



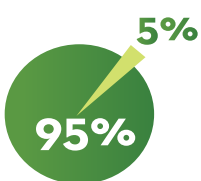
UNIVERSITY OF MINNESOTA
EXTENSION



Darrel Rufer
Rufer's Apiaries, Inc.
Waverly, MN

Getting to Know COMMERCIAL BEEKEEPERS

Commercial beekeepers manage from 500-70,000 colonies of honey bees as their sole, or major source of income. **They comprise about 5% of all the beekeepers, but own about 95% of all the honeybee colonies.**



In Minnesota, most have from 2,000-10,000 colonies. During the summer, beekeepers in Minnesota and the Upper Midwest produce honey, which they sell to wholesale distributors, or, less often, bottle for retail. Beekeepers have "gentlemen's" agreements with landowners to establish bee yards on their land.

During the winter months, the majority of commercial beekeepers move their colonies to other states -- to California to pollinate the almond orchards that bloom at the end of February, or to southern states, where they produce starter colonies and new queen bees to sell to other beekeepers.

Some beekeepers have two homes, one in Minnesota and in the state where their bees over-winter, and their families migrate along with them and the bees. The majority of their income comes from honey, pollination service fees, or from sale of bees and queens although honey prices have been low for many years.



Dan Whitney
Dan's Honey Co.
Ottertail, MN

Pesticides & Bees

The vast majority of beekeepers that advocate policies to protect bees are hobby and sideline beekeepers, although there are some commercial beekeepers in Minnesota that are vocal advocates. The majority of commercial beekeepers are less politically active.



Commercial Beekeepers understand the need for crop protection and pesticide use because they have to protect their valuable bee colonies with pesticides themselves.



Beekeepers use miticides to control a devastating parasitic mite that attacks their bees. They understand treatment windows, and the challenges of hitting the pest at just the right time.



Their colonies are sometimes killed or weakened by pesticide exposure (usually when crops are sprayed and the pesticide drifts onto nearby flowers where bees are foraging), but they don't like to complain because they risk damaging the valuable relationship they have with the farmer whose land their bees are on.

Commercial beekeepers would like consideration of farmers and landowners in helping to improve bee nutritional health, colony survivorship, and honey yields by planting or maintaining flowers that bloom over the growing season

Fewer Commercial Beekeepers In Minnesota

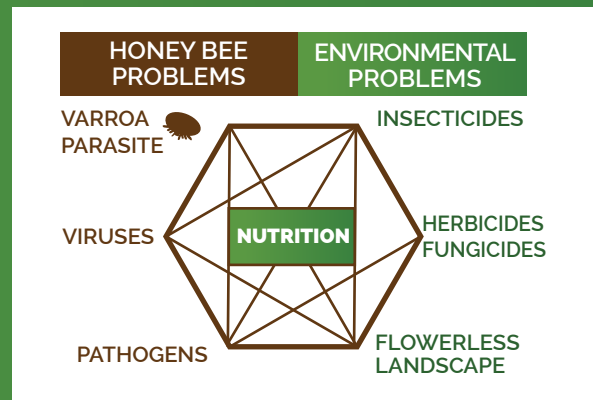


We estimate there are around 40-50 commercial beekeeping operations in Minnesota. Because Minnesota does not require beekeepers to register their colonies with the MN Department of Agriculture, there is no official count. There is no credential system to become a commercial beekeeper.

There is not enough bee forage (plants that the bees can make food from) in Minnesota to support the nutrition and health of more colonies. Honey bees get all their nutrition from floral nectar (carbohydrates) and pollen (protein and lipids). With the increase in acreage of soybeans and corn, which produce little or no nectar and pollen for bees, the number of beekeepers and bee colonies is diminishing. Honey yields in MN, now around 50-70 lbs/ hive, which is half of what it was 20 years ago. This decrease in honey production corresponds to changes in agricultural practices which have resulted in less blooming clover, alfalfa, and other flowers.

Honey Bee Die-offs

Researchers agree that honey bees are suffering from the combined effects of lack of forage, parasitic mites, viruses and other pathogens, and pesticides (not limited to neonicotinoid insecticides). There is no one main cause of colony losses, and it is not possible to prioritize which of these effects is the most important.



How You Can Help Bees

All agree that the best way to help honey bees and restore bee health is to provide abundant (acres of) flowers, particularly flowering cover crops and other legumes like alfalfa, that are allowed to bloom over the growing season.

Honey bees fly up to 2 miles when they forage for flowers, so the availability of the right type of plants, and the risk of exposure to pesticides must be considered within a 1-2 mile radius from where colonies are placed.



Other Beekeepers

The majority of beekeepers manage bees as a hobby in their backyard, or as a sideline business (sideline businesses have up to 500 colonies). They keep their colonies in one location year round, producing honey in the summer months. Honey bee colonies can survive the Minnesota winter if they have sufficient honey stores, are healthy, and have large number of bees in the colony to cluster and maintain heat for up to 6 months.

Marla Spivak, Professor & Extension Entomologist
Robert Koch, Assistant Professor & Extension Entomologist
Theresa M. Cira, Postdoctoral Associate

University of Minnesota
Minnesota Extension
Minnesota Extension IPM Program

BeeLab.umn.edu

