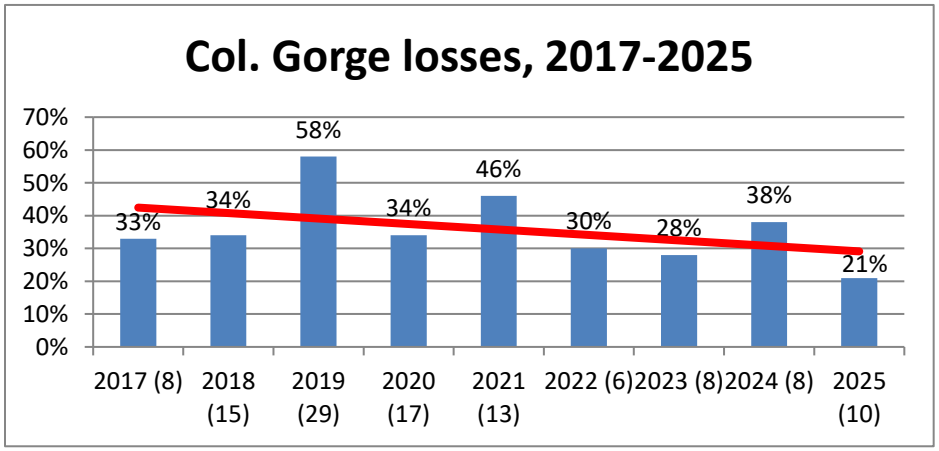
2024-25 Columbia Gorge Winter Loss by Dewey M. Caron

For the past 16 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 250 were received from OR beekeepers (25% loss rate) with 130 additional returns from Washington beekeepers.

During the 2024-2025 overwintering period, 10 Columbia Gorge member surveys were tallied, 2 more than last year but under the 8-year average return of 13 individuals. Members had a **loss rate of 21%;** 16 of 75 total colonies did not survive. This was a 4-percent-point better survival compared to statewide and a 17-percent-point improvement in survival compared to last year. Six respondents were from Washington and 4 from Oregon.

The 10 Columbia Gorge responses, reporting on 75 fall hives, showed two individuals with no loss (11 colonies) and 2 others with 100% loss (3 colonies). Three members lost one colony, 3 individuals lost 2 colonies, one lost 3 colonies and one individual lost 4 colonies, the heaviest loss. The three members with Langstroth 8 colonies (18 total fall colonies) lost 4 colonies overwinter (22% loss), 7 of 48 fall Langstroth 10-frame colonies were lost (15% loss) and 3 of 7 Top Bar colonies did not survive (43% loss). Two fall nucs of one individual survived.

The Figure below shows losses for Columbia Gorge members over the past 9 years. A bit of caution – I have had 10 or fewer responses the last 4 years– the respondent numbers are shown in ( ). The solid red line represents trend line; the 8-year average losses have been 37.6%, essentially the same as statewide loss average of last 15 years.



Colony loss: Typical of the statewide data, the Columbia Gorge respondents are largely beekeepers with few colonies. Statewide there is a relationship of decreasing losses with increasing colony numbers, which was the same for Columbia Gorge beekeepers as well. The 4 individuals with 1-3 colonies had 50% loss, the 5 individuals with 4 to 8 colonies had 25% loss and the one individual with 36 colonies (the highest colony number) had 11% loss.

In **years' experience** statewide, the greater the number of years' experience the better the hive survival. This relationship was not the same for the 9 Columbia Gorge individuals. Those 2 individuals with 1-3 years' experience (8 colonies in the fall with 6 surviving) had a 25% loss, the 3 individuals with 4 to 9 years' experience had 18 % survival (lost 3 of 17 fall colonies) and the 4 individuals with 10+ years' experience had a 22% survival (11 of 50 fall colonies lost). The highest years' experience was 50 years.

Reason for loss: The survey asked individuals that had colony loss to estimate what the reason might have been for their loss. Multiple responses were permitted; the 8 with losses had 15 reasons indicated. Weak in the fall (5) varroa (3 individuals) and starvation (3) were most common. Don't know (2 individuals) and poor wintering conditions (1) were the additional reasons indicated for winter losses.

When asked about an acceptable loss, two Gorge individuals said 10%, 1 indicated 29%, 3 said 25% (the median - statewide the median acceptable loss was 20%) 1 said 33% and 2 individuals said 50% was an acceptable loss level.

Thank you to those sending in a survey.