

The Russians are Coming!! - By Joe Lewis

The Beginning. The Russian Bee stocks originate from the Far East Russian region of Russia called Primorsky, near Vladivostok (nowhere close to Moscow!). These bees were first imported into the United States in 1997 by Dr. Tom Rinderer at the USDA-ARS and were researched, tested and released to the beekeeping industry beginning in 1999 and 2000. This is interesting in that the previous importation of honeybee stocks took place over a very wide period of time. The first stocks of Northern European (Black) honeybees came over to North America in the early 1600s, and the next major importation of new stock was with the Italians beginning in 1859. Over the subsequent years there have been many other sub-species imported (up until the overall ban on bee imports in the 1920s) including Buckfast (a type of Italian), Caucasians, and Carniolans. Many of these are good bees, but they can't compare to the Russians in their ability to naturally deal with varroa mites without chemicals or other treatment. Varroa mites are the main cause of the losses of our bees year after year (since they arrived in the US about 1987). Russians have the best hygienic abilities and may be considered VSH (varroa sensitive hygienic). They are survivors. They are resistant to Trachea mites also.

Acting Differently. Ask any beekeeper that has been around for a while and he or she will tell you that not only does each sub-species of bee perform and act differently, sometimes there is even great difference from hive to hive from the same sub-species. But now after 151 years of praising and raising Italian bees, we need to take some time to study the Russians and learn some new management skills so we can take care of them (and they can take care of us!). My experience with Russians shows them to be about as gentle and easy to handle as Carniolans, Caucasians, and Italians.

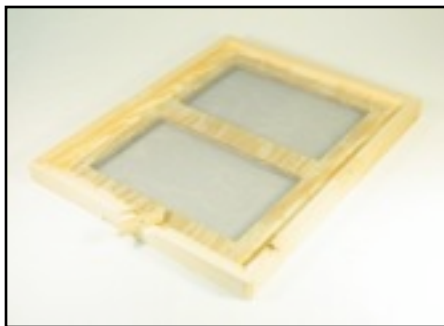
Plenty of Honey. If you don't have Russians and are concerned about honey production, don't worry. Honey production from Russians has proven to be equal to or greater than the other bees. The reason the commercial producers and big time pollinators can't use Russians is because they can't show the heavy brood buildup in time to make it to California almonds in Feb and March each year. And almond pollination is where the money is for those guys. They have to follow the money. We don't – we can follow the path to natural, healthy, chemical-free bees!



Smaller Clusters. Russian bees do not build their populations until pollen is available, and they shut down brood rearing when pollen is scarce. Italian bees and to a lesser extent Carniolan bees maintain a large brood area and worker population regardless of environmental conditions. This can result in more bees than the hive can feed and may lead Italian colonies to early winter starvation. It also partly explains the Italian bee's tendency for robbing in late summer. Russians will carry a much smaller cluster through the winter, but they will explode as soon as pollen and nectar become available. When the summer drought and nectar dearth hit, they shrink down again. So don't expect to see big brood patterns all summer long. You won't. Just because you don't see brood does not mean your queen has been lost.

How to Re-Queen Russian. This can be a challenge, but it is not as hard as you think. It just requires a different technique than we are accustomed to. Many beekeepers have used traditional queen introduction methods and lost their expensive Russian queens. They have a different odor (as do all queens) and the parent colony must become adapted to it more slowly or they will kill the new queen. If you are re-queening Russian, you should split the hive into two portions (upper and lower) separated by

Russians continued... a double screen. This permits the odors to commingle, but keeps the bees from transferring pheromones or interacting with each other. Keep the Italian or Carney queen in the lower portion. Put the caged Russian queen in the upper portion – double check, no – triple check to make sure there is not a second queen in the hive in that upper portion. Do not give the bees access to the candy in the Russian queen's cage. Keep it protected or covered. Provide an upper entrance for the upper hive body. The older forager bees will go out and only re-enter the lower hive. The heat from the brood nest in the lower portion will help heat the upper portion if it is cool outside. I do not recommend putting any unsealed brood up in the upper portion. If anything, only use sealed brood up there. Newly hatched bees will not have any allegiance to the old queen. After 10 days, the Russian queen can be released from her cage. Then let her lay eggs for about four weeks. If she continues to lay eggs and is being tended by the workers, she will be OK. At this point the old queen from below can be removed and the double screen can be removed, making it back into one colony. If by some accident the colony does not accept the Russian queen when you release her, you still have your old queen to carry on and the hive will not be lost. This procedure (40 days long) is not so important when re-queening a Russian hive with a Russian queen, but still you should be careful anytime you are re-queening.



Hybrids. Many Russian queens you get, for example when you buy a Russian package, may be hybrid crosses from local mating of drones. Research has shown that first generation hybrids are still fairly resistant to mites. Second generation hybrids (technically known as F2) and subsequent generations will not have the same mite resistance and may lose the characteristics originally displayed. For that reason you may want to make sure your Russian queens are marked. Then you will have the evidence if you see an unmarked queen in your hive.

Queen Cells. Russian colonies maintain active queen cells throughout the brood-rearing season. In Italian colonies, when you see queen cells you know a swarm is imminent. They will try to reduce overcrowding by establishing a new colony or to supersede (kill and replace) the resident queen. But with Russian colonies the workers often destroy the extra queen cells before they fully develop (and then they start a new one!)

Swarm More Often. In spite of their protective mechanism to carry queen cells through the season, I admit Russians do swarm more often than Italians. So take advantage of this characteristic and make a back-up nucleus colony (nuc) or a split.

Color. Russian bees can vary in color, but they are generally much darker than the Italians. I have reports (just in) that the 2010 release of new lines will result in some lighter colored Russians, so don't be surprised if you see these. Color is not the main key – how they act and what they do is the secret.

Screened Bottoms. Because the Russians achieve their success by better or more fastidious grooming, you may greatly benefit by using screen bottom boards. This will allow the dislodged mites to fall below and not allow them to jump back onto passing bees crawling on the bottom board. I recommend using #8 or # 7 hardware screening.

The Bottom Line. Russians bees are survivors and frugal to a fault. They can co-exist with varroa mites and trachea mites with reduced intervention, chemical or otherwise. Switching to Russian bees can be part of our solution to reducing or eliminating mite treatments. But the Russians perform differently from other species of bees and this fact requires us to learn some new management techniques. The Russians are Coming! - **Joe Lewis**