20232-24 Columbia Gorge Winter Loss by Dewey M. Caron

For the past 15 years, PNW winter colony losses and several managements related to bee health were solicited with an electronic honey bee survey instrument developed within the PUB bee group www.pnwhoneybeesurvey.com. A total of 172 responses (about ½ the normal response) were received from OR beekeepers with 121 additional returns from Washington beekeepers. During the 2023-2024 overwintering period, 8 Columbia Gorge member surveys were returned, about ½ the past 5-year average response rate.

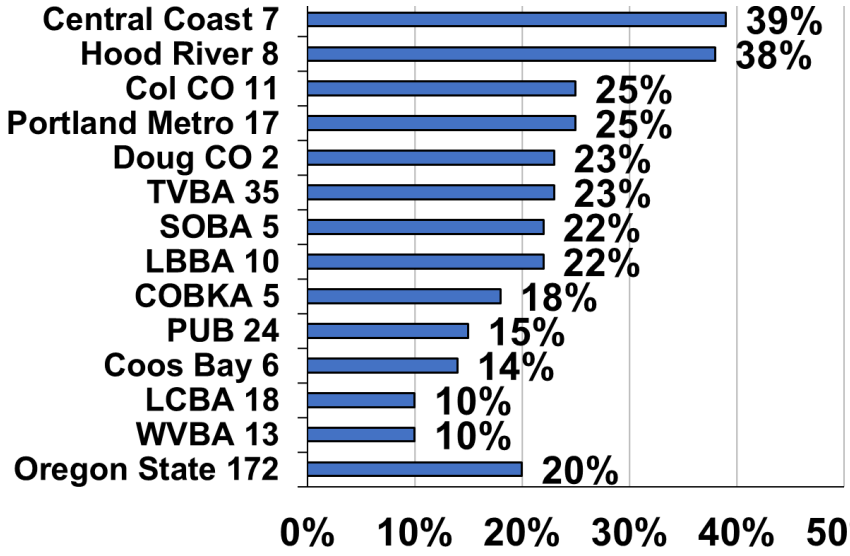


Figure 1

Club results of 13 local Oregon associations are shown in Figure 1. Colony numbers ranged from 1 to 41 colonies (average 5.7 colonies same as last year; medium number = 4 colonies, also same as last year). **Overwintering losses of small-scale Oregon backyard beekeepers was 20%, the lowest level in the 15-year survey.** Average backyard losses for last 15 years of Oregon backyarders is 36.7%. For comparison, the average 15-year loss average for Or Commercial beekeepers (50+ colonies) is 21.7%.

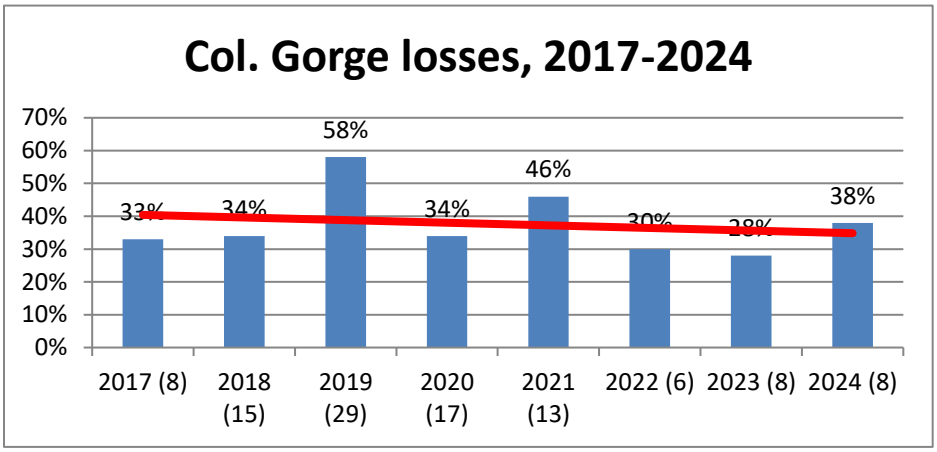
Average overwintering losses of the 8 Columbia Gorge respondents was 38%, almost double statewide average but with only eight respondents it might not represent the 'true" story of this past winter. 47 hives were included in the reports but over ½ were from one survey return. This individual had 50% loss – the seven remaining respondents (with one to four colonies) had a 21% loss.

The 7 Columbia Gorge responses (excluding the one outlier), reporting on 19 fall hives, showed four individuals with no loss (12 colonies); the three with losses had loss of a single colony (2 individuals) and the third lost two colonies. Three of seven lost were 8-frame hives and 3 of 8 lost were 10-frame Langstroth hives; all four top bar hives survived.

Figure 2 shows losses for Columbia Gorge members the past 8 years. A bit of caution – I have had relatively few responses – the respondent numbers are shown in ( ) following year. This year includes the outlier loss of 50% of 60% of total colonies. The solid red line represents

trend line; the 8-year average losses have been 37.6%, 0.9 percentage points higher than statewide average of last 15 years.

Figure 2



Typical of the statewide data, the Columbia Gorge respondents are largely beekeepers with few colonies. Excluding the outlier, one individual had one colony (100% loss), two individuals had two colonies but without loss, two had 3 colonies with 50% loss and the two individuals with four colonies had zero loss. Statewide there is a relationship of decreasing losses with increasing colony numbers. This same relationship holds statewide with increasing years of experience. For Columbia Gorge respondents, the 3 individuals with 1-3 years experience had 20% loss, the 3 with 4-6 years experience lost 50% loss while the two with 8+ years lost 20%. Greatest beekeeping experience was 15 years. Only 4 of 8 said they had a mentor available as they were learning beekeeping; state level was 77%.

Reasons for Colony Loss/Acceptable loss

We asked individuals that had colony loss to estimate what the reason might have been for their loss. Multiple responses were permitted. Queen issues (38 selections from 90 who had a loss), weak in the fall (31) and varroa (30 individuals) were most common. Starvation, 16 selections and yellow jackets, 11 respondent choices, along with don't know (12 selections) were three additional double-digit choices. Among other one indicated extreme cold and rain, another cited lack of attention, one said pigs knocked hive over and another that wind blew covers off exposing the bees. For Gorge respondents, two said varroa with queen issues, yellow jackets and starvation also indicated with a single selection.

When asked about an acceptable loss, three Gorge said 25%, 2 said 33% and 3 said 100% was an acceptable level of loss. Statewide the median acceptable loss was 20%.

Thank you to those sending in a survey.