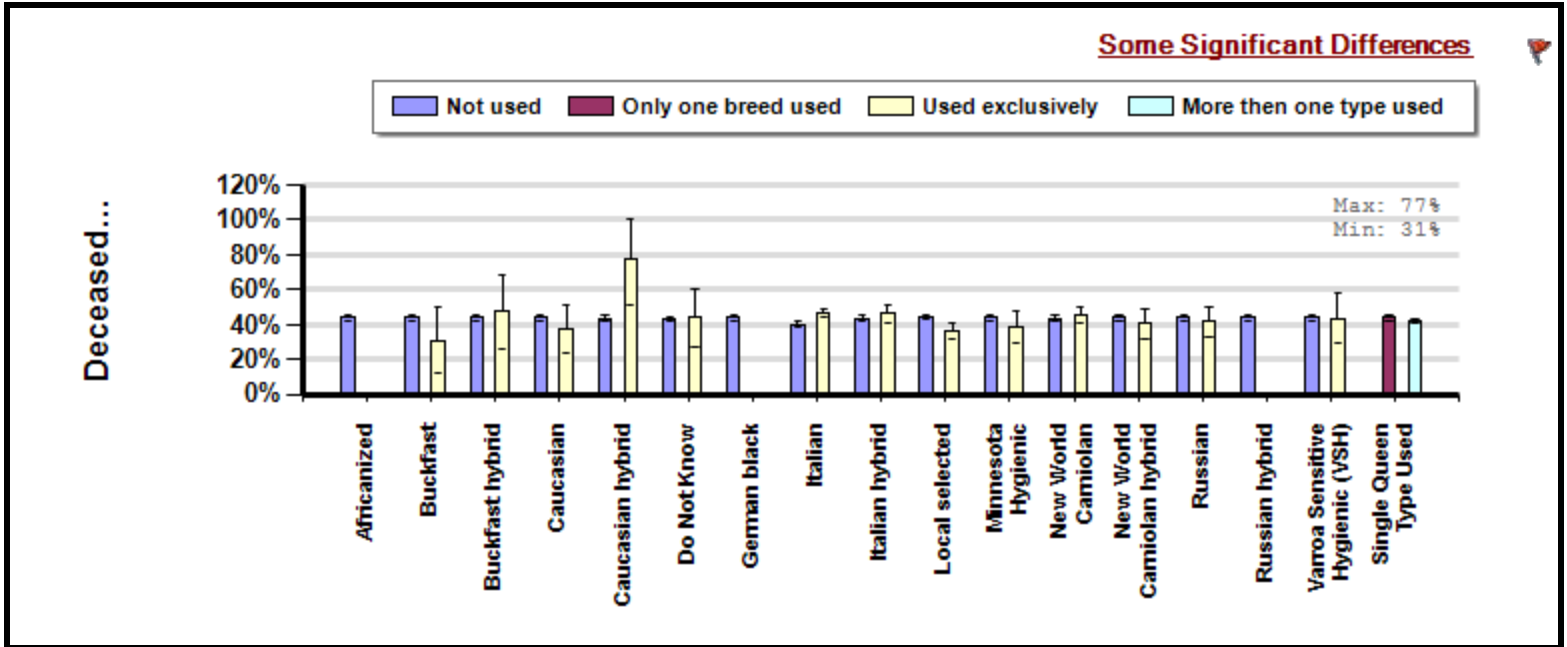




Average winter colony mortality reported by beekeepers who indicated which race of bees they kept between April and March.

Winter

Report ID: 206-2014



Interpretation

Beekeepers who kept a locally selected race of bees reported 8.4 less overwintering colony deaths per 100 managed colonies (18.9% less losses) than beekeepers who did not keep a locally selected race of bees. Beekeepers who kept a Caucasian hybrid race of bees reported 33.5 more overwintering colony deaths per 100 managed colonies (43.4% more losses) than beekeepers who did not keep a Caucasian hybrid race of bees. Also, beekeepers who kept an Italian race of bees reported 6.4 more overwintering colony deaths per 100 managed colonies (13.7% more losses) than beekeepers who did not keep an Italian race of bees.

Survey Question

What type or race of bees do you use in your operation?

- New World Carniolan
- New World Carniolan hybrid
- Caucasian
- Caucasian hybrid
- Italian
- Italian hybrid
- Buckfast
- Buckfast hybrid
- Russian
- Russian hybrid
- Varroa Sensitive Hygienic (VSH)
- Minnesota Hygienic
- German black
- Local selected
- Africanized
- Don't know

| | | Total Number of Respondents Providing Valid Responses | Total Number of Colonies Managed | Average Number of Colonies Managed | | Average Colony Loss |
|------------------|------------------|---|----------------------------------|------------------------------------|----------------|---------------------------|
| | | | | Mean | Standard Error | Mean(%) [Lower, Upper] CI |
| Africanized | Not used | 2,803 | 286,773 | 102.3 | 27.9 | 43.8 [42.4, 45.3] |
| Buckfast | Not used | 2,788 | 286,704 | 102.8 | 28.1 | 43.9 [42.4, 45.3] |
| | Used exclusively | 18 | 163 | 9.1 | 4.8 | 31.0 [11.9, 50.1] |
| Buckfast hybrid | Not used | 2,792 | 286,634 | 102.7 | 28.0 | 43.8 [42.3, 45.2] |
| | Used exclusively | 14 | 233 | 16.6 | 12.7 | 47.3 [26.1, 68.6] |
| Caucasian | Not used | 2,776 | 286,729 | 103.3 | 28.2 | 43.9 [42.4, 45.3] |
| | Used exclusively | 30 | 138 | 4.6 | 1.0 | 37.4 [23.7, 51.1] |
| Caucasian hybrid | Not used | 2,797 | 286,827 | 102.5 | 28.0 | 43.7 [42.2, 45.1] |
| | Used exclusively | 9 | 40 | 4.4 | 1.5 | 77.2 [51.2, 100.0] |
| Do Not Know | Not used | 5,307 | 510,448 | 96.2 | 16.9 | 43.0 [42.0, 44.0] |
| | Used exclusively | 24 | 136 | 5.7 | 1.5 | 44.0 [27.2, 60.8] |
| German black | Not used | 2,803 | 286,723 | 102.3 | 27.9 | 43.8 [42.4, 45.3] |
| Italian | Not used | 1,274 | 131,285 | 103.0 | 25.4 | 40.3 [38.2, 42.4] |
| | Used exclusively | 1,532 | 155,582 | 101.6 | 46.5 | 46.7 [44.7, 48.7] |
| Italian hybrid | Not used | 2,600 | 260,637 | 100.2 | 29.4 | 43.6 [42.1, 45.1] |
| | Used exclusively | 206 | 26,230 | 127.3 | 79.7 | 46.1 [40.6, 51.5] |
| Local selected | Not used | 2,583 | 276,870 | 107.2 | 30.1 | 44.5 [42.9, 46.0] |
| | Used exclusively | 223 | 9,997 | 44.8 | 36.4 | 36.1 [31.6, 40.6] |
| Minnesota | Not used | 2,745 | 285,060 | 103.8 | 28.5 | 43.9 [42.4, 45.4] |

| | | | | | | |
|---------------------------------|-------------------------|-------|---------|-------|------|--------------------------|
| Hygienic | Used exclusively | 61 | 1,807 | 29.6 | 16.1 | 38.3 [29.2, 47.4] |
| New World Carniolan | Not used | 2,507 | 266,652 | 106.4 | 30.9 | 43.6 [42.1, 45.1] |
| | Used exclusively | 299 | 20,215 | 67.6 | 37.8 | 45.3 [40.8, 49.9] |
| New World Carniolan hybrid | Not used | 2,734 | 281,514 | 103.0 | 28.6 | 43.9 [42.4, 45.4] |
| | Used exclusively | 72 | 5,353 | 74.3 | 52.3 | 40.4 [31.7, 49.2] |
| Russian | Not used | 2,719 | 285,856 | 105.1 | 28.8 | 43.9 [42.4, 45.3] |
| | Used exclusively | 87 | 1,011 | 11.6 | 3.7 | 41.7 [33.1, 50.2] |
| Russian hybrid | Not used | 2,806 | 286,867 | 102.2 | 27.9 | 43.8 [42.3, 45.2] |
| Varroa Sensitive Hygienic (VSH) | Not used | 2,778 | 286,277 | 103.1 | 28.2 | 43.8 [42.3, 45.3] |
| | Used exclusively | 28 | 590 | 21.1 | 13.7 | 43.6 [28.9, 58.2] |
| Single Queen Type Used | Only one breed used | 2,806 | 286,867 | 102.2 | 27.9 | 43.8 [42.3, 45.2] |
| | More than one type used | 2,525 | 223,717 | 88.6 | 17.2 | 42.2 [40.8, 43.6] |

Comments About This Data

For the analysis comparing individual queen types, only beekeepers using a single stock are considered. Beekeepers that use multiple stocks are not included in the comparisons of each type of stock.

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.