Who owns the forage?

In the 2016 beekeeping season I had a situation I had not experienced before. I sincerely had hoped it wouldn't happen again, but you will have to read on to find out about that. I had kept bees for 12 years at that point. I had never had more than ten hives. That is because I keep bees for the purpose of making honey, both for myself and to sell a little to friends. My family consumes a lot of honey – almost 200 pounds a year. We try to use as little sugar as possible, so we sweeten most everything with honey. My average honey yield is around 300 – 350 pounds a year. On a really good year I will get 400 or even more. My worst year was the summer of 2012 when our region experienced a drought and I got around 150 pounds of honey. In 2016 I got just around 100 pounds and even that probably should have been left on the hives, but it would have done no good to do so. What happened to my hives? Their forage was robbed by a commercial beekeeper who placed 30 hives on my neighbor's property line right near my hives.

I called the commercial beekeeper and told him that I really didn't think there was enough forage for his bees and mine. He dismissed my concerns, saying there was plenty of forage, and that if I didn't get any honey that year, he wouldn't put his hives there the next year. This was in late June. Fortunately I was finished making splits and rearing queens because his bees came from Florida, and I did not want his genetics. By late July, I had no honey. I called him back and asked if he would please move his hives. He got angry. He said that no one had any honey yet and that he makes his entire living from keeping bees, therefore it was more important for him to get honey than me. He said the hives would stay there until October when he would move them to Florida.

I emailed my state beekeeping organization to ask if I had any right to my forage. They never even acknowledged my email. In the October 2016 edition of the *American Bee Journal*, Dr. Larry Connor wrote an article which explained why. He stated that the state organizations were originally started by commercial beekeepers, and that they mostly existed, at least at first, to serve them, not small beekeepers. Also in the *American Bee Journal*, there was an article by M.E.A. McNeil, which explained that 95% of all managed hives in the U.S.A. are kept by commercial beekeepers, while only 5% are kept by small beekeepers. So, the question is: Am I less important because I keep only a few hives? Am I less important because I don't make my entire living from beekeeping?

The frustrating thing to me is that I have worked very hard to develop locally adapted bees. I do field days once a month throughout the entire beekeeping season to help beekeepers of all levels learn to keep bees in a healthy, sustainable manner. We have had great success and have gotten to where we don't bring in any outside bees. I always manage my honey so I don't have to feed sugar water, ever. Well, that all changed that year. After all the fall forage died, we had a stretch of wonderful mild weather. Guess when the hives went to Florida? November 13th! By the time they left, my hives were almost completely robbed out. I had also discovered 45 more hives a mile and a half away, placed by the same commercial beekeeper. We had two mild days in November after he moved his hives, and I was able to get tons of sugar water on the hives. It was pointless to put it on until after the other hives left, they would have just robbed it back off.

The whole situation did prove one point I have been trying to make to other beekeepers. Hive density is an issue today. There is only so much forage in any given area and that is shrinking constantly due to large fields of corn and soybeans and constant development of once open land. The big question is who should have the right to the forage? My bees fly all over on places I don't own. I can't control that. But why should the say 500 pounds of honey my area will produce have to be shared by 40 hives instead of

just 10? Then no one gets much honey. More hives do not equal more honey, especially when the forage is limited.

I thought at the time that a small beekeeper like myself cannot move hives as easily as the commercial beekeeper. I had two horizontal Langstroth hives that I hesitated to move because I had never tried to move them before and I thought it would be very difficult with bees inside. Several friends offered ideas on where to move my hives, but each area they suggested was not ideal due to farm fields or other issues which made them unlikely to have adequate forage either. Besides, I own my own property and I have 20 acres with lots of good bee forage. I felt that it was unfair that I should have to move my hives to somewhere else. It was a good year for all growing things and other beekeepers got a good harvest, so I am sure that my lowest crop ever, and my very light hives in November were not a coincidence. I had hoped the sugar water would get them through the winter.

Fast forward to the 2017 beekeeping season. Not only did the situation not get better, it actually got worse. The beekeeper not only returned, but a month earlier and with twice as many hives in both locations, making 144 hives competing with mine. I went into winter with four live hives. By February I thought I had two left alive. I had a plan to order new queens and make splits of two hives in early May. In April we had a cold snap which killed one of the two hives. I had a field day in April with the one remaining hive. It had brood and bees, it wasn't as strong as I would like to see, but it was alive and had a queen – then. By the time the queens came in early May, the one remaining hive had gone queenless. I already had four queens coming, so I just decided to go for it and split what was left four ways and give each split a queen and see what happened.

After two weeks, it became clear I should seriously consider moving my hives because they were not building up and there were so many bees on my property my yard was carpeted with them. I moved two hives to a friend's land six miles away and planned to leave the other two for a month or so and see what happened, but then I realized that would be an absolute death sentence, so a few days later I moved the other two as well. One hive was always stronger than the other three, I suppose because I had divided the bees unevenly and it got the most when we made the splits. One hive went queenless quite soon after the move. We weren't sure why, maybe the move was too stressful. We combined what was left in that hive with one of the others, the one that was weakest at the time.

As the summer went on the strong hive continued to do well. The other two struggled. The weakest one simply would not build up, even after adding what was left of the queenless hive. We saw the queens every time we inspected, and capped worker brood, but they never increased in size. By August the weakest hive was only covering six medium frames with no extra honey stores. The next weakest one had more bees, but also not really any stores. So we decided to combine the two hives with the newspaper method. The third hive successfully built up and produced enough honey for itself for winter, however no extra honey at all. All hives were started and given drawn comb and they never built a bit of burr comb, or extended medium frames down in a deep box. They did not produce any drones at all, all season.

By the middle of October the two hives finally had combined after operating separately for over a month. I put a top feeder on it and heavily fed sugar water, which I dislike greatly, but I had no other choice. I did reduce the entrance on the bottom because it appeared to be experiencing robbing. I am pretty sure it was the strong hive that was doing the robbing, not someone else's bees because that strong hive did not show any evidence of robbing. I don't blame the commercial beekeeper for the weakness of those hives, I could have bought new nucs or packages, I had just put in place a plan I had

been working on for several years to make a sustainable system in our area for beekeepers and by the time I realized I had nothing to work with, it was too late in the season to buy packages or nucs from others. It was a risky experiment and if there is anything alive by the spring of 2018, I will be amazed and also encouraged that you can go to an even further extreme with the bees and still succeed. I used the circumstances to test to see how far I could go. Because I am not a commercial beekeeper and I don't make my living from keeping bees, I had that freedom. I hope that my little experiments can someday be of use to people who make their living keeping bees, but it will take a big change in the system for them to ever consider it. At very least, I hope that small beekeepers can benefit by using these techniques to not be dependent on the "big guys" to get their bees.

So, for the 2016 season I got barely 100 pounds of honey and for 2017 I got none at all. There are places in town I hesitate to go because I have honey customers there who keep asking if I have any honey to sell. I am tired of telling them no. I am also tired of trying to explain why without sounding like I am complaining. I finally got a conversation with someone in the state organization, but they were not very sympathetic to my position. It appears that because I am a "hobby" beekeeper and the commercial beekeeper makes his living from keeping bees, my interests are of no consequence whatsoever. Apparently it is also not of any interest to anyone the number of hives he puts in locations, even in competition with his own hives. Because he makes most of his money from pollination, he really doesn't care if he makes any honey at all, I guess. It seems like he mostly needs some place to just put his hives for the summer between the spring pollination contracts here and the winter ones in Florida and eventually to almonds in California in February.

From what I have pieced together from talking to several different people, I think I have a pretty good idea of what is happening and to a small degree why it is happening. Our region is a large producer of fresh fruit and to a smaller degree fresh vegetables. These crops require pollination, and in today's agricultural picture that is accomplished by hiring beekeepers to place hives in the orchards and fields during the bloom period. As all commercial agricultural operations get larger and more intense, beekeepers who service them must do so in kind to provide the services they require. This means that the large beekeepers have gotten even larger to respond to the demand. The fruit pollination period is really quite brief, only about four to six weeks by the time all the different fruits have gone through their blooming times. The bees must be removed as soon as the petals drop, because fruit growers spray pesticides immediately following petal drop, which would kill the bees. When the brief fruit blooming period is over, some beekeepers place hives in vegetable crops, but there are nowhere near as many of those crops as the fruit crops, so most of the beehives are placed in summer holding grounds to make honey, or just pass the time until going to Florida for the winter.

Because of the demand for more pollinators and quite frankly, the lure of more money from crops like almonds, beekeepers have many more hives than they used to have that they must find summer places for, to wait out the time between the lucrative pollination contracts. Between more hives and diminishing vacant places to put them, beekeepers are beginning to encroach on other beekeeper's forage areas. Couple this with the backyard beekeeping boom and you have a problem which will probably get worse before it gets better.

So, for now I will keep my eyes open for where the commercial pollinators place their bees and keep mine as far away as I am able. I will advise other small beekeepers to do the same. I looked up the definition of "hobby". It is something one does for pleasure rather than as a primary source of income. So, I will take that. I completely enjoy keeping bees. I do make some income from it, but not much – especially lately. If I can get enjoyment out of what I do, and the big commercial guy just gets

headaches, sweat, bee stings and a little bit of filthy lucre to show for it, well then, I am the richer person in the end. I also will survive longer than him because I have less to lose and it will not bankrupt me to do it. I will have to be patient. It may take a few years, but in the end I will still be out there enjoying keeping bees and making honey, whether he is or not.