

# Tentative Recommendations for Hives Experiencing CCD

If you think you are experiencing heavy colony losses due to colony collapse disorder (CCD), please follow these recommendations:

These recommendations will change as our understanding of this disorder changes. However as of March 1, 2007 these are our groups current thoughts.

1. DO NOT combine collapsing colonies with strong colonies.

**Why?** We do not currently know the cause of CCD. If an infectious agent causes it and you combine a collapsing colony with a healthy colony, the healthy bees may succumb to the illness and you may lose both colonies.

2. When a collapsed colony is found, store the equipment where you can use preventative measures to ensure that bees will not have access to it. Put the equipment in this storage area within TWO WEEKS of collapse to prevent robbing by neighboring colonies. CCD colonies tend not to be robbed out by colonies immediately after collapse. When you take this equipment out for reuse, wear a protective face mask to prevent the inhalation of any mold spores that may grow on the comb.

**Why?** The CCD team is currently investigating various sterilization techniques that allow for comb reuse. We are hopeful that we will soon have a sterilization technique in place to treat equipment before it is reused. We DO NOT recommend burning infected equipment at this time. Keep it in storage (with necessary wax moth and SHB precautions) for the time being.

3. If you feed your bees sugar syrup, use Fumagillan.

**Why?** At this time the CCD working group does not believe that nosema disease is the underlying cause of CCD. However, infection with nosema is a stressor that can reduce the bees' tolerance to other disease agents. Treating for nosema helps reduce colony stress.

4. If you are experiencing colony collapse and see a secondary infection, such as European Foulbrood, treat the colonies with Terramycin, NOT TYLAN.

**Why?** The effectiveness of Terramycin has been well documented, while Tylan has not been tested as an EFB control agent. We know that Terramycin works for the treatment of EFB.

5. If you observe high levels of varroa mites, treat them using soft chemicals, such as Apiguard, Apilife VAR, or MiteAway II. We DO NOT recommend the use of oxalic acid, or home made hard chemical mixtures.

**Why?** Colonies experiencing CCD have been shown to have kidney (Malpighian tubule) problems similar to those seen in colonies treated with hard chemicals. There are some reports that Oxalic acid may damage bee Malpighian tubules. Also the harder chemicals (fluvalinate, coumaphos, and amitraz) may have a sub lethal affect on bees which may add additional stress on the bees. By treating for varroa mites with soft chemicals, you are helping to keep the colonies mite population low while avoiding the potentially negative effects of hard chemicals.

This document was released on March 7 2007 and prepared by Dennis vanEngelsdorp, M. Frazier, and D. Caron at the direction of the CCD working group.