Preliminary Results: Honey Bee Colony Losses in the U.S., Winter 2010-2011.

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Dennis vanEngelsdorp[1], Jerry Hayes[2], Dewey Caron[3], James Wilkes[4], Robyn Rose[5], and Jeff Pettis[6].

> Note: *This is a preliminary analysis, and a more detailed final report is being prepared for publication at a later date.*

The Apiary Inspectors of America (AIA) and the United States Department of Agriculture (USDA) conducted an online survey to estimate honey bee colony losses for the 2010/2011 winter season. A total of 5,572 U.S. beekeepers, or 20%[1] of the estimated number of beekeepers in the country, responded. Collectively these beekeepers managed over 15%[2] of the country's estimated 2.68 million colonies.

Preliminary survey results indicate that 30% of managed honey bee colonies in the United States were lost during the 2010/2011 winter. The percentage of losses have remained relatively steady (near or above 30%) over the last 5 years. Specifically, previous survey results indicated that 34% of the total colony loss in the winters of 2009/2010; 29% in 2008/2009; 36% in 2007/2008; and 32% in 2006/2007.

If we consider colony losses within individual beekeeper's operations, then responding U.S. beekeepers lost an average of 38.4% of their operation. This is a 3.8 point or 9.0% decrease in the average operational loss experienced by U.S. beekeepers during the winter of 2009/2010. Beekeepers reported that, on average, they felt losses of 13% would be acceptable. Sixty-one percent of responding beekeepers reported having losses greater than this.

Colony Collapse Disorder (CCD) is a phenomenon in which an entire colony of bees abruptly disappears from its hive. Of beekeepers surveyed who reported losing some colonies, 31% lost at least some of their colonies without the presence of dead bees. We cannot confirm that these colonies had CCD, but respondents to this question reported higher average colony losses (61%) than those respondents who lost colonies but did not report the absence of dead bees (34%).

It is important to note that this survey only reports on losses that occur during the winter and does not capture the colony losses that occur throughout the summer as queens or entire colonies fail and need to be replaced. Preliminary data from other survey efforts suggest that these "summer losses" can also be significant. Beekeepers can replace colonies lost in the summer and winter by splitting the populations of surviving colonies

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1 Based on 2007 Ag census

2 Based on NASS 2010 figures

to establish a new hive. This process is expensive, so replacing 30% of the nation's colonies annually is not considered sustainable over the long-term.

1. Dennis vanEngelsdorp, The Pennsylvania State University/Apiary Inspectors of America (AIA), Past-President dennis.vanengelsdorp@gmail.com 717-884-2147
2. Jerry Hayes, Florida Department of Agriculture, AIA Past President, hayesg@doacs.state.fl.us 352 372-3505
3. Dewey Caron, Oregon State Univ., carond@hort.oregonstate.edu 302 353-9914
4. James T. Wilkes, Appalachian State University, wilkesjt@appstate.edu, 828-262-2370
5. Robyn Rose, USDA APHIS Plant Protection and Quarantine, Riverdale, MD, robyn.i.rose@aphis.usda.gov, 301-734-7121.
6. Jeff Pettis USDA-ARS Bee Research Laboratory, Beltsville, MD, jeff.pettis@ars.usda.gov, 301 504-8205