## **MEL'S EXCEPTIONS TO THE OTS GUIDELINES**

## WHEN MITICIDES ARE APPROPRIATE

Since the mites entered the beekeeping scene in the late 1980s there have been lots of honeybee colony losses. Also in the late 1980s, I began OTS brood breaking by making artificial supersedures the first of July on the 43 parallel of Michigan. I have been practicing and teaching miticide-free beekeeping for 25 years which may imply that I am totally against miticides. This is not the case as there are specific circumstances where miticides can be used to save a colony. Let me explain. On page 32 in my 2016 book, OTS Queen Rearing, I make four starts to break the Varroa mites' breeding cycle. For 25 years I averaged two survivors from the four started which is an 100% increase from the one hive in the spring so I didn't need to use miticides. But circumstances have changed drastically over the past 30 years. Today, a lot of beekeepers take all of the honey from the hive and let the bees die from the mites because they figure that they will lose over 50% of their colonies anyway. They simply buy more bees in the spring with money from the honey sales and continue this way every year. This unfortunate trend endangers any OTS colonies within flight range (see page 105 in my book). I have come to call these abandoned, weak, non-OTS colonies that collapse in the fall from mite overload, "MITE BOMBS." This last year with the warm, late fall, some of my healthy July starts became re-infested by robbing out these weak, mite-infested colonies in the area. After dealing with this unfortunate turn of events, I determined that if there is a mite count of over 3 per 100 in a colony in November when there is no brood you must treat according to the IPM guidelines to save this colony. Its survival will also depend upon the length and severity of the coming winter. It certainly isn't an ideal situation but all beekeepers have the right to protect their livestock even if it means using miticides. Under these circumstances, I am not opposed to miticides although I am still miticide-free for over 25 years as I can make increase very quickly from my survivor stock.

## HOW A PRE-SOLSTICE OTS QUEEN CAN SAVE A COLONY

In July, when you make the 4 artificial supersedure starts, instead of pinching the queen you can make a broodless swarm with one honey comb and two shakes of bees. All swarms break the mites' breeding cycle so these bees will be clean. In 30 days, if one of the daughter queens does not start laying you can unite the old queen with this failed start and save the start. Under proper OTS conditions this queen is only one year old and is in perfect condition to live another year. Now I mention in the book that queens mated before the summer solstice will be shut down in the fall by the alpha bees. This is not true with a swarm because the alpha bees that control the queen are now in survival mode and want to rear as many bees for the winter cluster as possible. In my opinion, it is always better to have the daughter queen continue the colony instead of the pre-solstice queen but in the case of a failed start, it is totally appropriate to save that colony with the pre-solstice queen.