

## **OTS Research Report Vernal Equinox 2011**

Dear Reader,

After keeping bees for 40 years and queen breeding with OTS for over 20 years, I have seen many a winter come and go. Over the past three years, I began to see honeybee colonies struggling in my area but I myself was still able to maintain normal overwintering rates, until this past fall. Because of the major bee losses that we are experiencing now, I want to clarify the nature and origins of these losses so that beekeepers do not mistakenly doubt the integrity and high quality of OTS queen rearing and July Starts.

Over this past winter, I attended many meetings where I was able to interview a lot of beekeepers as well as listen to many various speakers and researchers. I found that most researchers focused on viruses and/or nosema as being the underlying causes of hive losses. The possibility of an outside agent causing illness or bee kill was not mentioned, considered, or explored. Hardly talked about or entirely omitted were the recent, revealing leaks that the USDA and EPA's own scientists have known all along about the neonicotinoids' outright, deadly harm to honeybees and other pollinators through their very own research. It is a taboo subject but we now know that our own regulators abandoned honeybee safety and stressed our entire beekeeping industry for some corporation's market share. In other words, the chemical lobby was stronger than the beekeeping lobby.

Another conflict of interest that has come to my attention is that many researchers could lose valuable funding if the CCD mystery is solved.

The beekeepers I interviewed bring further light to this problem. I found that the beekeepers experiencing the most success are located in areas that are isolated from worked landscapes. By isolated I mean that they are well out of flight range and wind drift of industrial agriculture, golf courses, and chemically treated residential areas. And I am seeing the same success within my own isolated apiaries.

Last fall I lost 2 yards of July starts that were doing very well into October. The new queens started laying the first of August on the 43rd parallel and had excellent brood patterns as was demonstrated to the local bee club in late September. The starts were brood rearing well into mid-October which is normal with July starts with OTS queens. Sometime between mid-October and mid-November, I had 3 CCD hives and 4 other hives losing their queens and field force and trying to supersede. The other hives in the yard were queen-right but had lost a lot of bees and were dead shortly thereafter.

Another yard had healthy July starts behaving normally. In late August I decided to move 1/3 of the hives to an isolated area on private land flanking the Allegan State Forest. These re-located hives are doing well with normal losses as expected whereas the same-family hives back at the original location perished completely. This has become a very important experiment as the bees were from the same stock in the same yard and the locations have very similar overwintering

conditions. Had nosema and/or viruses been a problem in that stock, both apiaries would have perished.

Hive loss in all the yards near worked landscapes seems to have occurred sometime as of October on the 43<sup>rd</sup> parallel. This is consistent with other CCD and hive loss reports in the fall. It seems as if they are being affected with an outside agent that weakens them if it doesn't outright kill them. If this outside agent is undetectable at 1 part per 10 billion then we are left to believe that they died from viruses or nosema. Just because we have not yet designed an instrument to detect to 1 part per trillion does not necessarily mean that an outside agent cannot kill at that level. What I am saying here is that the honeybee is the canary in the coal mine detecting an agent that is compromising human health. Don't forget that every one of us starts out in life smaller than a bee.

I may not be able to see the wind but I know what it is doing and the same is true with an outside agent. A medical examiner states the cause and manner of death. If the deceased had HIV and died of pneumonia, the cause is HIV and the manner is pneumonia. As for the current drastic bee losses, it is my opinion that nosema and/or other viruses are the manner of death and an outside agent is the cause. The best beekeeping methods in the world cannot maintain thriving honeybee colonies around pesticides or other harmful agents.

I have been keeping bees for a very long time and my instincts tell me something is very wrong, wrong enough that I have begun to establish isolated apiaries far away from worked landscapes to protect my stock. It would be my recommendation that you do the same. Please examine the surroundings of your apiaries within and beyond flight range and wind drift. Learn more about the seasonal timing of your local agricultural methods. Finally, please contact your elected representatives.

I have contacted both of my U.S. Senators to inform them of my findings. There may be a very serious problem within our environment right now and it may be affecting the air, water and soil that the EPA was commissioned to protect in 1970. And now the U.S. taxpayers are told they must fund a national health care plan. Are we going to pay for medical problems that are really a result of environmental contamination?

What started out as a honeybee problem is now clearly a human health and safety issue.

Respectfully yours,

Mel Disselkoen