



Winter Ventilation

November Meeting

Sunday, November 11

St Michael's Church
N4911 Gray Road
Hustisford, WI 53034

1:00pm Potluck - please
bring a dish to pass.

2:00pm Meeting

Inside this issue:

Minutes	2
Minutes, continued	3
Did You Know?	3
Recipe	3

Newsletter Editor

Katrina Pokorny (youth
beekeeper), can be
contacted at
pokornybees@gmail.com

Ventilation provides some level of humidity control by directing the cluster's warm convective flow to the outside, but the consequence is the removal of needed heat. A few important questions come to mind. First, as beekeepers, we know how to keep condensation levels down by adding lots of ventilation, but do we know enough to understand how to balance ventilation with the needs of wintering bees.

The complication arises from the fact that natural humidity levels change in response to many ordinary variables in the daily life of the colony. Therefore, a fixed amount of applied ventilation will not accommodate those natural fluctuations. How much ventilation is required, and when to adjust the amount, is not known. It's not even definitively known if bees attempt can control humidity, or if they just adapt to naturally occurring levels. What is clear is that bees need some of the condensation they generate to hold heat in the enclosure.

Also, we've known for some time that humidity plays a significant role in *Varroa* reproduction, with optimum humidity for reproduction ranging from 55% to 70% and only limited reproduction taking place at higher humidity. So a real contemporary question is does added ventilation aide *Varroa* reproduction. The next question is how much of our current practice of provisioning 60-100 lbs of honey per wintering colony, then providing supplemental fondant, and in some cases ending with the need for emergency food, is being driven by removing lots of heat the bees must replace?

E.B. Wedmore calculated the amount of honey required to overwinter a measured population of bees in his influential 1947 book, *The Ventilation of Bee-Hives*. Wedmore converted the caloric content of honey to watts and then using wattage he calculated that the basic needs are about three lbs. per month between mid-October and mid-April. Therefore, if Wedmore is correct, and the primary Winter honey requirements of an average population of bees are in the range of ~21 lbs., it seems like our need to provision Winter stores at four times that amount, may indicate something about the burden on bees to generate additional heat beyond their basic needs. One obvious reason is the loss of heat by an abundance of added ventilation.

There's no question that ventilation is needed, but I think if we could refine our understanding of how much is needed and when, modify our boxes to direct the convective flows away from the cluster's center, and increase insulation around the Winter cluster, we could help our bees live healthier, lessen the burden of Winter provisioning, and reduce Winter losses. - By: William Hesbach, Published in *Bee Culture*, October 2016.

October Minutes

The October 14, 2018 Dodge/Jefferson County Beekeepers Association meeting was called to order at 1:18 pm by President Steve Drajese at Steve and Robyn's farm in Neosho. Eleven members and one guest were in attendance.

Steve welcomed guest Mike Graceffa from Cambridge. Mike's interested in purchasing some hives next year.

Secretary's Report – Robyn read the minutes from September's meeting. The minutes were approved as read.

Treasurer's Report – The current checkbook balance is \$7,089.99. In addition, there is \$140.00 in Lois Nass Memorial money.

Club Hives - Bernie's hives are doing well. He is feeding 2:1 sugar water, and mentioned that the Italians are out performing the Carniolans. Jeff provided Jeanne with 55 pounds of honey for the up coming fish fry.

Education & Promotion - Kevin Weisman, Jefferson County Parks Department Director invited the Club to the Mason Farm Jamboree. Steve and Robyn D., Honey Queen Holley, and Greg, and Tracy Schwartz set-up a table. Honey Queen Holley did an awesome job rolling candles with families. A great time with the honey bee "learn the roles" costumes.

Ralph went to Johnson Creek High School, and took an extractor and some frames, and demonstrated how to extract honey. He was well received and will continue helping with the School Program.

Queen Report - Holley traveled to Jefferson County Private Farm and conducted some radio interviews with a California college.

Fish Fry Report- Chef Chance will no longer be at the Juneau Community Center as of the first of the year. Discussion was held as to a new venue. Steve D. noticed the FFA was holding a Fish Fry at Turner Hall in Watertown. Greg S. will inquire as to the logistics of this location and report back to the Club.

Sunshine Report – Our club lost another beekeeper this month. Russ Haecker lost his battle with cancer. Please keep him and his family in your thoughts and prayers. Steve D. attended the funeral and signed the guest book for the Club.

Christmas Party - The Christmas party will be held Dec. 8th at Turner Hall 301 S 4th St, Watertown, WI 53094. Please RSVP by November 11 to Steve Drajese one of the following ways: W2140 CR NN Neosho, WI 53059 / e-mail: bulldozer33@sbcglobal.net / text or call 414-412-5323, or sign-up on the club Facebook page.

Robyn and Greg discussed this year's Christmas prizes. Robyn will take the lead on this project and report back to Greg and Tracy. Marion Unertl has been picking up items throughout the year, and Dana volunteered to help.

Old Business - Karen W. handed out a draft copy of the updated constitution/bylaws. These need to be reviewed. Members can view them on the Club website or contact Karen if you need a paper copy. Club members need to vote on the bylaws three times (November, December, January), to be officially changed.

Insurance coverage - Steve D. has a quote for liability insurance and is waiting on one more from Greg Schwartz. If all the information is gathered in time, a final vote will be held at the November's meeting.

WHPA– The WHPA Fall Convention is November 1-3, 2018 at Hotel Mead in Wisconsin Rapids. Tracy Malterer will be our delegate and will receive \$150.00 for expenses.

October Minutes, cont.

Member Report - Dan Unertl attended a beekeeping class held by Tim Wilbanks at Heritage Honeybee. He reported that it was good class and would recommend it to others.

Greg Schwartz asked if anyone else has experienced wax moths. Mel stated that he has, and mentioned he sold the worms for bait. The moths lay their eggs in the pollen and as the worms hatch, they cause damage to the comb. It usually happens when storing boxes with comb. A solution is to place the frames in a freezer for 24 hours to kill the eggs and larva.

Bernie Hall asked if anyone had hive beetles. Steve D. had some in used equipment, but caught them in time to prevent no damage. If you buy used equipment, know your source to lessen the risk of getting disease contaminated equipment.

Fall feeding is 2:1 sugar syrup that's 16# of sugar per 1 gallon of water. Bees are taking in a quart a day.

Members brought in some of their honey for tasting and testing for moisture content.

Steve D. demonstrated a sugar roll test in the bee yard, and shared a new method of fogging with oxalic acid using a insect fogger. Using 100ml of grain alcohol, and 30g oxalic acid

The next meeting will be Sunday November 11, at St. Michael's Church. The potluck is at 1pm, followed by the 2pm business meeting. The guest speaker will be Charlie Koenen.

The meeting was adjourned at 3:35pm.

Did You Know?

The American Beekeeping Federation's (ABF), website has resources for beekeepers that interact with kids? The page is full of resources, book recommendations, games, lesson plans and much more. In addition, there is information on the E-Buzz Children's Column.

These resources can be found at:
<https://www.abfnet.org/page/16>.

The mission of the ABF's Kids and Bees Program is to educate the next generation of Americans on the importance of honey bees and inspire them to take part in the preservation of honey bees.

Check it out!



Cranberry Orange Sauce

Ingredients:

- 1 cup orange juice
- 1/2 cup honey
- 2 tablespoons orange zest
- 1 12-ounce package fresh cranberries

Directions:

Over medium heat, dissolve the honey or granulated sugar in the orange juice. add orange zest.

Add the cranberries and cook, uncovered, until most of the berries have popped and the sauce has thickened a bit (it'll continue to thicken as it cools, which takes about 15-20 minutes). It takes about 10 – 15 minutes of simmering.

Pour the cooled sauce in an airtight container and store in the refrigerator for up to 5 days.

Prep Time: 5 min
Cook Time: 15 min
Ready in: 20 min

Yield: 2 cups

