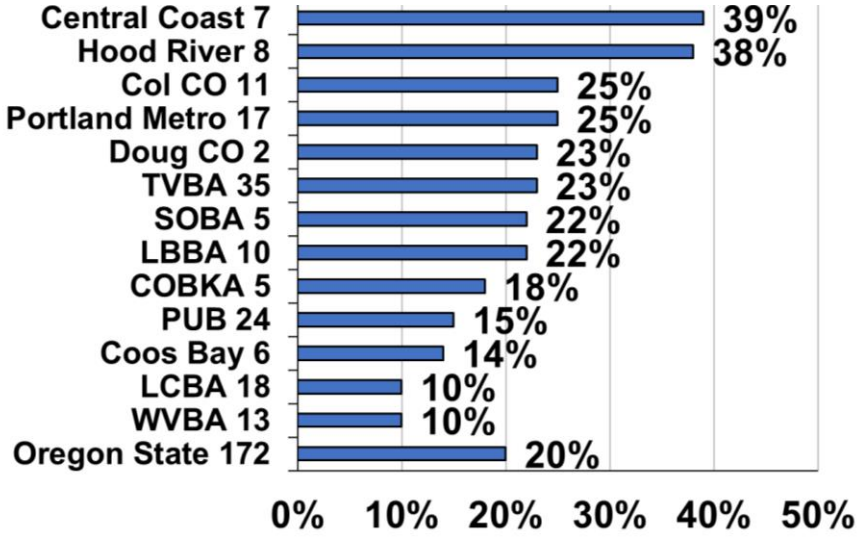
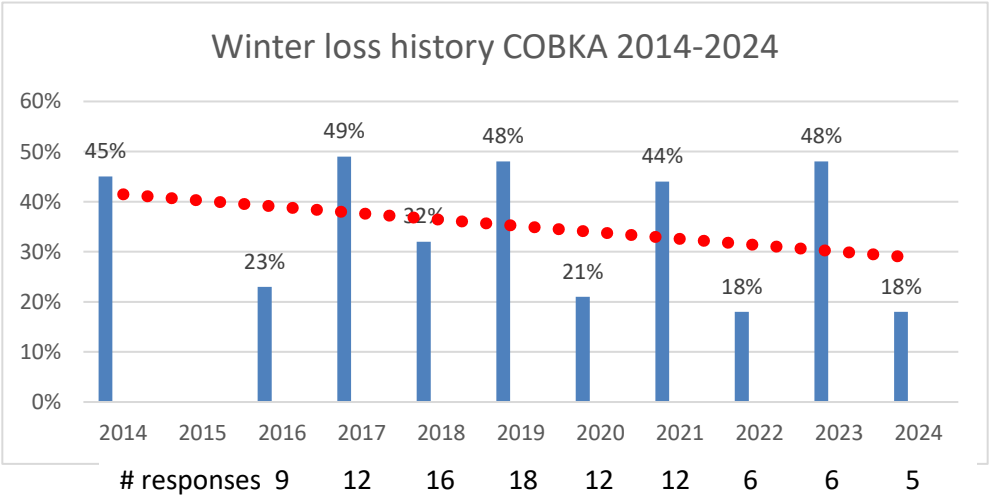
2023-24 Central Oregon Winter Loss by Dewey M. Caron

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 171 responses were received, only 2/3rds of the number last year and well below the previous 5-year average of 305 respondents. Oregon average loss was 20% the lowest reported for both state groups in my surveys. During the 2023-2024 overwintering period, 5 COBKA member surveys were returned, slightly below the previous 5-year average of 11.4. Loss was 18%.



COBKA responses reported on 44 fall hives Two of 4 8-frame hives did not survive, none of the 6 10-frame colonies were lost while there was a 19% loss of 37 long hives. Three COBKA members lost zero colonies, one lost 1 and another lost 7 colonies. Self-reported reason for losses were varroa, queen issues and yellow jackets.

Lost history of COBKA for 10 years is shown below. The red dotted line shows loss trend.



Curiously, losses every other year are reduced. Heavy losses in 2017 were thought due to "heavy, long winter" and in 2019 to "slow spring". Numbers of respondents last three years very limited.

Why do colonies die?

There is no easy way to verify reason(s) for colony loss. Colonies in the same apiary may die for different reasons. Examination of dead colonies is often confusing, 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. Our acceptable loss level has crept upwards over time.

Major factors in colony loss are thought to be mites and their enhancement of viruses, especially DWV (deformed wing virus, plus declining nutritional adequacy/forage and diseases. Pesticides in the agricultural environment weakens colonies. Yellow jacket predation is a constant challenge 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 currently facing honey bees. Varroa mites and the viruses they transmit are considered a major factor why colonies are not as healthy as they should be.

Managements

We asked in the survey for information about some managements practiced by respondents. The survey inquired about feeding practices, wintering preparations, sanitation measures utilized, screen bottom board usage, mite monitoring, both non-chemical and chemical mite control techniques and queens. Respondents could select multiple options and there was always a none and other selection possible. This analysis seeks to compare responses of this past season to previous survey years. With 5 respondents the numbers are skewed. Refer to the statewide report when it is posted.

Thank you to COBKA members for the returns. I am hopeful we can get response level back up to the double digits as was the case prior to 2021.