

Honey Bee Colony Losses 2016-2017: Preliminary Results

Note: *This is a preliminary analysis. Sample sizes and estimates are likely to change. A more detailed final report is being prepared for publication in a peer-reviewed journal at a later date.*

*Nathalie Steinhauer¹, Karen Rennich¹, Dewey M. Caron², James D. Ellis³, Phoebe Koenig⁴, Kelly Kulhanek¹, John Klepps³, Katie Lee⁴, Meghan Milbrath⁵, Juliana Rangel⁶, Robyn Rose⁷, Ramesh Sagili², Ben Sallmann⁸, John Skinner⁹, Rob Snyder⁸, Ellen Topitzhofer², James T. Wilkes⁹, Michael E. Wilson¹⁰, Geoffrey R. Williams¹¹, Dan Wyns⁵, Dennis vanEngelsdorp^{*1}*

¹Department of Entomology, University of Maryland, College Park, MD 20742;

²Department of Horticulture, Oregon State University, Corvallis, OR 97331;

³Entomology and Nematology Department, University of Florida, Gainesville, FL 32611-0620; ⁴Department of Entomology, University of Minnesota, St. Paul, MN 55108;

⁵Department of Entomology, Michigan State University, MI 48824; ⁶Department of

Entomology, Texas A&M University, College Station, TX 77843; ⁷USDA Animal and Plant Health Inspection Service, Riverdale, MD 20737, ⁸UCCE, Butte County, Chico, CA 95965; ⁹Department of Entomology, University of Tennessee, Knoxville, TN 37996;

¹⁰Department of Computer Science, Appalachian State University, Boone, NC 28608;

¹¹Department of Entomology and Plant Pathology, Auburn University, Auburn, AL 36849

**Corresponding Author: dvane@umd.edu*

The Bee Informed Partnership (<http://beeinformed.org>), in collaboration with the Apiary Inspectors of America (AIA), conducted the eleventh annual national survey of honey bee colony losses.

For the 2016-2017 winter season, 4,963 beekeepers in the United States provided validated survey responses. Collectively, these beekeepers managed 363,987 colonies in October 2016, representing about 13% of the country's estimated 2.78 million managed honey producing colonies¹. An estimated 21.1% of colonies managed in the United States were lost over the 2016-2017 winter. This represents an improvement of 5.8 percentage points compared to the previous 2015-2016 winter, and is below the 10-year average total winter loss rate of 28.4% (Figure 1).

Beekeepers not only lose colonies in winter (October – March) but also throughout summer (April – September). The 2016 summer colony loss rate was 18.1%. When all the survey results were combined, beekeepers lost 33.2% of their colonies between April 2016 and March 2017. This is the second lowest rate of annual colony loss recorded over the last seven years.

Total US managed honey bee colonies Loss Estimates

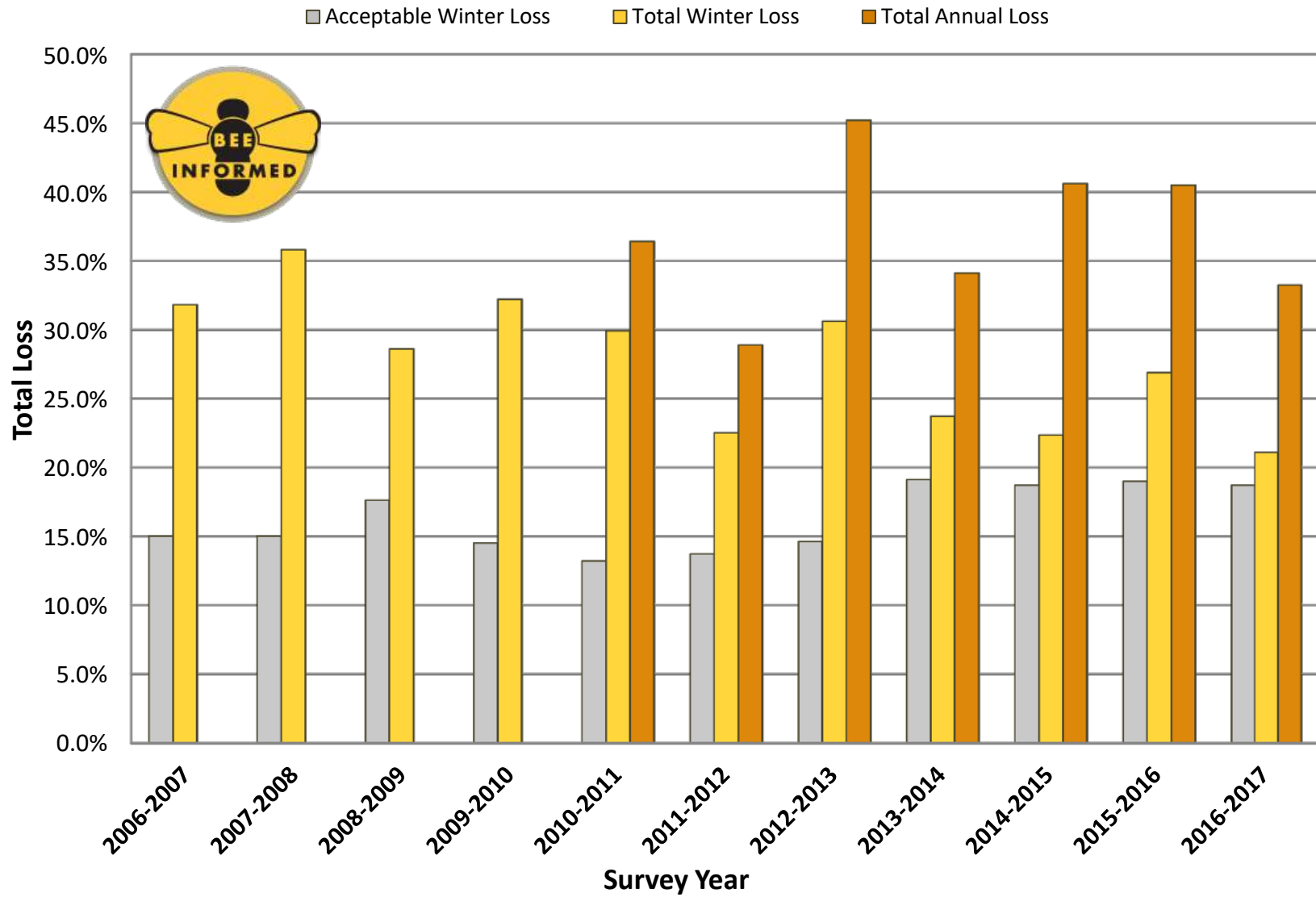


Figure 1: Summary of total overwintering colony losses in the United States across eleven years of conducting the winter loss survey (yellow bars; October 1 – April 1) and across six years of conducting the summer (April 1 – October 1) and annual loss survey. Total annual loss values (orange bars) include total winter and total summer losses. The acceptable winter loss rate (grey bars) is the average percentage of acceptable yearly colony losses declared by the survey participants in each year of the survey.

This survey was conducted by the Bee Informed Partnership.

¹ Based on 2016 NASS Honey Report figures (published 2017).

² Previous survey results found total winter colony loss values of 27% in the winter of 2015/2016, 22% in 2014/15, 24% in 2013/2014, 30% in 2012/2013, 22% in 2011/2012, 30% in 2010/2011, 32% in 2009/2010, 29% in 2008/2009, 36% in 2007/2008, and 32% in 2006/2007 (see reference list).

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