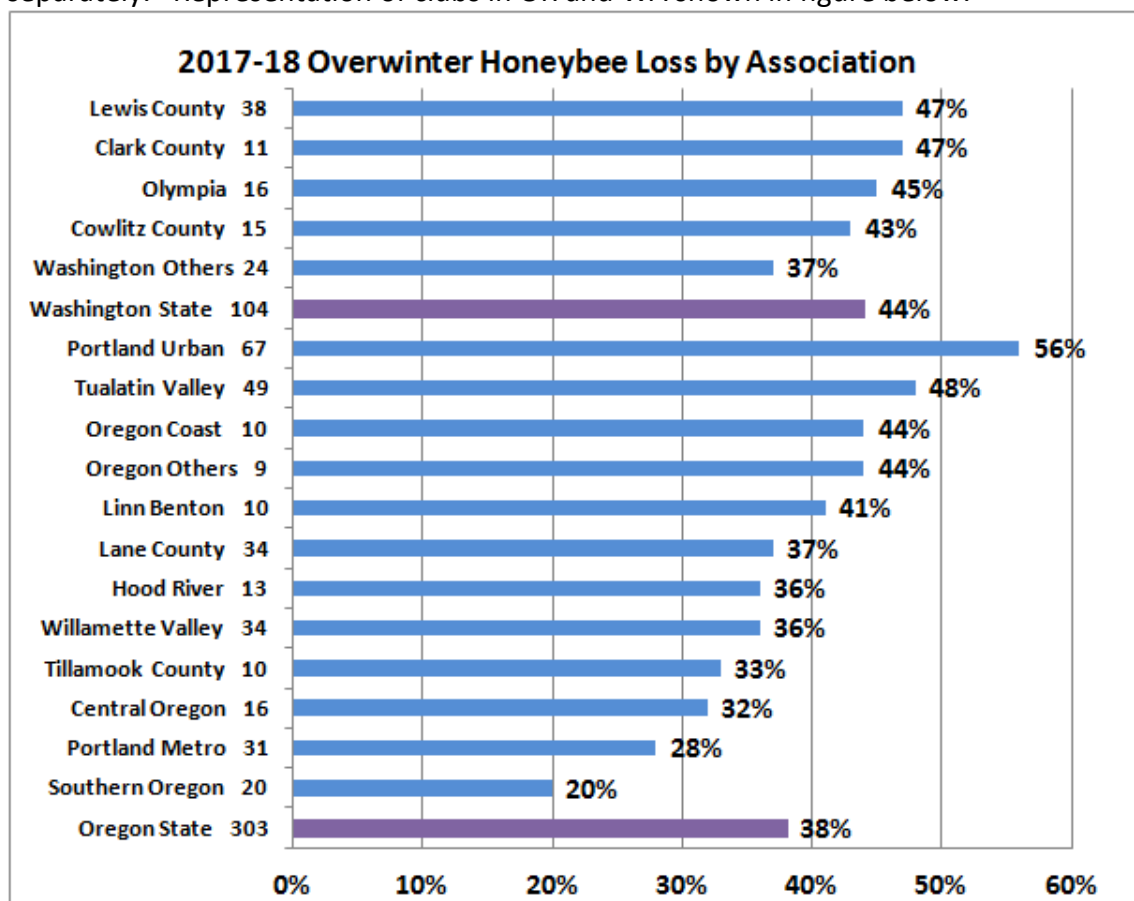


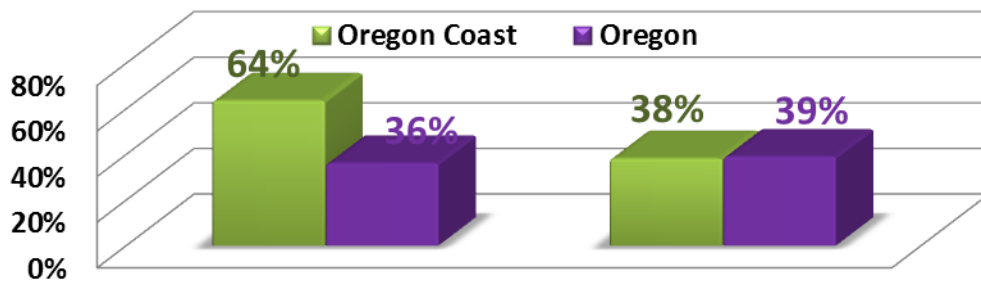
2017-18 Oregon Coastal Winter Loss by Dewey M. Caron

Oregon beekeepers were directed to a web-based survey document in a continuing effort to define overwintering losses/successes. This was the 10th year of such survey activity. I received 303 responses from Oregon backyarders and 104 from Washington beekeepers keeping anywhere from 1 to 50 colonies. Ten Oregon Coast (1 coos Co, 2 South Coast and 7 central Coastal association members) + 10 Tillamook Association member completed a survey. This is a report of the Oregon Coast members – a Tillamook County report has been filed separately. Representation of clubs in OR and WA shown in figure below.



Overwintering losses of Tillamook respondents was 28% (for Langstroth hives), 33% overall (accounting for losses of nucs, Warré and other hives). **Percent losses, of the 10 Oregon Coast members was 44%**, 6 percentage points higher than statewide losses. Overwinter losses were determined by asking fall colony numbers and surviving spring numbers. Member respondents started winter with 34 Langstroth 10-frame and 11 Langstroth 8-frame hives; there were no nucs or alternative hive types reported by respondents. Comparison of 8 and 10 frame Langstroth hive losses with statewide OR beekeeper losses is shown in Figure 2.

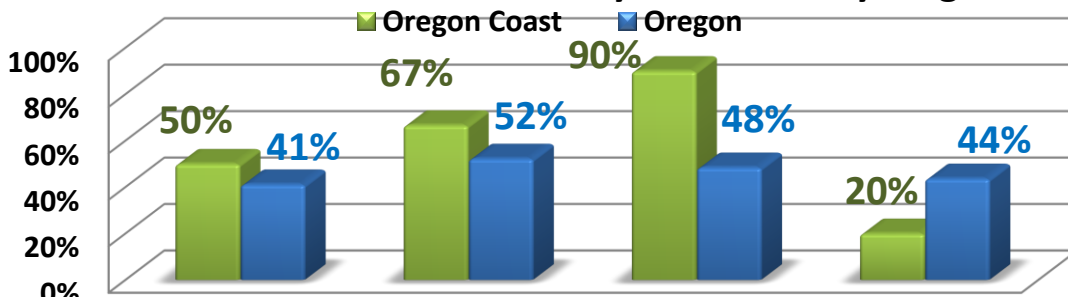
2017-18 Winter Honeybee Loss % by Hive Type



Fall Col # (loss)	Lang 8	Lang 10
	11(7)	34(13)

The survey also asked for hive loss by hive origination. Eleven of 22 overwintered colonies (50%) were alive in the spring, slightly lower than statewide. Losses of packages and nucs were both substantial but swarms showed good survival. Figure 3 compares OR Coastal with statewide respondents.

2017-18 Winter Honeybee Loss % by Origination



Fall Col # (loss)	Overwintered	Package	Nucs	Swarms
	22(11)	6(4)	10(9)	10(2)

The Or coast survey respondents were a mixture of new beekeepers and older, more experienced individuals keeping 2 to 11 colonies. Three Coastal respondents had 2 fall colonies, 3 had 3 colonies each (60% for both) and the 4 additional had 4, 6, 9 and 11 colonies. Five individuals (50%) had 1 or 3 years of experience, three had 7 to 10 years and 2 individuals had 15 + (15 and 30 years experience). Three individuals said they had a mentor available as they were learning beekeeping while 7 indicated they did not.

Not everyone had loss. Three coastal respondents had NO LOSS (30%) while 2 had total colony loss (20%). Of the 7 with losses one loss one colony, 2 lost 2, 2 individual2 lost 3 colonies and 2 individuals lost 4 colonies, the heaviest Coastal losses by an individual.

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). Of 12 responses, 4 each selected queen failure and varroa, 2 said viruses and one each said weak in the fall and pesticides. Survey individuals are asked to indicate what might be an acceptable loss level. Among Coastal responses were zero (3 individuals), 10% loss acceptable (1 individuals), 15% (3 individuals, the medium), 20% (1 individual) and 33% (2 individuals) loss level as acceptable.

Why colonies die? There is no easy way to verify reason(s) for colony loss. Colonies in the same apiary may die for different reasons. Colony forensics on dead colonies is, at best, confusing and, although some options may be ruled out, we are often still left with two or more possible reasons for possible reasons why a colony (ies) died. 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.

Major factors in colony loss are thought to be mites and their enhancement of viruses such as DWV (deformed wing virus), pesticides, declining nutritional adequacy/forage and diseases, especially viruses and Nosema. Management, especially learning proper bee care and how to best use chemicals for varroa control, remain 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 but by no means are the only reason colonies are not as healthy as they should be.

Management selections and losses

The survey inquired about feeding practices, wintering preparations, sanitation measures utilized, screen bottom board usage, queens, mite monitoring techniques and non-chemical and chemical mite controls used. Individuals could check none or more than one response; most beekeepers often do not do just one thing/management to their colony (ies) to control mites. It takes effort to improve overwintering success. The survey results will be presented for the 3030 Or beekeepers. Results will be posted as soon as available.

Thank You to all who participated. If you find any of this information of value please consider adding your voice to the survey in a subsequent season. Dewey Caron May 2018