

Skalko Wintering Honeybees Presentation  
NE Minnesota Beekeeper's Association Meeting  
Fond du Lac Tribal and Community College in Cloquet, MN  
August 26, 2019

Good evening my name is John Skalko. I have been a beekeeper since 1986. During this time there has been many changes raising bees. In the late 1980's and early 1990's I remember some hives up to 10 boxes high. I would back my truck up to a colony and then use a ladder to take the frames from the hives. Professional beekeepers were averaging about 80 pounds per colony during these times.

I have done extensive research on how to winter honeybees in this northern climate. My research went back as early as 1895. Back in the late 1800's and early 1900's beekeepers were wintering their honeybees in their cellars (basements). In my research I discovered that wintering honeybees in Idaho was successful. After multi conversations with Agri-Store Industries, I learned that they convert potato storage bins into warehouses to store honeybees with the capacity of 25,000 colonies for the winter. There was only a 6-7% mortality of bees over the winter.

From the research I wrote a grant and was funded by SARE USDA to build a prototype that would help Minnesota and Wisconsin beekeepers. The project allows honeybees to be stored inside an insulated shipping container (refrigerated shipping container) with an enclosed ventilation system. After consulting a Minnesota Power engineer, I was able to size the (ERV) Energy Recovery Ventilation. The controls panel was set up for CO<sub>2</sub>, temperature, and air ventilation. Currently, between Minnesota and Wisconsin, there are 4 beekeepers that have an indoor wintering house for their honeybees – 1 beekeeper in Ashland, Wisconsin and 3 beekeepers in the central to northern region of Minnesota.

More information will be available on your website with additional documentation.