



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.

Inside this issue:

Apiary Notes	2
Welcome New Beekeepers	2
Outdoor Show	3
Beekeeper's Garden	3
Swarm Bucket Workshop	4
Garden Design App	4
Mathematical Bees	5
Property Manager Sought	6
Spring Queen Order	6
Open Guild Positions	6
Mentor Program	7
Dates to Remember	8
Gathering of the Guilds	8

## Words from the President

Greeting Fellow Beekeepers,

First, I would like to thank all of the volunteers that contributed to the success of our Beekeepers Introductory Course. I have received nothing but positive comments from the students. Although the class was small in number, it certainly was not short on excitement or determination to gain beekeeping knowledge. As every beekeeper knows, the classroom instruction is just the start and learning will continue for years to come as we spend time in our apiaries. Our mentorship program is an important element for our new beekeepers and will contribute to their success. Including new members in your hive inspections would be extremely beneficial for them and an extra hand for you.

As we enter spring, more events are being scheduled which require volunteer time from our members. You don't have to be a "seasoned" beekeeper to volunteer for these events. Not only will you be sharing bee knowledge with the public, but you will be reinforcing your knowledge through that interaction, gaining knowledge from the other volunteers during the event, and gaining priority on the BGSV nuc list. Other volunteer opportunities are; 1) filling some of our guild's vacant positions, 2) writing articles for the newsletter, and/or 3) helping out with refreshments.

Dave



Dave Robinson, President  
Beekeepers Guild of Southeast Virginia



**FREE** Swarm  
Bucket & Bee  
Vacuum  
Workshop!

**March 30, 2019**

See details on  
page 4

## March Monthly Meeting

**Meeting:** Monday, March 11, 2019 at 7:00 PM

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

**Program:** The Medicine of Bees and Honey

**Speaker:** George Hoerr, M.D.



## March Apiary Notes for Coastal Virginia

- Order queens NOW. Many breeders are already sold out for spring delivery dates.
  - Evaluate woodenware and replace any rotted items.
  - Install honey supers. A queen excluder may be used above the brood box and under the 1<sup>st</sup> super.
  - Air out drawn comb that had been stored with wax moth preventative - paradichlorobenzene (PDB) - for several days before putting it on the bees. A better alternative is the biological control, XenTari.
  - Select a sunny, southeast facing spot for new apiary locations. All day sun is best to discourage small hive beetles and Varroa mites.
- 
- Feed any light hives to encourage population buildup. Make sugar syrup in a 1:1 ratio (5 lbs. sugar to 10 cups water) at this time of year.
  - If medicating, STOP at least 2 weeks before honey supers for human consumption go on!
  - On a warm day (60 degrees or above), check for larvae & brood. If there is no sign of a laying queen, order one ASAP or combine with a queen-right colony.
  - Move frames of brood to the lower hive body. Do not break the brood into two boxes when cold weather is forecast.



*Mentoring*



*Taking delivery of a nucleus colony*



*Using a Guild frame jig*

## Welcome New Beekeepers! *By Nick Delphia*

This year's beekeepers introductory class was buzzing with activity. To the many students that attended the class: Welcome to the Beekeepers Guild of Southeast Virginia!

Let me list some of the perks you get as a part of your tuition to the class. First, you are now a member of the Guild for 2019. Memberships expire on June 30, 2019. Dues are \$20 a year, and if you would like to be a member of the Virginia State Beekeepers Association (although optional), dues are an additional \$10.

As a member of our guild, you are eligible to participate in all Guild programs, including our mentor program where we match you with an experienced beekeeping mentor and our nucleus colony program where we make local bee colonies available to you for purchase (keep in mind, it takes a while before local nuc colonies to be ready, so please be patient). We believe that these two programs will give you the best possible start to successful beekeeping.

Another perk of guild membership is the use of our guild equipment. You can check out a frame or box jig to help you assemble your woodenware accurately and efficiently. Should you need to move hives,

you can borrow the guild's hive lifter. For spinning and bottling honey, check out our honey extractors, our refractometers for measuring moisture content in honey and our honey straining and bottling equipment. We also will provide you with the tools for public outreach such as an observation hive, educational posters and teaching hive if you are interested in conducting a talk at a school, or garden club.

As a guild member, you are also eligible to participate in group orders of equipment where combined buying power lowers the cost for all of us. You also qualify for an association discount on leading beekeeping magazine subscriptions.

We encourage you to continue your education at monthly meetings on the second Monday of the month where topics vary from beginning to advanced levels. The meeting is an excellent place to pose your questions to more than one person and share success stories, and lesson's learned.

Finally, please consider volunteering for a community event; you'll find that they are wonderful opportunities to pick the brains of more experienced beekeepers.

See you at the next meeting!

MCDONALD GARDEN CENTER'S 26TH ANNUAL

March 1-3, 2019

Outdoor show

The Guild is once again participating in McDonald Garden Center's Outdoor Show. This exciting home and garden show kicks off spring with beautiful plants and outdoor living essentials. It's three

days full of landscape inspiration plus on-going garden seminars all weekend long! Held rain or shine under heated tents and in the greenhouse, this show attracts hundreds of visitors each year. Admission and parking are free.



Our Guild will have a booth explaining the importance of bees and how to protect them with good gardening practices. Members may sell honey and hive products. There are still a few slots for volunteers. Please sign up at [www.signupgenius.com/go/30e0549afa92aa1fe3-20192](http://www.signupgenius.com/go/30e0549afa92aa1fe3-20192)

### The Beekeeper's Garden in March by Pam Fisher

With the Spring Equinox occurring on March 20th, spring will officially start. But don't tell plants and bees that; they've been enjoying spring-like weather for weeks now and have responded accordingly. Look for the following blooming flowers in Coastal Virginia this month: Alder (*Alnus*), Baby Blue Eyes (*Nemophila*), Barrenwort (*Epimedium*), Bachelor Buttons (*Centaurea cyanus*), Bay Laurel (*Laurus nobilis*), Brunnera, Bugleweed (*Ajuga*), Blueberries, (*Vaccinium*), Camellia japonicas, Camellia oleifera, Carolina Jasmine (*Gelsemium*), Corn Poppy, (*Papaver rhoeas*), Cornelian cherry (*Cornus mas*)



*Dandelions (Taraxacum) may vex you but your bees love them. Honey from the nectar is dark and strong but rarely stored, being consumed during brood rearing.*

Dandelion (*Taraxacum*), Edgeworthia, Flowering Currant (*Ribes sanguineum*), Flowering Quince (*Chaenomeles speciosa*), Forsythia, Lamium, Lenten Rose (*Helleborus*), Pansy, *Pieris japonica*, Persian Irontree (*Parrotia persica*), Primrose

(*Primula vulgaris*), Lungwort (*Pulmonaria*), Redbud (*Cercis canadensis*), Rosemary, Sassafras, Scabiosa, Scilla, Skunk Cabbage (*Symplocarpus*), Snowflake (*Leucojum*), Spring Flowering Bulbs, Sweet Breath of Spring a/k/a Winter Honeysuckle (*Lonicera fragrantissima*), Viburnum, Willow (*Salix*), Winter Daphne (*Daphne odora*), Winterhazel (*Corylopsis*), Winter Heath (*Erica carnea*), Winter Jasmine (*Jasminum nudiflorum*), Wintersweet (*Chimonanthus*), Witchhazel (*Hamamelis*)

*Persian ironwood (Parrotia persica) is a small deciduous tree related to witchhazel with four seasons of interest. Parrotia blossoms with tiny red flowers in spring, has glossy green leaves in summer, sports fabulous fall color and exfoliating bark for winter texture. Grow in light shade to full sun.*



Lamium is the same plant as Purple Deadnettle but one is considered an attractive, care-free ground cover and the other a weed. So weather you are deliberately growing one of the colorful cultivars or fighting the tenacious weed in your lawn, your bees are indifferent to the distinction and happy with both.



## Swarm Bucket Workshop



Are you ready for swarm season? Will you have the equipment to pick up free bees when you receive your first swarm call?

Come join us on Saturday, March 30, 2019 from 10 AM until 3 PM as Buddy Hoggard leads a swarm bucket workshop. The workshop will be held at the Chesapeake Ag. Trailer, located at the corner of Shea Dr. and Holt Dr. in the Chesapeake Municipal Center in Great Bridge. Mem-

bers supply their own 5-gallon bucket and modify it into a swarm bucket at the workshop. Buddy will supply the drill and hardware cloth for assembly. Examples of swarm vacuums will be on hand for you to examine, take pictures of and get some measurements if you'd like to proceed further and build one of these at home. Space is limited - please sign up at: <https://www.signupgenius.com/go/30E0549AFA92AA1FE3-swarm>

## Pollinator Garden App Coming Soon!

Republished from a January 24, 2019 article by Jessica Mjelde at the [North Carolina State Beekeepers Association](#)

A new garden design tool being developed at NCSU will be a valuable resource for beekeepers, gardeners and wildlife advocates. Assistant Professor of Applied Ecology Dr. Elsa Youngsteadt, with students at NCSU, is developing an online tool for designing and visualizing pollinator gardens.

Dr. Youngsteadt's research and outreach deal with the ecology and health of pollinators in urban environments. She says, "I have noticed that a barrier for homeowners who want to create pollinator habitat is their discomfort with the garden design process, particularly when faced with lists of pollinator-friendly plants that may not be traditional ornamentals."

To overcome this barrier, Youngsteadt is working with NCSU's computer science students to develop an online garden-design tool, driven by a database of recommended pollinator plants for North Carolina, whose climate is almost identical to Virginia. The app will allow users to design a garden, see how it would look, check for recommended design features, and make adjustments prior to real-world installation. The app will be similar to that offered by Better Homes and Gardens with

some important differences: Beyond its pollinator-friendly plant palette and the ability to show the garden in side view AND layout view, the application will also generate reminders if a planned garden doesn't meet recommendations such as having variety in flower colors and shapes in each season.

This fall, the software project made the cut for development in the Senior Design Center capstone course at NC State. The Senior Design Center is funded by donations; since this project was accepted, Youngsteadt needs to raise \$5000 to support their work on the garden-design app. Individual and club contributions may be made to the Youngsteadt Lab online at <http://go.ncsu.edu/youngsteadtlab>

Youngsteadt says, the application "will be free to use! It will be hosted on an NC State website and users will need to create an account, but I plan on most if not all functions being free. To support maintenance costs, we might add premium features in the future, but the core functionality will be available to everyone."

To help with future usability testing, please email Dr. Elsa Youngsteadt at: [ekyoungs@ncsu.edu](mailto:ekyoungs@ncsu.edu).



**"The hum of bees is  
the voice of the  
garden."**

-- Elizabeth Lawrence

# Honey Bees Learn Mathematical Calculations

Republished from [The Guardian](#)

Honey bees can learn to add and subtract, according to research showing that while the insects have tiny brains, they are still surprisingly clever.

Researchers behind the study have previously found that honey bees can apparently understand the concept of zero, and learn to correctly indicate which of two groups of objects is the smaller. But now they say insects can learn to carry out exact numerical calculations such as adding and subtracting a given number.

If the team are right, the insects are in good company. While it was once thought that only humans could manage such calculations, the authors note recent research has revealed other creatures can keep track of numbers or even add or subtract.

The team say the latest research adds to a growing body of evidence, including human studies, that language is not necessary for learning how to manipulate numbers. However, Paul Graham, professor of neuroethology at the University of Sussex, was cautious, and said it was not clear that the bees really did have a concept of mathematical operations, or even numbers.

"In reality, you don't really know what the animal has done, because you are not investigating how it is doing it," he said, adding it was hard to design an experiment to rule out other, simpler explanations for the bees' behavior.

Writing in the journal [Science Advances](#), Dyer and colleagues describe how their research involved releasing bees into a simple maze in which they were shown a picture of a small number of colored shapes. After flying through a hole, the bees were presented with two further images showing a different number of shapes.

When the shapes in the set up were blue, insects that made a beeline for

the image with one more shape than in the initial picture were offered a sugary drink. When the shapes were yellow, they were rewarded for flying to the image with one fewer shape. If the bee flew to the "incorrect" image, they were given a quinine solution – which is unpleasant to bees.

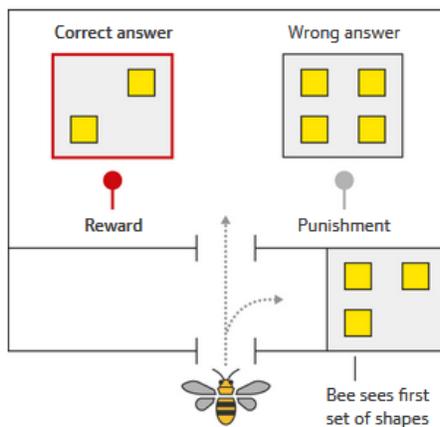
"It is very hard to train a bee to understand a plus or minus sign because that is an abstract symbol, so we use color because they learn color very quickly," said Dyer.

64% and 72% of the time, depending on the test.

"It is not that every bee could do this [spontaneously], but we could teach them to do it," said Dyer.

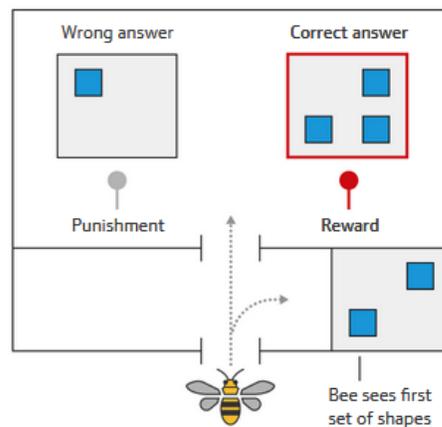
Dyer said the prevalence of numerical competence across the animal kingdom was "suspicious", leading him to believe it might be a widespread phenomenon in animals that aids survival. However, he added it was difficult to test this, and said there was an alternative explanation

## The bees were taught that yellow meant 'subtract one'...



Guardian graphic. Source: Science Advances 2019

## ... and that blue meant 'add one'



Fourteen bees were involved in the experiment and each completed 100 of the training exercises, with the shapes and numbers – up to a maximum of five – chosen at random from a pool of possibilities.

Each bee was then tested 10 times on two different scenarios for each color

Crucially, the first image the bees saw in the test setups contained three shapes. Neither the number nor the particular shape used had been presented to the bees as the initial picture during training, meaning they could not choose the "correct" answer from memory.

The results showed that the bees did better on the tests than chance, getting the correct answers between

– the real phenomenon is the ability to make associations and solve conundrums, rather than have or acquire numerical skills per se.

"It might be they don't actually use this in any natural context. They just have a brain which is plastic enough to learn our problem," he said. "Not everything we do [as humans] is essential to our survival in [terms of] evolution: playing a guitar, surfing and travelling into space are all things we can do because we have a lot of neural flexibility, we are really bright ... honey bees have been around a long time and they are very good at surviving in different environments and coming up with novel solutions, and maybe that has just led to a brain that can learn this task if they need to."

## Property Manager for Virginia Beach



Dave Kvello has served as the Guild's property manager for the Virginia Beach area for years and unfortunately, he no longer has the storage area to fulfill this volunteer obligation.

This translates into a request for a beekeeper in the Virginia Beach area that is willing to store some of the Guild's property and make it available for members to check out. This is not an everyday or even every week responsibility. And the property manager is not expected to bring the equipment to guild events nor pick it up.

We are looking for someone with a little space, less than 50 square feet, for storage and the ability to be available at reasonable hours, by appointment, for guild members to pick up or drop off equipment.

Have a business or storage unit and want a tax credit? As a nonprofit, we can provide one for services in kind.

Contact Dave Robinson at 757.641.2464 or [bgsv.dave.robinson@gmail.com](mailto:bgsv.dave.robinson@gmail.com) if you are interested.

Thanks, Dave, for your years of support!

## Spring Queens



The guild will have a limited number of spring queen bees available for delivery on May 7, 2019. More details to follow in subsequent newsletters.

## Open Guild Positions



In addition to volunteering during guild events, becoming part of the guild organization through volunteered service in positional roles is also an option. This is an excellent opportunity to have an active influence during the planning and organization of various guild endeavors. The following positions are available: (descriptions taken from the guild's by-laws):

**Event Coordinator.** Volunteer position. The Events Coordinator shall be the liaison to collect information, by collaborating with the Board of Directors, and public contact for the Event, to promote the event.

**Newsletter Editor.** Volunteer position. The Newsletter Editor shall collect information, by collaborating with the Board of Directors, for inclusion in the Guild newsletter and prepare the Guild's monthly newsletter.

**Education Committee.** Volunteer position. The Education Committee shall be a standing committee consisting of a minimum of three Guild members, including the Vice President who shall be the Chairperson. The committee shall be responsible for establishing educational programs including those offered at monthly membership meetings and workshops, subject to Board approval.

**Property Manager, Virginia Beach.** See previous article, this newsletter.

Please consider volunteering for one of these positions. We, as a guild, work as a team and having leaders fill in these position helps us distribute guild responsibilities so that one individual is not overly burdened with additional duties. If you have any questions on any of these, please contact Dave Robinson at 757.641.2464 or [bgsv.dave.robinson@gmail.com](mailto:bgsv.dave.robinson@gmail.com).

*"The strength of the team is each individual member. The strength of each member is the team."*

--Phil Jackson



As our Mentor Coordinator, Dennis Heidenthal, has been introducing new beekeepers to their assigned mentors. The mentor guide below, produced by Bill Gregory, is an excellent review of the mentor program.

### Mentor Guide

The Guild believes the mentoring experience should be pleasant and rewarding for both the mentor and the new beekeeper. We also believe that to be successful, the program should include certain elements intended to guide the new beekeeper through a first year or so of beekeeping.

Being a mentor doesn't mean knowing all there is about beekeeping. It's OK to admit not knowing the answer to a question, but be willing to research it. It's probably illuminating to the students to know that no matter how long one keeps bees, there is still more to learn and nobody knows it all.

As a mentor you're there for support and guidance. At the same time, realize that eventually the student will adopt practices that work for them, but which may differ from yours. It is not a judgment of the mentor's beekeeping when the student adopts a method that differs from the mentor; it shows they are growing in their confidence.

Most of all, try to make yourself available. You'll get calls about all manner of things that seem mysterious or frightening to the new beekeeper. Your calm and wise counsel is what

## *Guild Mentor Program*

they want.

As always, feedback to the mentor coordinator on how to improve the experience for both parties is always welcome.

Please include the activities below in your mentoring experience.

1. Keep a journal of instruction. Strongly encourage new beekeeper to keep a journal.
2. Discuss set up of bee yard and location.
3. Discuss set up of hive and stand, weed control.
4. Discuss necessary clothing, equipment, tools and supplies, including the risks associated with purchasing previously used equipment. It is incumbent on the new beekeeper that they have protective clothing. This means, in particular, long trousers, long sleeved shirt and a veil. Often, the mentor has extra veils/jackets the new beekeeper can use – check to be sure. Inexpensive mosquito veils are available in sporting good departments of many stores and, with a billed hat, will suffice until beekeeping protective clothing is purchased.
5. Discuss methods of obtaining and installing bees.
6. Encourage new beekeeper to observe/assist you working in your hive as much as possible. Three or four times during the active season seems a reasonable goal. (If mentoring multiple students, these could be held as field days in your bee yard.)
7. Discuss seasonal issues and maintenance.
8. Demonstrate lighting the smoker, proper use of equipment and how to handle bees.
9. Study frames with Student pointing out: queen, workers, drones, eggs, larvae, pupae, brood pattern, pollen and honey.
10. Discuss ventilation, swarming, robbing, feeding, pests and diseases. Encourage integrated pest management techniques.
11. Assist student in installing bees.
12. Visit the new keeper's bee yard with them. Have them demonstrate what they have learned during the mentoring process.
13. Encourage the new beekeeper to participate in Guild educational events such as festivals, plant sales and garden shows. Participation helps fulfill the Guild mission of education and helps the new beekeeper learn more about bees and beekeeping through involvement with other beekeepers and the public.

Should you wish to participate in the mentor program, either as a mentor or a student, please contact Dennis Heidenthal at 757-270-9477 or [Heidenthal@gmail.com](mailto:Heidenthal@gmail.com)



# March 2019

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11 	12	13	14	15	16
17	18	19 	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

## Dates to Remember

- March 1-3 - McDonald Garden Center's Outdoor Show
- March 7 - Board Meeting - Members welcome!
- March 10 - Daylight Savings Time begins
- March 11 - Guild Meeting
- March 17 - Happy St. Patrick's Day!
- March 19- Virginia Beach 4-H Beekeeping Club Meeting
- March 20 - 1st day of spring
- March 30 - Swarm Bucket Workshop
- April 6 - Artisan Festival and Native Plant Sale (formerly Gathering of the Guilds) at Francis Land House

## Gathering of the Guilds ~ April 6, 2019

The Beekeepers Guild has been invited to participate in the 26th annual Gathering of the Guilds newly renamed, "Artisan Festival and Native Plant Sale". The event will be held on Saturday, April 6, 2019 from 9 a.m. to 4 p.m. at the historic Francis Land House in Virginia Beach. Artisan Guilds from all over Hampton Roads will share information and demonstrate their specialties to the public.

The local chapters of the Virginia Native Plant Society & the Butterfly Society will hold their annual plant sales in conjunction with the Artisan Festival. Guild members volunteering in our booth may sell honey and hive products.

To volunteer, please sign up at:  
<https://www.signupgenius.com/go/30E0549AFA92AA1FE3-20193>

If we get enough volunteers, we can all do a little shopping for pollinator-friendly plants native to our area!

