm cells only delays the act of swarming and we could miss seeing one.
- ✓ Before a hive swarms the queen stops laying eggs and the bees stop feeding her and she looses weight so she can fly.
- ✓ The swarm will generally land somewhere close to the hive while they decide on which new location to accept that the scout bees have found. This could take a short time or several days.

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