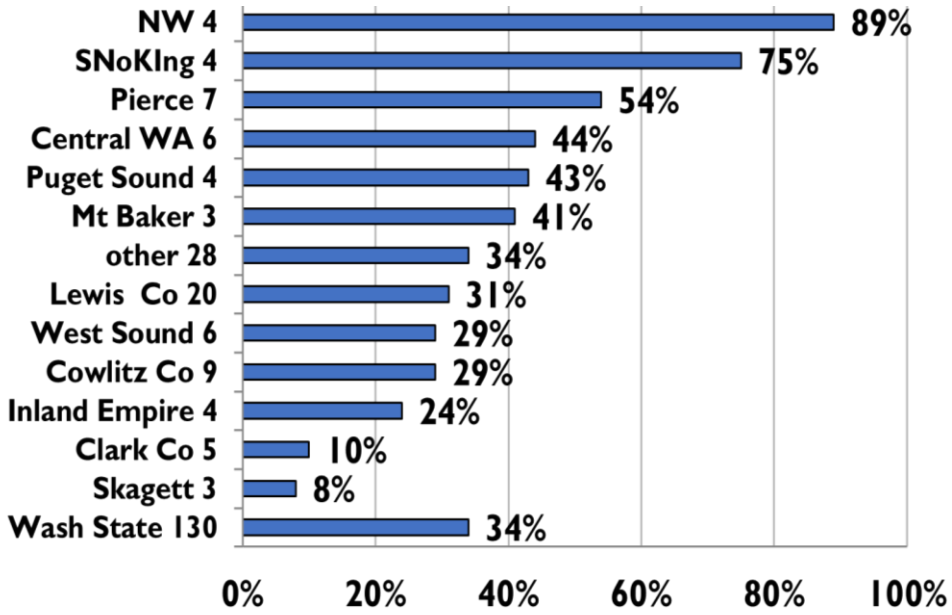
Cowlitz Co beekeeper Losses 2024-25 by Dewey Caron

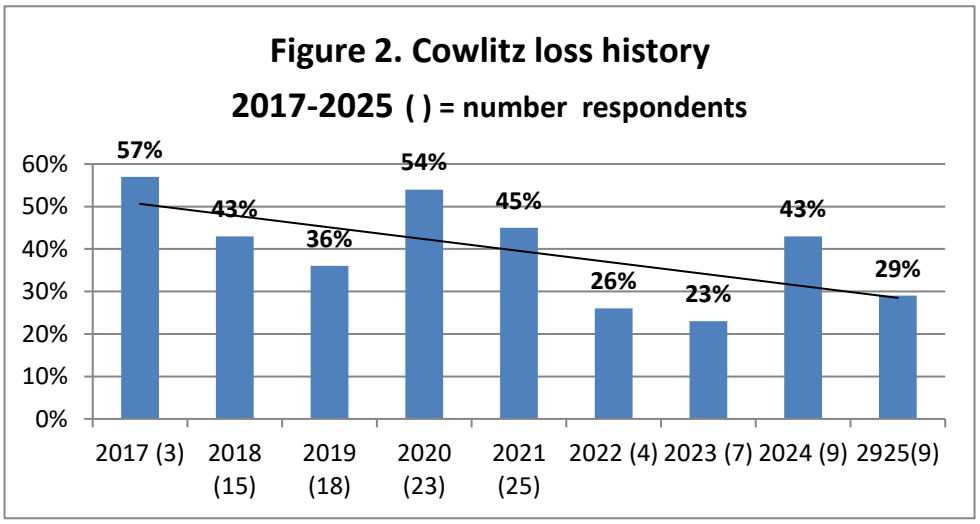
Overwintering losses of small-scale Washington beekeepers was determined from information provided by 130 Washington backyard beekeepers with an electronic honey bee survey instrument www.pnwhoneybeesurvey.com. Statewide losses were 34%. Cowlitz losses were lower compared to the previous year. Nine Cowlitz beekeepers (same return rate as last year) returned surveys reporting on 49 fall colonies (four more than last year) with a 28.5% loss level, 14.5 percentage points lower than last years 43% loss. Figure 1 shows total WA response by club.



The loss survey overwintering statistic was developed by our asking number of fall colonies and surviving number in the spring by hive type. Results for Cowlitz respondents: 8 of 9 Langstroth 8-frame colonies (11% loss) and 26 of 38 10-frame Langstroth hives survived (31.5% loss rate). Both the Top Bar and AZ hives survived.

Loss by hive origination: We also asked survey respondents to list their loss by hive origination. This year individuals could FAST TRACK and not respond to this survey question – 5 Cowlitz individuals supplied information while 4 did not. Cowlitz respondents reported that all 15 previously overwintered colonies survived, both package-originated colnies survived, three of 5 swarm originated colonies survived and all 3 splits survived for these 5 individuals.

Loss History: Losses of Cowlitz beekeepers this past overwinter was 28.5%. Response rate however (9 individuals), was three less than the 11.7 average. Figure 2 shows 9-year Cowlitz loss history (bars) with number of survey respondents in ( ) on x-axis. The dotted line shows loss trend. Survey response by Cowlitz members has been lower the last 4 years.



.

The 9 Cowlitz Co respondents to the electronic survey had 1 to 12 colonies. Three had no loss (21 colonies) and one had total loss (5 colonies – the heaviest loss level). Two individuals lost 1 colony and 2 lost 2 colonies. The other 2 individuals lost 4 and 5 colonies. Two individuals with 1-2 years' experience lost 5 of 11 colonies (35.5%), the 4 with 5-6 years' experience lost 31.5% and the 3 individuals with 8+ years' experience lost 3 of 19 colonies (16%). Keeping bees 14 years was the most extensive experience.

Self-reported "reasons" for colony losses: One survey question asked respondents to check the "reasons" for winter loss; multiple responses were possible. There were a total of 6 individuals offering 11 selections. Two each indicated varroa mites, moisture, weak in fall, poor wintering and yellow jackets. The single selection was CCD.

Acceptable loss. When asked to choose an acceptable loss Cowlitz Co mirrored statewide respondents. Two said none, one said 5%, three said 10% (the median), three indicted 25% and one said 33% was an acceptable loss level.

Why do colonies die? There is no straightforward way to verify reason(s) for colony loss. Colonies in the same apiary may die for several reasons. Examination of dead colonies is, at best, confusing, and although some options may be ruled out, we are often left with two or more possible reasons for losses. There is a good deal of variance in opinion as to what might be an acceptable loss level. We are dealing with living animals which are constantly exposed to many different challenges, both in the natural environment and the beekeeper's apiary. Cowlitz Co individual choices varied from zero to 33%, with a medium of 10%, slightly below state level of 20%, and lower than actual losses of 28.5%.

Major factors in colony loss are thought to be mites and their enhancement of viruses, especially DWV (deformed wing virus) and declining nutritional adequacy/forage and diseases. Pesticide in the agricultural environment weakens colonies. Yellow jacket predation is a constant danger to weaker fall colonies, Management, especially learning proper bee care in the first years of beekeeping, remains a factor in losses. What effects our changing environment such as global warming, contrails, electromagnetic forces, including human disruption of it, human alteration to the bee's natural environment and other factors, play in colony losses are not at all clear.

There is no simple answer to explain the levels of current losses nor is it possible to demonstrate that they are necessarily excessive for all the issues facing honey bees in the current environment. Varroa mites and the viruses they transmit are considered a major factor colonies are not as healthy as they should be.

Thank you Cowlitz beekeepers for your participation in the PNW Honey Bee Survey