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In March 2013, 22 active honey bee brokers were contacted by phone to participate in the 2013 Bee Informed Partnership bee broker survey and 18 chose to participate in this survey. This represents 2 more brokers participating than in 2012. In all, there are thought to be between 30 and 40 companies or individuals who broker bees for CA almonds*.* The responding bee brokers placed bees for a total of 323 beekeepers. These 17 of these brokers placed a total of 342,161 colonies in almond orchards for pollination (23% of the estimated 1.5 million colonies needed to pollinate almonds). The five largest responding bee brokers collectively placed 221,000 colonies, or 15% of the needed colonies for almond pollination. Each broker leased an average of 21,127 colonies from an average of 18 beekeepers, with the largest five each leasing an average of about 44,200 colonies from roughly 136 beekeepers. Almond growers in 2013 paid an average of $155.50 per colony, ranging from a low of $95 and a high of $200. The average price paid for colonies was $151 per colony in 2012.

Collectively, the brokers reported an in*crease* in the number of colonies placed in 2012 over their total from the previous year; however, bear in mind this years figure contains 2 more brokers over the previous year. When comparing the responses of the 16 brokers that participated in 2012 to their answers to the survey in 2013, we see that they placed ??????

While the survey was not designed to determine the losses experienced by beekeepers, the brokers estimated that 123 (38%) of the beekeepers they broker had difficulty meeting their colony commitments due to colony death or serious decline in adult bee populations. This percentage was a sharp increase from 2012 where brokers reported 11% of the beekeepers were unable to meet or had difficulty meeting their commitments. Beekeepers’ ability to meet their commitments has fluctuated between survey periods from 16% in 2011 and 33% in 2010. The bee brokers surveyed estimated that they were short approximately 37,073(10.8% of total colonies committed) in 2013 as compare with 7,680 (2.4 % of total colonies used) in 2012. In 2011 the shortage was about 51,697 colonies (12.5% of total colonies used) and in 2010 was 55,040 colonies (13% of total colonies used). In general, beekeepers were concerned about shortages in bees available for pollination in 2013. Most of the brokers said that they could have place more colonies if they were available. Given an unlimited supply, they reported that they would have placed 142,078 more colonies this year. This was about 42.5% of the amount of colonies that they actually placed. In 2012 given an unlimited supply, they reported that they would have been able to place 70,100 (22% of colonies placed), which is about half the estimated excess demand this year. In 2011 brokers predicted that they needed even fewer colonies to meet the excess demand, around 30,700 (7.4% of total colonies used). In 2010 all but one broker said that he or she could have leased more bees had they been available; up to 20% more in some cases. Given an unlimited supply, brokers in 2010 would have placed an additional 97,740 (23% of colonies placed) more colonies if available, which though higher than 2012 and 2011 is still substantial less that the excess demand this year.

In 2013 the average grade of colonies placed in almond orchards declined from the previous two years to 8.1 frames. In 2012 the average colony grade was 9.3 frames of bees, just above the target colony size of 8.5 frames of bees per colony. This year more than half of the respondents stated that they placed field run colonies (10 of the 18). The simple average amount of field run colonies placed was 11%. Two of the 18 respondents stated that 50% of the colonies they placed were field run. This figure should be view critically since the criteria used to define field run colonies differ between brokers. Some brokers consider field run to mean ungraded hives while other define it as a grade below a certain number of frames usually around 8.5 frames. In 2012, only 6 of the 16 beekeepers reported that a percentage of the total colonies placed in almonds were field run. The simple average number of field run colonies in 2012 was 8%. Most beekeepers mentioned that the lower grade of the colonies this year is a result of the shortage. On average, brokers reported placing 1.96 colonies per acre, which is lower than 2012 and 2011 with 2.02 colonies per acre in 2012 and with 2.06 colonies per acre in 2011. The lowest density of colonies reported was 0.5 colonies per acre. The highest density of colonies reported was 3.5 colonies per acre.

The vast majority of the arrangements between brokers, beekeepers, and almond growers are continuations from previous years. On average, brokers reported reusing 84% of the beekeepers from the year before, and placing 93% of the colonies with the same almond growers. These results are similar to 2012 in which brokers reported worked for 85% of the beekeepers from the year before, and placing 97% of the colonies with the same almond growers.

After several mild years this year has been harsh on beekeepers with 38% of beekeeper having trouble meeting their commitments. Last year it appeared that despite national colony losses, bee brokers had less trouble meeting the number of colonies they commit for pollination (33% of brokers had issues with meeting their pollination commitments in 2010, 16% in 2011 and 11% in 2012). This trend appears to have reversed since more beekeepers had trouble meeting their commitments as compared with the other survey years. This year was hard on beekeeper with all the brokers who responded stating that a least some of the beekeeper they broker for were short bees. Given the bee shortage it is somewhat surprising that the rental cost of colonies only increased $4.50. However, the quality of the colonies that were placed this year were graded 1.2 frames lower compared with 2012. Our preliminary analysis confirms suspicions that this year was a challenge for beekeepers.