



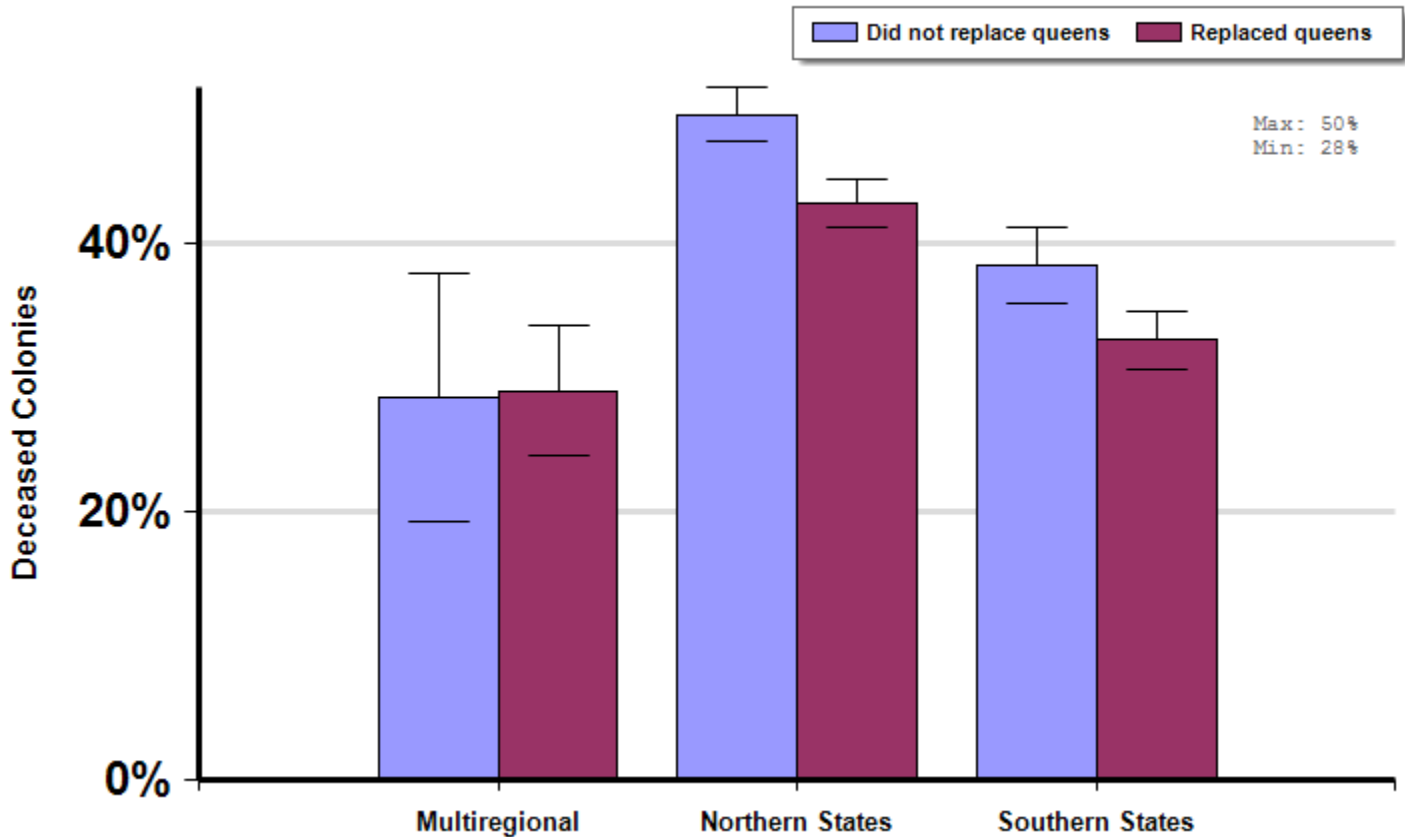
# Queen Replacement By Region

Average winter colony mortality suffered by beekeepers who indicated they did or did not replace any queens in their colonies between April and March by region of operation.

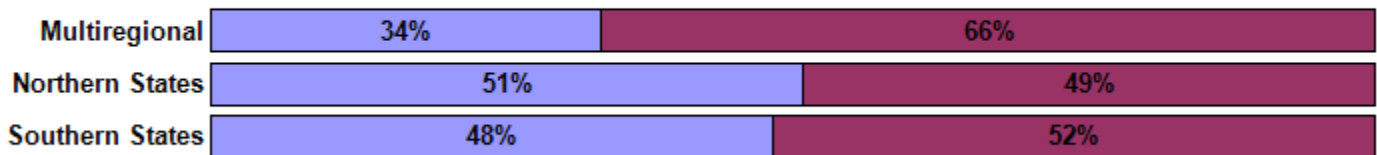
## Winter

Report ID: 221-2015

**Some Significant Differences (within regions)**



## Respondent Ratio



## Interpretation

Northern beekeepers who replaced queens in their colonies reported 6.6 fewer overwintering colony deaths out of 100 managed colonies (13.3% fewer losses) than northern beekeepers who did not replace queens. Also, southern beekeepers who replaced queens saw 5.6 fewer overwintering colony deaths out of 100 managed colonies (14.6% fewer losses) than those who did not replace queens.

## Survey Question

Did you replace the queens in any of your colonies between April 1, 2014 and April 1, 2015?

|  |  | Total Number of Respondents | Total Number of Colonies Managed | Average Number of Colonies Managed | Average Colony Loss |
|--|--|-----------------------------|----------------------------------|------------------------------------|---------------------|
|  |  |                             |                                  |                                    |                     |

|                 |                        | Providing Valid Responses |         |        |                | Mean(%) [Lower, Upper] CI |
|-----------------|------------------------|---------------------------|---------|--------|----------------|---------------------------|
|                 |                        |                           |         | Mean   | Standard Error |                           |
| Multiregional   | Did not replace queens | 47                        | 5,571   | 118.5  | 80.5           | 28.4 [19.2, 37.7]         |
|                 | Replaced queens        | 93                        | 241,438 | 2596.1 | 754.0          | 29.0 [24.1, 33.9]         |
| Northern States | Did not replace queens | 1,461                     | 8,650   | 5.9    | 0.7            | 49.6 [47.6, 51.5]         |
|                 | Replaced queens        | 1,407                     | 39,695  | 28.2   | 7.9            | 43.0 [41.2, 44.8]         |
| Southern States | Did not replace queens | 698                       | 4,437   | 6.4    | 0.8            | 38.3 [35.6, 41.1]         |
|                 | Replaced queens        | 747                       | 52,179  | 69.9   | 27.1           | 32.7 [30.5, 34.9]         |

## Comments About This Data

### Relevant Links, References, and Citations

Funded By:



United States  
Department of  
Agriculture

National Institute  
of Food  
and Agriculture

This information is for educational purposes only. References to commercial products or trade names do not imply endorsement by the Bee Informed Partnership or its members. The results presented here are the summary of the population who responded. The sample may not be representative of the beekeeping population at large. These results simply highlight differences in the sample population. The results cannot be considered conclusive, causative, protective, or attest to product efficacy or lack of efficacy.