

Miller Alaska Maneuver

**AKA
Tom's System**

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What is the idea?

What is involved is making a split at the beginning of the nectar flow. This accomplishes several things. It virtually (actually in my experience) eliminated swarming. I have never had a swarm using this system. It maximizes honey production and virtually eliminates brood in all honey frames. Results in a nucleus colony which can be used for a couple purposes. Results in a new queen in each colony treated. And it seems to eliminate varroa mite problems. I will touch on each of these areas.

What exactly do I do?

Four weeks before the date of the honey harvest, I go into each colony and remove the queen with two frames of brood. It is important that some eggs be left in the parent colony for the raising of a new queen.

As far as the original colony is concerned this amounts to a swarm. They will not have a queen laying and thus no new brood. They will raise a new queen using some of the eggs I pointed out must be left in the brood nest. To ensure a good quality queen (as much as anything like that can be ensured) it is important to go back into the parent hive on the fourth day and carefully remove sealed queen cells. Leave unsealed cells to produce the new queen.

It is important to remove the sealed cells because any queen cells already sealed before the fifth day will have been produced with larvae a day old, and may well result in inter-caste queens. That is queens that have started out life to be a worker and were switched after a day or so to be fed as a queen. These queens will usually be of a lower quality than a larvae that was fed as a queen (with royal jelly) from the beginning. This is why you will often read that emergency queens are not desirable. The bees want a queen as soon as they can get one so they will often use larvae that are older than the ideal.

It is still possible with several queen cells to have a colony throw a swarm. This danger can be greatly reduced (eliminated in my experience) by returning a week after cutting out sealed cells and carefully removing all but a couple of the biggest cells (and my reading suggests a rough surface is a good indicator as well) being careful not to damage or jostle the ones you leave. Swarming is thus eliminated.

Now the parent colony has a queen cell and considers itself queen right. It will thus continue to gather nectar and make honey. Now since there are no new babies to feed, all the nectar will be used for honey production. These new babies not being hatched are bees that would never be old enough to serve as collectors before the flow ends. These are often called "welfare bees." In addition the elimination of what we have called "welfare bees" the younger workers will graduate to the field at an earlier age thereby increasing the collection of nectar

and pollen. This all adds up to a larger honey crop than would have been gathered otherwise. Maximized honey crop is thus obtained.

Now over a period of three weeks all the brood will have hatched and the combs will be ready to hold honey. Since it will take about a month for a newly hatched queen to begin laying there will be no brood to worry about in your honey harvest. If you wait to harvest in hopes of getting a little more honey you may well have a little brood appearing. It should all be in the bottom box so there is still a minimal impact of brood in the hive.

We have discussed elimination of swarming, maximizing the honey crop, and the elimination of brood in the honey frames.

There is now a nuc to be considered. This small colony will build up as you feed it – and since it has a very small foraging population you should be feeding it from the beginning. I use inverted quart jars, or nut jars, with a number of small holes in the lid inverted over the brood nest. A pollen supplement patty might be in order as well. Since I am normally trying to stimulate brood I use a 1:1 sugar syrup – or slightly stronger (I don't actually measure). By the end of August, or shortly thereafter you will have a new full sized colony. You have doubled your stock, but that is only useful if you can winter your colonies successfully.

I have normally used my nucs for introducing new queens. A nuc will much more readily accept a queen than a full sized colony. I purchase queens which I hope will produce good wintering stock. Before the start of the introduction the laying queen must be removed. There must be no queen and no queen cells. No colony will accept a queen unless it considers itself queenless. Once the new colony has begun to build up and the honey crop has been gathered, I will combine the two colonies. For me this is the beginning of August. Before combining the new queen the original colony has raised will have to be removed. So there we have two possible uses for the new nuc as promised.

One question arises about the location of the new nucs. I routinely place my nucs beside the parent colony.. Won't the workers all return to their original home? Not in my experience. Remember the two frames we used to form the nucs were brood frames. The workers (nurse bees) have never been out of the hive and so do not know the way home. They will stay with the queen unless there is something else going on besides what we have discussed.

One last thing accomplished by this maneuver is varroa control. It seems that when there is no brood in the old colony the varroa decline since they can not reproduce. The nuc is building up rapidly and is able to keep ahead of the mites. When I first began using this system varroa control never even entered my mind. I was simply arranging to requeen my colonies with winter hardy queens. But, since using it I have had colonies survive multiple years with no varroa problems. One colony survived through seven winters and never showed any varroa symptoms. I never saw more than two mites with a 48 hour natural drop over a sticky board. Was I onto something here? I read an article by Mel Disselkoen in the July, 2010 issue of "Bee Culture" which suggested that I might be. [I can send you a PDF copy of the article if you are interested (contact beeman@gci.net). According to the author "These colonies survived because the mites were reduced to a minimum by the pause in brood rearing in the same way that Africanized bees survive the mite and increase via frequent swarming." I don't know if this is the real explanation but resulting resistance to varroa appears to be real. It has long been known that a break in brood rearing gives some

protection against bee diseases, so this may be part of the same protection.

Recap

Beginning with a strong colony beginning the nectar flow two brood frames with the original queen will be moved to a nucleus box (nuc) next to the original hive. (you can actually put your nuc anywhere you like.) Ideally your nuc equipment would consist of all drawn comb, but some foundation will be acceptable as the new colony grows. Since your new colony will be quite weak a greatly reduced entrance should be used. What ever you use for a hive stand, as well as all your equipment should be set up before you begin.

Set your nuc box, I use a standard deep box, on your stand next to the parent colony.

Remove several frames from the center of the box to leave room for your new nuc colony.

Begin with what amounts to a hive check. When you locate the queen place her along with 2 or 3 frames of brood into the space provided in the center of your nuc. Add any extra frames removed to the outside of the brood nest in the nuc box.

Remember that it is extremely important that there be eggs left behind in the parent colony. Only if the parent colony is queen right will they continue to forage and prepare your harvest and for winter if you are wintering.

Place these two or three frames of brood along with the queen in the empty space and carefully move the surrounding frames into place. Add the frames you removed to begin with on the outside of the new brood nest. Be sure that there were eggs left in the parent hive for the production of a new queen. I keep repeating that as it is essential. Now close up the nuc having put your sugar syrup feeder on. I have never bothered but a pollen supplement patty would not be out of place now. Reduce the entrance to the nuc to the smallest opening on your reducer, around an inch.

Now replace the frames you removed from the parent colony with drawn combs or foundation and close up the parent hive. There will be a bit of extra activity around the parent hive for the first day. Very quickly the colony will begin raising their new queen and normal activities will resume. Keep an eye on the syrup level on the nuc.