



## The Shore Swarm Newsletter

### June 2017

**BGES** Leadership

President: Ann SnyderVice President: Licho BerrouetteTreasurer- Phil HarrisCarol Zuccarino- SecretaryTara Southard- Outreach CoordinatorGeorge Brown- Web MasterEstelleSpachmann- Newsletter Editor



A Message from Our President

Dear Beekeepers,

I am sulking on this overcast, cool Memorial Day, knowing that each day's delay in going through my hives will mean more burr comb and eventually, more difficulty loosening up frames to examine the hives. The weather during this rainiest of Mays has been inconvenient for me, but it will certainly result in abundant forage for the bees well into the summer.

Stuck-together frames and over-crowding are the consequences of being a bee haver, and I am experiencing some humility and doing some penance! To any of the new beekeepers reading this, I would encourage you to do as I say, not as I do! Use your first year to get to know your bees, practice opening your hives every few weeks to learn what "normal" looks like, and to learn the gentle, efficient techniques of assessing and making adjustments to your hives. The more frames you can handle, the more confident you'll become. Remember that if you'd like another beekeeper alongside as you get to

know your bees, our list of mentors is your resource to find a willing person not far from you. Don't hesitate to ask for help; we are eager to give it!

I know the new beekeepers have been impatient to receive their new bees. Mid-May to the end of June is the customary time for nucs to be ready for their new homes. I'm certain that all who want to have bees will be getting them in the next few days.

I'm pleased that our guild is moving forward with some plans. There is a small committee working to promote less mowing and more wildflower growth in public spaces. The Board of Directors will be purchasing some large items for members to share, among these is a new electric extractor, more candle making supplies, and some "Honey-B-Healthy." Several of our members are interested in arranging for Guild meetings to be held regularly in northern Accomack to accommodate our northern members better. We are aiming for an October meeting "up the road;" this will be a fun field trip for us Southerners! We're also making plans for a guild picnic – keep July 29<sup>th</sup> clear on your calendars.

I had the pleasure of visiting "Eastern Shore Apiaries" recently for a commercial beekeeping conference featuring our own Licho Berrouette - oh, and his business partner Jonathon Orloff as well as master beekeeper Dean Burroughs, from Salisbury. This was a fascinating experience even for a small time hobbyist like me. It was good to meet many of our counterparts from Maryland, and I hope that we might benefit from relationships with them in the future.

I'm looking forward to our meeting Saturday, June 3<sup>ed</sup>, at the Painter Experiment Station. Our guest speaker is George Waldenmeier, a long-time beekeeper himself, and also the man behind the wonderful company, "Bee Busters." He provided a program for us several years ago that was one of our most fascinating. I hope you can be there.

By the way, congratulations to Caroline Boyd (David's daughter) on winning the Eastern Shore News spelling bee, and to Emilie Hollingsworth (Ulli's daughter) for being the A&N Electric Cooperative's honoree as well as Chincoteague High School's nominee for the Virginian-Pilot's annual scholarships. Each of these is an amazing achievement!

Best wishes!

Ann, (a bee-haver hoping to convert to beekeeper).



### Common Pesticide Damages Honey Bees' Ability to Fly

Biologists at the University of California San Diego have demonstrated for the first time that a widely used pesticide can significantly impair the ability of otherwise healthy honey bees to fly, raising concerns about how pesticides affect their capacity to pollinate and the long-term effects on the health of honey bee colonies.

Previous research has shown that foraging honey bees that ingested neonicotinoid pesticides, crop insecticides that are commonly used in agriculture, were less likely to return to their home nest, leading to a decrease in foragers.

A study published April 26 in *Scientific Reports* by UC San Diego postdoctoral researcher Simone Tosi, Biology Professor James Nieh, along with Associate Professor Giovanni Burgio of the University of Bologna, Italy, describes in detail how the neonicotinoid pesticide thiamethoxam damages honey bees. Thiamethoxam is used in crops such as corn, soybeans and cotton. To test the hypothesis that the pesticide impairs flight ability, the researchers designed and constructed a flight mill (a bee flight-testing instrument) from scratch. This allowed them to fly bees under consistent and controlled conditions.

Months of testing and data acquisition revealed that typical levels of neonicotinoid exposure, which bees could experience when foraging on agricultural crops -- but below lethal levels -- resulted in substantial damage to the honey bee's ability to fly.

"Our results provide the first demonstration that field-realistic exposure to this pesticide alone, in otherwise healthy colonies, can alter the ability of bees to fly, specifically impairing flight distance, duration and velocity" said Tosi. "Honey bee survival depends on its ability to fly, because that's the only way they can collect food. Their flight ability is also crucial to guarantee crop and wild plant pollination."

Long-term exposure to the pesticide over one to two days reduced the ability of bees to fly. Short-term exposure briefly increased their activity levels. Bees flew farther, but based upon other studies, more erratically.

"Bees that fly more erratically for greater distances may decrease their probability of returning home," said Nieh, a professor in UC San Diego's Division of Biological Sciences.

This pesticide does not normally kill bees immediately. It has a more subtle effect, said Nieh.

"The honey bee is a highly social organism, so the behavior of thousands of bees are essential for the survival of the colony," said Nieh." We've shown that a sub-lethal dose may lead to a lethal effect on the entire colony."

Honey bees carry out fundamentally vital roles in nature by providing essential ecosystem functions, including global pollination of crops and native plants. Declines in managed honey bee populations have raised concerns about future impacts on the environment, food security and human welfare.

Neonicotinoid insecticides are neurotoxic and used around the world on broad varieties of crops, including common fruits and vegetables, through spray, soil and seed applications. Evidence of these insecticides has been found in the nectar, pollen and water that honey bees collect.

"People are concerned about honey bees and their health being impaired because they are so closely tied to human diet and nutrition," said Nieh. "Some of the most nutritious foods that we need to consume as humans are bee-pollinated."

*From:* University of California San Diego. "Common pesticide damages honey bees' ability to fly." ScienceDaily. ScienceDaily, 26 April 2017.

#### Looking Ahead and Afield: (upcoming events outside our immediate area)



#### Eastern Apicultural Society

The honey bee, often referred to as the small wonder, is going to be magnificently celebrated at the Eastern Apicultural Society's (EAS) Annual Summer conference in Newark, Delaware, the other small wonder from July 31<sup>st</sup>- Aug. 4<sup>th</sup> 2017. EAS is the largest noncommercial beekeeping organization in the country and in just a few short months from now, will host their two day "short course" followed by a three-day conference. Keynote and featured speakers include some of the greats such as Dr. Tom Seeley, Dr. Marla Spivak, Mike Palmer, Larry Conner, and Tammy Horn just to name a few as well as workshops including a few led by VDACS own Keith Tignor and Bob Wellemeyer and many others covering a wide range of topics. There are opportunities for field trips to a botanical garden, a mansion, or a meadery, a six hour Children's Beekeeping Academy run by the Bee Girl organization, and you might even find a couple of VSBA members on the program or running the honey show! I am especially pleased to see several Virginia beekeepers volunteering in different capacities at EAS this year.

As if that is not enough- there will be a live auction entirely separate from the historical Thursday night dinner, a honey show, evening socials, and the esteemed EAS Master Beekeeping certification program. There are over 130 sessions in a typical EAS week. I fondly refer to this week as "Bee Camp" and encourage every one of you to consider attending EAS and have the experience of being able to talk bees morning, noon and night if you want! Let's not forget the honey show. Show me the Honey. Did you know, "you've got to be in it to win it?" I encourage each and every one of you to consider entering this competitive honey show while you are at **EAS 2017**. For more information about EAS see: <a href="http://www.easternapiculture.org/">http://www.easternapiculture.org/</a>

For some fun and informative videos highlighting the EAS experience in all its glory, please see the new VSBA You Tube site located at: <u>https://www.youtube.com/channel/UChFqpEVxOxVL0PSZI8DC2Pw</u>

*So, are you coming to bee camp; are you entering the honey show; or considering taking the master beekeeper certification exams?* 

### From The Lower Eastern Shore Beekeepers Association (Maryland):

We are hosting a Fall Honey Harvest Festival on Saturday September 30 from 10AM-4PM at Wright's Market <u>9300 Old Railroad Rd</u> <u>Mardela Springs, Maryland, MD 21837</u>

(410) 742-8845 https://www.facebook.com/WrightsMarket/

The success of this event falls heavily on beekeeper participation! We would like to reach out to other "local" clubs and encourage you and your members to not only attend but to participate!



BGES meetings alternate locations between the Barrier Island Center(BIC) in Machipongo and the Eastern Shore Agricultural Research and Extension Center located in Painter, VA.

To learn about what happens at the AG Center, visit their website: <a href="http://www.arec.vaes.vt.edu/eastern-shore/">http://www.arec.vaes.vt.edu/eastern-shore/</a>

# Meeting Reminder: Saturday June 3 at 10:00 AG Center in Painter.

### <u>Outreach</u>

In April the Lemon Tree gallery in Cape Charles featured a month of Bees. Russell Vreeland and Mary Walker coordinated this opportunity to inform the public about beekeeping *Attracting Pollinators to Your Yard*.

### **On-line Opportunity through Ohio State University:**

Setting up Your Extracting Line - What's Needed

Jim Tew, Alabama Cooperative Extension Service

OSU Bee Lab webinars are free, and registration is not required.

The recording-as well as previous presentations- is posted and can be <u>viewed at your</u> <u>convenience</u>: https://u.osu.edu/beelab/webinar-recordings/



### Membership DUES:

BGES dues \$20 State dues \$10 Memebrship runs from June 30-July 1. Application is on BGES website. IF you have not yet paid your dues for this year, please mail your check to our treasurer Phil Harris at 20496 Seaside Road Cape Charles, VA 23310

The BGES has a Facebook page. Log on to see some of the latest escapades of fellow BGES.

The official website for the BGES is <u>http://www.bgesva.org/index.html</u> Any news worthy items-feel free to forward to <u>emspachmann@gmail.com</u> for possible inclusion in future newsletters.

The Cape Charles Farmers Market is open every Tuesday with opportunities to sell honey and other hive products. Contact WT Wilkins for more information.

### The Last Word

Which is greater:
A) the total number of Nuclear warheads in the world
B) the total number of pesticides registered for use in the United States
C) the total number of bullets fired for every insurgent killed in Afghanistan and Iraq
D) Total number of medicinal drugs approved for use by the US FDA since 1827.

ANSWER: Nuclear Warheads Total: 15,000 (US 7300; Russia 8,000) Bullets fired in Afghanistan: 250,000 per Insurgent killed Drugs approved since 1839: 1,423 Approved Pesticides: 350,000 (Thanks to Russell Vreeland)