

## Ten Things to Do Now To Help Your Bees Survive Winter

LCBA President Kevin Reichert

1. If you have tested your bees and know they have mites, now is the time to treat them (unless you have a non-treatment philosophy). Queens are winding down laying as the colonies prepares to over-winter, so a hive with a mite load can get overwhelmed by mites. Though Kevin himself doesn't treat his bees, he would if he had access to oxalic acid, just approved by the FDA to kill mites on adult bees.
2. Look for Nosema, and if you see it, treat for it using Fumagillen. The dysentery that Nosema promotes will debilitate bees and make it hard for them to make use of food supplies effectively. You can pre-treat by infusing a dose of Fumagillen into the last couple of gallons of sugar-syrup you put on your bees; you can do this again in the spring if you see signs of Nosema.
3. Evaluate honey and pollen stores for winter. You can look in the hives and strategically position food frames above the brood chamber (as the bees will move up through winter). For brood boxes, the best order, from the outside to the center, is frames of honey, then pollen, then brood in the center.
4. Feed bees now if they are light on stores. Kevin is now feeding one gallon per hive per week to hives he thinks needs it. However, he's not feeding all the bees – it's best if they build up more naturally. As the temperature drops, it's time to shift from 1:1 sugar:water mix to 2:1.
5. Make candy boards now to get ready for the fall transition to dry feed. Moisture in hives during cold wet weather can chill bees and kill them, so prepare for dry winter feed. For candy board recipes, visit LCBA's website, click on the Mentors/Workshops/Classes link, then Overwintering Bees.
6. Protect hives from the wind and rain. Some move bees under shelter; others use covers (like political signs) that overhang the top by a foot or more all around. This helps keep moisture out of the hives and also provides bees with a space for cleansing flights in rainy weather.
7. Place moisture control boxes above the hive boxes – these act like sponges, drawing moisture off the colony. For details, see the slideshow of Kevin's moisture control box method on LCBA's website – it is linked under Mentors/Workshops/Classes – click on the Overwintering Bees page.
8. Give good ventilation: be sure that there is space for moisture to rise and exit the colony (see the slideshow noted in #7).
9. Add an entrance reducer to protect the colony from mice, which sometimes seek shelter in a nice warm hive for winter and can do a lot of damage to comb, as well as urinate inside the colony.
10. Get hives up off the ground to help combat moisture problems: you can put hives up on pallettes, cinder blocks, etc. if you do not already use a hive stand.