The most important thing that I proved was something I noticed years ago and used to joke about but it is no longer a joke. For 25 or more years I would say that a third of your hives will make a lot of honey, a third will make some and a third will make none - the rule of threes as I called it. It really applies to many things in life. With my honeybees this year, the bottom 1/3 did not make enough honey to get through winter. Most beekeepers would feed them and help them along - why? If you have a runt pig in a litter do you try to save it? Do you keep a calf out of a poor milk cow? I think it is important to cull at least the bottom third of your colonies - preferably 1/2 each year. I have never in 48 years read anywhere or heard a speaker say 1/3 of the bees are of poor quality. It is always how the beekeeper manages them. Now I know different and I have the proof. When someone comes up to me and explains about a problem hive I tell them to hit it over the head and throw it out on the compost heap. Perhaps I'm not very tactful but truthfull - you can't make a silk purse out of a hogs ear. The queen IS the colony and if she is producing poor stock she always will. Everyone says to unite 2 weak colonies in the fall so they get one through winter. Fine, now you have inferior drones next spring to mate with your new queens. Cull them out at the end of summer. Requeen in late summer if they are strong enough to warrant it. The joke among beekeepers is: 80% of our time is spent on 20% of our hives which are the poor producers. Let's start farming like crop and livestock farmers.

One of my ideas for this coming year is to remove the queen from every other hive and see what this does towards swarm prevention. The other big one that Dennis and his group will help with is to measure brood in late spring and see if we can measure a hives potential production for the summer and if we can pick out the poor queens at this time.

My next project will be for a different objective. Presently no one does research on honey bees in a side by side test. I want to duplicate the corn trials that P.S.U. does except with honey bees. Use at least 5 colonies from 4 different producers of packages at each location and measure for production, mites, and swarming. Presently all we base our decision on where to buy is which advertisement looks best. It is time someone does this. If one suppliers bees produce significantly better than someone elses, it will force those poor producers to develop better bees just as corn breeders are always improving. I have spoken with a couple of producers and they think it is a good move. Also Dennis and I are going to use some hives for Formic Acid research- an organic form of mite control.

10. Outreach:

I spoke at P.S.U. to the Pa. State Beekeepers in July and again at the annual meeting in November. Presently I help teach beekeeping classes for the Clinton County Extension and in February I will speak at Beaver Campus of Western Pa. and I have two Produce and Fruit Grower meetings where I will teach keeping bees for pollination. I also plan to send this information into the national magazines that I have written articles for before.

Craig A. Cella