Apis m. Esoteria 2a

Hive Management

What do you want to accomplish with your bees? You need to figure this out before you purchase equipment and bees. Of course, you can change your mind at any time. However, if you have an idea of what you want to do you can save money by not over-purchasing equipment. You also will get a frame of reference in your mind that will allow you to focus your attention. You will soon see this is important.

What do you want to do?

Pollinate my garden

Make honey for friends and family

Make excess honey for more friends and to sell

Make ancillary hive products

Wax candles and cosmetics

Pollen

Propolis medicinal products

Grow bees and queens for sale

Just growing bees will produce all the above as a by-product of good hive management. Focusing on one aspect more than another will determine how much of which by-product you produce.

Your pollinator beehive will expand in the early summer creating excess bees. What do you want to do with them? If you don't manage them, they will swarm.

That is okay, but! The loss of bees in the swarm may set you back some to achieve the goals you want.

If you want a small amount of honey just for the family, do you want cut-comb (the easy, cheap way) or extracted honey? The difference is how you want to extract the honey and what equipment that entails. With cut comb you really don't even have to remove the honey from the hive until you are ready to eat it. With extracted honey you can use the old-fashioned method of just squishing the comb in a bowl or purchase (barrow) a centrifugal extractor.

If you want to produce lots of honey for sale you will need an extractor and bottling equipment.

Doing something with wax requires lots of bees to produce the wax. Making wax is slow, labor intensive to the bees, and consumes a lot of honey. Wax is made from honey. One hive may not produce enough wax in one year for one large candle. It takes about 8 pounds of honey to make one pound of wax. That is one pillar candle.

Propolis is 10 times more medicinal than raw honey. It is the varnish and glue that bees produce from plant leaf resin. It takes a lot of bees to collect propolis in the spring using some kind of propolis trap to collect it on. The spring leaves put out more resin than the late summer leaves.

All the "Bert's Bee" products and more are made with honey, wax, or propolis in the recipe. You can make them in the kitchen as gifts or for sale.

Pollen is a wonder drug. It is consumed raw to fight allergies and as an energy booster. You would need a pollen trap and a pollen cleaning system. It must be collected and stored daily.

Growing bees and queens for sale like a cattle rancher requires normal hives and special small finishing hives. This can be done on a small scale with little extra equipment or more intensely with specialized equipment.

How you manage your hive will determine how much of each aspect of beekeeping you will get into. One hive will produce all the phases throughout the year.

Let us look at each aspect in the order of the annual cycle inside the hive. First you will grow bees. One hive or ten makes no difference to the bees. You will only have to work harder repeating each activity 10 times.

At this point it does not matter if you start your hive with a package or a nucleus hive (a nuc). The nuc will be 6 weeks more maturity than a package of 3 pounds of bees and a randomly selected queen. Once the bees are installed in a hive body your job is to sit back and watch the bees grow. If you want the population to grow slowly you might only have to feed the colony sugar syrup until it is established. If you want it to expand quickly you will need to feed syrup and pollen substitute for an extended period of time (6-8 weeks) to feed the brood and draw out wax comb. No matter what, by the time summer arrives you will have extra bees as the hive is ready to swarm.

During this build up period, if you want lots of wax for products you can stimulate lots of comb building through frame manipulations. You will reduce the amount of honey available for the new hatching bees and for winter storage.

If you want extra bees to expand your apiary or for sale you can keep the parent hive population small but crowded. This will stimulate queen cell development and swarming. As each of these aspects occurs you can repeatedly split the hive. You must intensely manage the hive to avoid swarming. At the same time the hive will not grow large enough to store enough food to survive the winter. If you are managing a hive system of two hive bodies for your base colony, there will be enough bees to store winter food and support the splits.

The growing colony will draw additional comb for brooding more bees and for storage of winter honey. With lots of bees in the colony and lots of blooms (late spring) you can judiciously steal the frames of comb and the bees will replace them with more comb quite quickly. Again, you are reducing the colony's ability to put up winter food. The queen also will not produce her maximum amount of brood as you are reducing the area available for her to lay eggs.

You will also get wax from your honey collection process in the fall. If you use the family cut comb process you will not generate extra wax, as you will have eaten the wax with the comb. If you extract the honey using the squish technique you will produce the most wax, as all the comb is lost during the extraction process. If you use the centrifugal machine extraction process you will preserve the comb to use in honey collection next year but still have the capping wax that you removed before running the frame through the extractor.

You can place propolis traps in the hive which will stimulate the bees to collect propolis. This is economically a very valuable product. Every bee collecting

propolis is not collecting nectar or pollen. Propolis can be collected in the spring (most efficient) or the late summer after the nectar flow is over. The requirement is to have growing green leaves that produce the required resins. There will be a little propolis produced in the extremities of the hive that you can scrape out at any time. This is along the box edges and the lid or on the rabbet edge of the box where the frames rest. You need to clean the rabbet area yearly to make frame removal easier.

Pollen collection requires a pollen trap of some kind. Again, the more bees in the colony the more pollen collected. More bees will be engaged in nectar collection than pollen collection. The forager bee carrying pollen will crawl through the trap and some of the pollen will be scraped off the bee. Enough will get through the trap to feed the growing larvae, but maybe the queen will slow down egg laying because less pollen is getting into the hive. The pollen trap needs to be emptied almost daily. The pollen will now be cleaned to remove bee parts and grass seeds, etc. Then the pollen is stored daily in a freezer until used or sold.

You can see how the nuances of targeting one hive product will affect the other colony's activities. More honeybees will be a by-product of growing the hive for any endeavor. As you manage the population to avoid swarming, you will create nucs from your splits. These nucs will grow new queens if done correctly. They will grow into full colonies before winter. You can keep the extra colonies or sell them and the queens they produce throughout the year.

I like to go into winter with the number of nucs matching the number of hives that I want in the spring. This way I am growing my own colonies to replace the ones that die over the winter. This requires you to have extra nuc boxes and/or complete hives.