



President: Dave Robinson; Vice President: Charity Mack; Treasurer: Kathy Robinson; Recording Secretary: Tracy Shonts; Newsletter Editor: Pam Fisher; Webmaster: Dave Robinson | Deadline for the newsletter is the 20th of each month.

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Words from the President

Greetings fellow beekeepers:

First, I would like to thank the many volunteers that came out for the Flower and Garden Expo. This was our first large event of the year and we did not run short of workers.

Our next event, the Introductory Beekeeping Course, is our most important. It is a great time to start sharing and refreshing our honey bee knowledge amongst ourselves and especially passing our knowledge to those just starting out. From those I have talked with, they are very excited and eager to start learning the ins and outs of beekeeping.

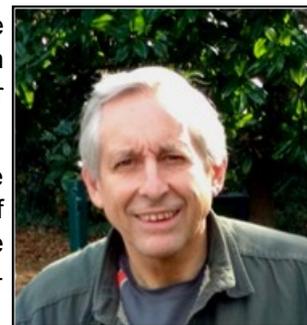
If you haven't already, please consider becoming a mentor. Being a mentor does not require years of experience; even if you are going on your second year, you have beneficial knowledge to share. Our new beekeepers will not have bees right away and would be excited for a chance to work with some actual hives.

With the weather fluctuating from cold to warm and back, be sure to check your hives for adequate feed stores. A quick check can be done by lifting the back end of your hive and if it feels light, your bees are in need of supplemental food supplies.

We still have some position openings in the guild; specifically, the Newsletter Editor and Events Coordinator. Please consider one of these positions. It would be a great help within the guild to have these filled so that one person is not being overwhelmed by covering more than one position. Thanks everyone.

Best wishes,

Dave



*Dave Robinson, President
Beekeepers Guild of Southeast Virginia*

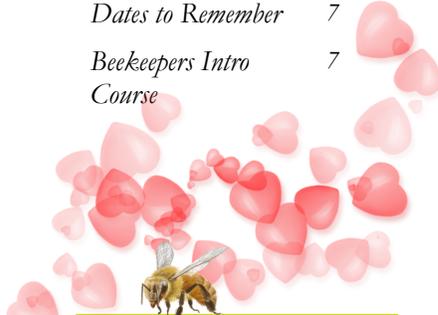
February Monthly Meeting

Meeting: Monday, February 11, 2019 at 7:00 PM

Location: Towne Hall, left wing of Towne Bank located at 137 Mt. Pleasant Rd., Chesapeake, VA 23322

Program: Honey Bee Swarms: Causes, Prevention and Capture

Speaker: Buddy Hoggard



**Beekeepers
Introductory
Course starts
this month!**

1st Class: 2/2/2019

2nd Class: 2/9/2019

3rd Class: 2/16/2019

February Apiary Notes for Coastal Virginia

February is typically the coldest winter month in Coastal Southeast Virginia. The bees are usually clustered in their hives waiting for warm spring weather to arrive.

Make sure that your hive entrances are open and not blocked by dead bees in case we get a few days of 50° F or warmer for cleansing flights.

Continue to check the colonies for adequate winter stores by opening them and checking the location of the winter cluster. If the bees are at the top of the box, they've gone through their stores and you will need to feed them to prevent starvation and encourage population buildup. Because they may not take sugar syrup at low temperatures (below 50°F), you may have to feed



fondant, candy or granulated sugar directly over the winter cluster.

Brood rearing has begun and the bees will need pollen. In this area pollen is usually plentiful; only feed pollen patties if there is no natural pollen being brought in as pollen supplements can also boost buildup of Small Hive Beetles once the weather warms.

Place your orders for queens and local nucs as soon as possible to ensure timely spring delivery. Remember the state of Virginia does not recommend purchasing stock from any states with Africanized honey bees.

Take inventory of your equipment and order any new woodenware to allow time for assembly and painting.

Virginia Apiary Registry



Have you registered your hives with BeeCheck™?

When the Environmental Protection Agency mandated that states develop pollinator protection plans and best management practices to reduce pesticide risk to managed pollinators, many states created task forces that brought stakeholders together. In Virginia, stakeholders represented researchers, beekeepers, pesticide applicators and crop producers who met with personnel from the state's regulatory agency, VDACS. From those meetings, came the recommendation to implement an easy to use and readily accessible, communication tool available to all stakeholders.

BeeCheck™ is a **voluntary** communication tool offered in Virginia that enables beekeepers and pesticide applicators to work together to protect apiaries through use of the BeeCheck mapping program.

BeeCheck™ is operated by FieldWatch, Inc, a non-profit company created by Purdue University. The site features a map interface that clearly shows applicators the

locations of registered apiaries so they can use the information to avoid bee poisoning during pesticide applications. Registering your hives is voluntary and your information must be updated annually. Once you enter your information, your application will be approved by VDACS before appearing in the system to avoid abuse of the system.

Field signs and flags can be used for additional communication and awareness near apiaries. Official BeeCheck™ signs and flags are available for purchase by registered producers and beekeepers with approved sites.

For more information, visit the BeeCheck™ website at:

<https://va.beecheck.org/>



"Many of these pollinator protection plans are primarily communication and education plans. We want to ensure we have good trust and communication to minimize any potential risk."

**--Dave Flakne
Syngenta**

VA Flower & Garden Expo Review

Many thanks go out to our fabulous guild volunteers for staffing our booth at the Virginia Flower and Garden Expo this year. We had a tremendous amount of help with set up and tear down in addition to show hours. Our booth was buzzing the entire time with visitors eager to sample local honey and hive products from various areas of Coastal Virginia.

Guild volunteers also explained honey bee biology and the codependence of bees and flowering plants. To support bees, we offered bee-friendly plants and seeds for sale. More than 100 new camellias and hellebores should now be brightening Coastal Virginia landscapes and offering additional bee forage on warm winter

days. Kids and adults enjoyed making seed bombs for spring with seeds generously donated by Botanical Interests.

A heartfelt guild **Thank You** is extended to Samuel Benson, Amy Bone, Jean Carideo, Tammy Cobb, Nick Delphia, Donna Eure, Rick & Pam Fisher, Rick & Lou Anne Franklin, Bill Gregory, Buddy Hoggard, Dawn James, Steve Jones, Brian Krause, Dave Kvello, Carolyn Lilley, Patty Midgette, Don & Chris Pering, Richard Seeloff, Keith & Vicki Roberts, Dave & Kathy Robinson, Steve Rose and Karen Zablocki. We couldn't have done it without you!



The Beekeeper's Garden in February

Brood rearing is underway inside hives and foragers can be found in large numbers on plants with good pollen supplies. The following plants bloom in February in Coastal Southeast Virginia:

Alder (*Alnus*), Barrenwort (*Epimedium*), Brunnera, Bugleweed (*Ajuga*), Camellia japonicas, Camellia oleifera, Carolina Jasmine (*Gelsemium*), Crocus, Dandelion (*Taraxacum*), Edgeworthia, Flowering Current (*Ribes sanguineum*), Flowering Quince (*Chaenomeles speciosa*), Forsythia, Fragrant Wintersweet (*Chimonanthus praecox*), Japanese Flowering Apricot (*Prunus mume*), Lamium, Laurustinus (*Viburnum tinus*), Lenten Rose (*Helleborus*), Lungwort (*Pulmonaria*), Oregon Grape Holly (*Mahonia bealei*), Pansy, *Pieris japonica*, Persian Irontree (*Parrotia*



Skunk cabbage (Symplocarpus foetidus) is one of the first flowers to emerge in spring. This wetland native smells dreadful but provides early pollen for bees.

persica), Primrose (*Primula vulgaris*), Red-bud (*Cercis canadensis*), Red Maple (*Acer rubrum*), Rosemary, Scilla, Skunk Cabbage (*Symplocarpus*), Snowflake (*Leucojum*), Strawberry Tree (*Arbutus unedo*), Sweet Breath of Spring a/k/a Winter Honeysuckle (*Lonicera fragrantissima*), Sweetbox (*Sarcococca*), Willow (*Salix*), Winter Daphne (*Daphne odora*), Winterhazel (*Corylopsis*), Winter Heath (*Erica carnea*), Winter Jasmine (*Jasminum nudiflorum*), Witchhazel (*Hamamelis*)

Red Maple, (Acer rubrum), which is named for its red flowers, twigs, seeds and brilliant fall foliage, is a Virginia native deciduous tree to 60 feet high. Maple blooms in January and February providing one of the first major pollen sources of the year. Maple pollen stimulates brood rearing and spring build up while the nectar is mostly consumed and not stored as surplus honey.



Hazel Alder (Alnus serrulata) is a large deciduous shrub or small tree native to the eastern U.S. It is found growing naturally as densely branched thickets in boggy ground along ditches, streams and in wet fields with full sun to part shade. Flowers are monoecious; male pollen-producing catkins provide bee forage and female flowers are bright red.





"Not a single bee has ever sent you an invoice. And that is part of the problem - because most of what comes to us from nature is free, because it is not invoiced, because it is not priced, because it is not traded in markets, we tend to ignore it."

-- Pavan Sukhdev

Support the Honey Bee as State Pollinator

Virginia state delegate Patrick A. Hope has introduced House Bill 1896 to designate the European Honey Bee (*Apis mellifera*) as Virginia's official state pollinator. The impact statement accompanying the bill anticipates no budgetary or fiscal impact from this action. Yet there is an organized effort to thwart this bill based on the fact that honey bees are not native to Virginia. Rather than celebrating Virginia's unique status as the point of origin for honey bees in North America, some organizations are mounting letter writing campaigns to oppose the honey bee as Virginia's state pollinator in favor of one of Virginia's native bee species.

The opposition does not take into account many of the facts that support designating the honey bee as Virginia's state pollinator:

- The earliest record of honey bee introduction to North America is documented in a ship's inventory leaving England in December, 1621 and arriving in Virginia in 1622.
- Most colonists were of European origin and raised European crops which required a pollinator that coevolved with those crops.
- Honey was the main sweetener in the colonies and beeswax had myriad uses, including waterproofing and candles.

- Our Virginia presidents, George Washington and Thomas Jefferson kept honey bees on their estates.
- Today, honey bee pollination provides 110 million dollars of increased crop production in Virginia, 23 million in apple production alone.
- The number of honey producing colonies in Virginia has decreased from 30,000 in 1986 to 4,000 in 2012.
- 30% of all honey bee colonies die each year and Virginia has experienced losses as high as 60%.

If you support HB 1896 to designate the European Honey Bee as Virginia's official state pollinator, please contact your state representatives and urge them to vote yes on the HB1896. You can look up your legislators and their contact information at <https://whosmy.viriniageneralassembly.gov/> or sign the online petition from the Sweet Virginia Foundation at: <http://honeybee.sweetvirginia.org/>



Refreshment Request

We all enjoy the snacks at monthly meetings and the fellowship they foster but they don't just happen. Gracious guild members kindly take their time to make or purchase refreshments to share with others. Often it's the same people month after month supplying us all with tasty treats.

If each member brought snacks just

once a year, we could all enjoy refreshments at every meeting with very little effort.

If you can help by bringing snacks or beverages to share, we are most grateful. Homemade or store-bought, we appreciate the effort!



West Nile Virus and Beekeeping

by Dreda A. Symonds, Director, CMCC

The summer of 2018 brought events never before experienced in the City of Chesapeake: two locally acquired human cases of West Nile virus (WNV). WNV is a virus maintained in the bird population and most often spread to humans through the bite of the common brown house mosquito. It can be a devastating disease with long-term effects and is probably our biggest concern as mosquito control professionals in Chesapeake. Although neither of the two patients work in our city, they are residents, and mosquito control response is always focused on the area closest to patients' homes. This particular mosquito bites after dark and residents are often exposed to them on their own property.

The first step to stop the spread of mosquito-borne disease is to reduce the adult mosquito population that is spreading it. That means CMCC must spray, but most spray treatments will occur after dark when the common brown house mosquito is most active. The spray does not persist in the environment and breaks down before your bees are out and active the following morning.

Another step we take to keep the adult mosquito population from increasing is to locate sources of immature mosquitoes and eliminate the dirty, stagnant water where they thrive. If we cannot eliminate the water, we must treat it with a product to kill mosquito larvae. Bti (bacterial) pesticides often do not work well in the highly polluted water that this species prefers, so we usually use a sustained-release methoprene product (an insect growth regulator). These products are designed to release the pesticide slowly and at a rate that will kill mosquito larvae over time, directly and constantly exposed through the water they live in.

The amount of pure methoprene in treated water at any time is equivalent to about 1 drop in an Olympic size swimming pool. The amount of methoprene that your bees may pick up when they drink and bring water back to the hive is infinitesimally small (please see the sidebar for references & calculations). Although bees and mosquitoes undergo the same complete life cycle, bee larvae are never exposed to harmful levels of methoprene through mosquito control applications.

Residents can help reduce mosquito populations by eliminating stagnant water where mosquitoes breed. Please tip & toss anything that may collect rainwater and fill in low spots on your property, especially where livestock manure and rainwater will nurture immature mosquito larvae. Never clog drainage ditches with leaves or grass clippings.

Common brown house mosquitoes pick up WNV by biting birds, so chicken coops are very attractive to the adults. Although WNV does not make chickens ill, chicken coops attract these mosquitoes closer to people, who are vulnerable. Please consider periodically treating your coop for adult mosquitoes.

Finally, if you or your loved ones are outside in the evening, or any time mosquitoes are active, please cover your skin with long, loose and light clothing and/or use an appropriate insect repellent. WNV is a real threat to our community – please help the Chesapeake Mosquito Control Commission by cooperating with our control efforts during an outbreak and take action to protect yourselves. We want you and your loved ones to be healthy and comfortable.



What is the amount of Mosquito Control methoprene product to which your bees are exposed?

These calculations make the following assumptions, which pose a worst-case scenario:

1. Your bees are bringing 1 gallon of water per day to the hive on the hottest, driest days of the year (source: Eric Mussen, Apiculturist at UC Davis, Department of Entomology & Nematology)
2. The concentration of methoprene in nearby mosquito breeding sites (standing water) is the maximum of 10 ppb. Most actual field measurements indicate 2 – 5 ppb. (Ecotoxicology & Environmental Safety, University of California).
3. Your bees collect water exclusively from the mosquito breeding site treated with methoprene.
4. The number of bees in your hive is relatively small (20,000). I could not find a reference as to the percentage of larvae, but assume that this number includes larvae.

$$\begin{aligned}
 &10 \text{ ppb methoprene in one gallon water} \\
 &= .0000016 \text{ oz. methoprene brought to the hive per day} \\
 &.0000016 \text{ oz methoprene} / 20,000 \\
 &\text{bees per day} = .0000000008 \text{ oz} \\
 &\text{methoprene exposure per bee per day} \\
 &=
 \end{aligned}$$

.08 billionth of an ounce of methoprene exposure per bee per day

I could not find any studies on the effect of methoprene on immature honey bees, but one unpublished paper I found exposed individual adult bees to 200 micrograms of methoprene in an acetone solution. The author of this study deduced that methoprene did affect foraging behavior and reduced life span. However, the **dose of methoprene was 88,888 times** what the bees in the above scenario would be exposed to under the most extreme field conditions.



Painted Hive Contest

Calling all beekeepers, teachers and artists! The Nansmond Beekeepers Association's painted hive competition is now underway. Proceeds from the sale of the painted hive bodies fund honey bee research. Last year's grant recipients were Zac Lamas of the vanEnglesdorp Bee Lab and Chelsea Abegg of Rutgers University.

School-age children's entries are free, semi-pro adults' single box entries are \$20, and professional artists' entries are \$25 per box. Full hive entries are \$50 each. Monetary prizes are awarded to 1st, 2nd and 3rd place entries in each class based on the funds raised from entry fees.

Entries in all classes are due at Anderson's Garden Center, 11250 Jefferson Ave, Newport News, VA 23601 on April

13th. The entries will be on display at various venues around the area at public outreach events. Judging will occur at the Smithfield Farmers Market on June 29th followed by a silent auction of the entries at EAS 2019 in Greenville, SC from July 15-19, 2019.

For more information or to enter the competition, please contact Jane Schweiger at specialbees3@gmail.com or 757-725-3167.



McDonald's Outdoor Show

March 1 - 3, 2019

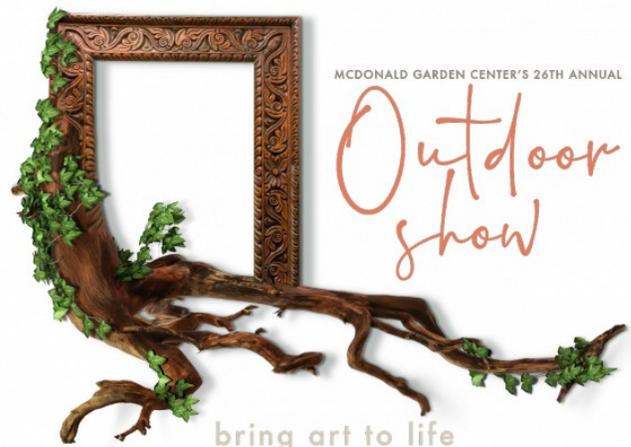
Please join us as we participate in McDonald Garden Center's 26th annual Outdoor Show. This extremely popular event is free and open to the public featuring over 70 home and garden-related vendors, workshops, and seminars to celebrate the beginning of spring. Over 8000 visitors typically attend the show.

McDonald Garden Center is focusing on bees and butterflies through June, 2019 and currently hosts an observation hive. They are also stocking mason bee houses and featuring habitat kits for rearing monarch butterflies. Guild members will lead two seminars and staff an educational booth to share the joy of beekeeping and offer advice on good gardening practices to protect pollinators.

The show hours are 9 AM to 6

PM, Friday through Sunday. Shifts are five hours each and divided into morning and afternoon. Won't you please join us and enjoy a little camaraderie with fellow beekeepers while enjoying the very latest in home and garden ideas for spring? Signup is through Signup Genius at:

<https://www.signupgenius.com/go/30e0549afa92aa1fe3-20192>



**"The promise of spring's arrival is enough to get anyone through the bitter winter."
-- Jen Slelinsky**

February 2019

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
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| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
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| |  | | | | | |
| 17 | 18 | 19 |  | 20 | 21 | 22 |
| 24 | 25 | 26 | 27 | 28 | 1 | 2 |

Dates to Remember

- February 2 - 1st class of Beekeepers Introductory Course at LETA
- February 7 - Board Meeting - Members welcome!
- February 9 - 2nd class of Beekeepers Introductory Course
- February 11 - Guild Meeting
- February 14 - Happy Valentine's Day!
- February 16 - 3rd class of Beekeepers Introductory Course
- February 19 - Virginia Beach 4-H Beekeeping Club Meeting
- March 1-3 - McDonald Garden Center's Outdoor Show

Help with Beekeepers Intro Course

For many of you, your first experience with the Guild was walking into our Beekeepers Introductory Course. You were met by beekeepers who were happy to see you and excited to help you join the fascinating world of apiculture. A yummy buffet was offered during the breaks, plus plenty of Guild members were present to answer your many questions.

Now this event is underway again and your assistance as Guild members is requested. Please come help us welcome the new group of beekeepers and feel free to sit in on the lec-

tures for a little refresher training while you're there. Fortunately there is seating for everyone!

The classes will be held at the Virginia Beach Law Enforcement Training Academy (LETA) on February 2, 9 and 16, 2019. Doors will open at 7 AM, classes will start around 8 AM and run until about 2 PM. The LETA is easy to access right off Birdneck Road and interstate 264 in Virginia Beach at 411 Integrity Way, Virginia Beach, VA 23451. It is very near the Virginia Beach Convention Center where we participated in

the Virginia Flower & Garden Expo.

We need help with providing the snacks, their set up and clean up, as well as members to talk to new beekeepers during breaks. The classes will occur before we have another membership meeting so please sign up here: www.signupgenius.com/go/30e0549afa92aa1fe3-20191

Hope to see you there!

