

THE SECATEUR



Gardeners of Central Lake County
Where grown-ups get to play with the dirt

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Volume 56, Issue 139 March 2020

President’s Message: by Cindy Julian

Hello Gardeners,
 We all look forward to the start of spring, March 19th, and I am always reminded of a quote I like. “If we had no winter, the spring would not be so glorious”. I think we all look closely for the smallest signs of budding trees, birds returning, new growth of our perennials and the warmth of the sun. It is magical to watch the greening of our world again and hope our seeds sprout, our perennials emerge and our flowering trees and shrubs delight with a riot of color.

DIRECTORS: Cindy Julian, Chuck Austin, Jan van der Wagt, Donna Hughes, Corrie Glass, and Pat Scales
Past Presidents: Susan Plasz, Andy Plasz, Tony Kirch, Jerry Cleland, Andy Kimmel, Karen O’Hayre

Secateur Submission deadline: 25th of each month

Gardeners of Central Lake County’s Website:
<http://www.gardenersofcentrallakecounty.org/>

Monthly Board Meetings: 7 p.m.

The board meets the first Wednesday of the month at 359 Merrill Court, Libertyville (just west of Milwaukee Ave, just south of Winchester Road.)

The **club meetings** are held on the second Monday of the month at **7:00 p.m.** in the CrossLife Evangelical Free Church on the SE corner of Garfield Ave and Austin Ave. in Libertyville.

Seeds and starting plants from seeds is a gardening passion of mine, and I hope to have been an inspiration to give it a try; whether winter sowing or starting seeds



indoors. This year I have winter sown mostly perennials, including various coneflowers, perennial geraniums, hollyhock, Jupiter's beard, foxglove, and lavender. I continue to be amazed with my winter sowing results. Starting seeds outside in jugs is minimal work and it so such fun to watch the seeds sprout. Our website has some good links to check out. I have also started tomato,

herb and pepper seeds and a few annuals, like geraniums, indoors.

One key for success for me is to use a plant heating mat under seed starting containers, my favorite ones are clear plastic salad bar containers with lids. Once the seedlings emerge, I take off the lids and place them 2” or so under ordinary shop lights. By keeping the seedlings close to the lights, the plants are sturdy and stockier. Be sure to label! It’s a wonderful winter hobby and one with great rewards!



Our club participated in a terrific event, The Round Lake Area Garden Club's Annual Seed Expo on Feb. 1. Thousands of free seeds packets were offered and the expo was really well attended. Karen O'Hayer, Chuck and Laurie Austin, Trudy Valente and I were busy sharing our club's seed packets, gardening info and club publicity at our club's table. Left over seeds and many more are available for free at the Round Lake Library seed library. Check it out before you buy garden seeds!

The 10th Annual Green Living Fair will be held Sat. March 14 at the Libertyville Civic Center. Please plan to attend and also participate by sitting at our club's table. The day is a fun way to meet people and talk about mutual gardening interests and our club! Jan Kirch is our club liaison and you will find detailed info here in the Secateur.



How can we continue to encourage more people to attend our meetings, join our club and come to our plant sale? I serve as the club's publicity chair and always am looking for additional resources to publicize meetings and events. Please share your ideas with me!

Time to think about our club's Plant Sale which will be held on Saturday May 9. The sale is our club's main fundraiser and we depend on our members to contribute plants and work at the event. Dividing perennials is good for your garden, and there is still plenty of time to start plants from seed. Be on the lookout for any plant rescues and let me know and we will send a team to the rescue! Recent opportunities have included unwanted plants from new landscaping projects, neighbor's thinning out perennials, and gardeners who have plants to donate and need assistance.

I am really looking forward to our March 9 program, "How do Homeowners Help our Honey Bees?"



presented by Justin and Jerry Cleland. This will be a fun night to learn how honey bees make honey, life in their hives and how we as gardeners encourage bees in our own gardens. In my yard, I have planted a variety of flowers to attract pollinators with different blooming seasons to make the bees happy! Sunny days ahead!

This Month's Club Activity:

March 9 – How do Homeowners Help our Honey Bees? – Justin and Jerry Cleland

This presentation will describe how honey bees create honey, what goes on inside of their hives, and what home owners can do to help this process. Some of the major pressures on local bees will be described and potential solutions will be offered.

Future Programs for 2020

April 13 – Insects of Lake County

Ryerson Woods/LCFP

Insects of Lake County: Learn about the insects found in your backyard, their life cycles, and the difference between the beneficial and harmful insects. We will cover some organic means of controlling the harmful insects.

May 9 – Annual Plant Sale

May 11 – It's Not a Bug, It's Abiotic

by Sharon Yiesley, Horticultural Services

Abiotic?? What does that mean? This word refers to problems that are NOT caused by a living pest (insect or disease). Abiotic problems have non-living causes like weather, poor planting techniques, soil problems, etc. We often focus on problems caused by pests, but these abiotic problems are often more common and widespread. Learn what they are so you can recognize what is going on in your garden.

June 8 – Mini Plant Show

July 17 Annual Picnic 5pm

August- No Meeting

Sept 14 (Veggie Tasting)

The New Fall Cleanup by Kim Ellson

As devoted gardeners, we have traditionally always prepared our gardens for winter by diligently cutting down and removing all dead growth. So what has changed? We now know so much more than we did in the past, and in particular how our management of our garden can have dramatic impacts on wildlife. Did you know that some of your favorite butterflies need that dead growth to overwinter and survive another season? Learn why more and more people are now embracing a new approach to fall cleanups and how you too can make a positive change.

Oct 12- Permaculture Gardening- by Alicia Dodd

Alicia is the creator and manager of the Fremont Township Community Garden and will be sharing a Permaculture approach to managing our environment that conserves resources, encourages biodiversity, and brings our surroundings to life! Join us as she shares lessons learned with integrated pest management, weed control, and plant selection for successful chemical-free gardening. She's happy to address questions on organic gardening, native plants, drip irrigation, building with natural materials, green roofs, fermenting, erosion control, rain gardens, and building community.

Nov 9 Pie Social & Seed-Swap

Dec 6 - Annual Meeting and Holiday Party

Green Living Fair 2020

- Jan Kirch

As you know, our club will be exhibiting at the 10th Annual Green Living Fair

When: Saturday, March 14th from 10 A.M. to 2 P.M.

Place: Libertyville Civic Center, 135 W. Church St. Admission is FREE! The event is sponsored by the Libertyville Civic Center Foundation and Lake County Green Congregations.

This year's theme is The Food Cycle; from earth to harvesting, packaging, consumption, food waste, composting and returned to earth.

Attendees will have the opportunity to interact with many new exhibits this year featuring local environmental groups, farms, businesses. Continuous

30 minute Speaker Forums will address today's environmental challenges related to food. New this year attendees will have an opportunity to discuss sustainability with local leaders. No Goods or Services will be sold directly at the fair.

Recycling opportunities include bikes, bike parts, Styrofoam, Christmas lights, T-shirts, gym shoes, wine corks, and tooth-paste tubes.

*Join our planning committee meeting at 6:30 before our regular monthly meeting on March 9th to review our exhibit plans.

Consider volunteering for 1 hour. It's a great way to connect with people and promote our club.

We need 2 people at the table all day. We need volunteers from 9-10am for setup and every hour thereafter plus clean-up from 2-3pm. I will bring the sign-up sheet on March 9th. Questions?

Email Jan Kirch at ideasjan1217@comcast.net or call at 224-541-4374.



Gardenfest

- Cindy Julian

When: Saturday, April 4 at

Place: McHenry County College

Time: 7:30 a.m. - 4:00 p.m.

Registration opens on Monday, February 10

For more information go to

<https://bit.ly/2RzqdHJ>

2020 The Worm Still Turns

Worm Casting will be Available

- Andy Plasz

The Gateway Rose Society of Southeastern Wisconsin being innovators in growing and trying out new interesting products is again making available a wonderful product for our gardens this spring. I am a member of Gateway and will have the ability to purchase for members of the Gardeners of Central Lake County, a natural fertilizer and soil amendment -Worm Castings – to make every garden even better.

Now here is the really good news –

The worm castings will be available in 25 pound bags for still only \$20 each.

Now here is the deal, at the March meeting, I will take orders for this wonderful stuff, however, I will have to have your check or cash before April 1, 2020. The Gateway Rose Society has to pay cash upfront for the castings. I will take cash or a check after the meeting prior to April 1st. I will get the castings to you as soon as possible after our GCLC meeting on the 13th of April. They should be available to the gardeners the weekend of April 11-12 or before. I will e-mail the lucky gardeners of the products arrival and you will have to pick it up at the Plasz garden or at the April 13 meeting. I DO NOT DELIVER!!!

I will have the fact sheet and signup sheet at the March meeting. In addition I will have directions available for those of you who want to plan ahead how to parcel out and use this wonderful treasure from Mother Nature! You may signup then or before.

Think Worms!!! Use Worms!! Enjoy the Amazing Results!

2021 Photo Contest Theme

-Jerry Cleland

For the upcoming year 2021, the photo contest theme is **Hot /Cold**, which can be interpreted in any number of



ways by our photographers. It might refer to weather, to spiciness, to color choices, or to other possible meanings. While our entrants have said they enjoy the challenge of creating photos

following the theme, it is not required so if you have other great photos make sure you enter them.

For the January 2021 contest, each member may enter up to 5 photos. As in the past, the photos will be printed and displayed in a 4 x 6 inch format. More complete instructions will be distributed later this year during our monthly meetings and in the Secateur.

2020 Monthly Plant Competition

If you have something that looks good to you, why don't you bring it to the monthly meeting and enter it in the competition. You never know it may be the best flower of the show. It is worth giving a try.

February 2020 Monthly Competition

Name	Entry	Points
Best of the Show Jerry Cleland	Cymbidium Orchid	10
First Place		
Karen O'Hayer	Bromeliad	5
Janice Paulson	Yellow Orchid	5
John Adams	Dendrobium Orchid Noble Type	5
John Adams	Dendrobium Orchid Phal Type	5
John Adams	Coelglyne Orchid	5
Cathy Nardo	Lavender	5
Second Place		
Janice Paulson	Madagascar Palm	3

2020 Year to Date Results

Name	Points
John Adams	20
Jerry Cleland	15
Karen O'Hayer	10
Susan Plasz	10
Janice Paulson	8
Cathy Nardo	5

Garden Learning Series

University of Illinois Extension Master Gardeners

Monthly for seasonal workshops conducted by Extension Master Gardeners.

March 11, 2020 - Successful Vegetable Gardening

Register:

<https://web.extension.illinois.edu/registration/?RegistrationID=21923>

Also coming this spring:

April 8, 2020, 6:00 pm – 7:30 pm - Native Trees for the Home Landscape

May 6, 2020, 6:00 pm – 7:30 pm - Best New Plants for 2020

Location: Lake County U of I Extension Office – 100 S. US Hwy 45, Grayslake, IL 60030

Fee: \$8.00 per person



Successful Vegetable Gardening

March 11, 2020
6:00 pm - 7:30 pm

Can you imagine tasting your own vegetables picked fresh from your garden? Build your success with research-based methods that promote healthy, productive plants.

To get the most out of your garden, Andy Brugger, University of Illinois Extension Master Gardener, will give you steps to plan your garden as well as steps for success during the gardening season. He will include tips on garden location, layout and preparation, recommended vegetable varieties, proper planting, pest control, proper watering, and harvesting tips.

Cost: \$8.00 per person

To Register: <https://web.extension.illinois.edu/registration/?RegistrationID=21923>

Lake County Extension Office
100 South US Highway 45
Grayslake, IL 60030
847-223-8627




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The Honey Bees

-Laura Wilson

The club has been following the topic of endangered pollinators. The recent article from *Science* "A Microbiome silver bullet for honey bees" offers hope. See article below

Schedule of Audubon Society Field Trips

An exciting series of field trips has been planned for 2020, with several new programs offered, including hands-on experiences in photography and biological sampling. See the schedule below.

Peg Ransom Obituary

Peg Ransom passed away December 6 after a short battle with lung cancer. Peg was born in Davenport, Iowa and graduated from Davenport High School and Augustana College in 1957. She taught English and speech at Beloit High School, then Lake Forest High School and finally Warren Township High School. She retired from teaching in 1965 and started her business career in 1972 at Sara Lee Bakery retiring in 1989 as Manager of Public Affairs and Public Relations. She was affiliated with Public Relations Society of America, Grocery Manufacturers of America, American Association of University Women and the Gardeners of Central Lake County. Her professional honors include being named to Outstanding Young Women of America, Who's Who of American Women Millennium Edition, Who's Who in America and Who's Who in the World Millennium Edition. She is survived by her husband of 59 years David Duane Ransom, son David Burke Ransom, grandson Dylan Ransom, brother Richard and various nieces and nephews
Services were held December 12, 2019



February Meeting Photos



Plant Competition



Seed Swap



Photos from the Contest



Lake County Green Congregations and
Libertyville Civic Center present the

10th Annual Green Living Fair

MARCH 14TH

10 AM TO 2 PM

135 W CHURCH ST. LIBERTYVILLE, IL
60048

24 Exhibitors
NEW EXHIBITORS!

Recycling Opportunities

Bikes and Bike Parts

Styrofoam

Wine Corks

XMas Lights

T-shirts

Tennis shoes

and more to be announced!

Find the Green Living Fair on Facebook! 

Speaker Forum

Tea Room (Meet a Local Leader)

Mary Edly-Allen

John Wasik

Jennifer Clark

and more to be announced!

Room A (Food Topics)

Jen Miller, Wind Farms

SWALCO

and more to be announced!

INSIGHTS

PERSPECTIVES



MICROBIAL ENGINEERING

A microbiome silver bullet for honey bees

A genetically engineered honey bee gut bacterium knocks down two major bee threats

By Robert J. Paxton

The western honey bee (*Apis mellifera*) brings tangible benefits to humans as an important pollinator and insights into social evolution as a model organism. Yet, despite close scientific scrutiny, it is under global threat from a range of

stressors (1) that are unlikely to diminish with global change. Chief among these are pests and pathogens, remedies to which are either ineffective, short-term, expensive, or impractical. On page 573 of this issue, Leonard *et al.* (2) reveal a hidden microbiological key to fight these pests and pathogens: genetically modified honey bee gut bacteria tailored to

induce host RNA interference (RNAi)-based defense (3) that is effective, long-term, potentially cheap, and easy to apply. This important approach may not only provide a solution to many of the honey bee's woes, it also offers a new functional genomic toolkit with which to dissect the molecular intricacies of honey bees and their societies.

PHOTO: CYRIL RUJOSO/MINDEN PICTURES

Pests and pathogens threaten a major pollinator, the honey bee (*Apis mellifera*).

Originally brought to the Americas by early European settlers, the honey bee is now globally distributed and indispensable in agriculture. Yet its success—and intercontinental transport—has been accompanied by the spread of its numerous pests and pathogens, foremost among which are the exotic *Varroa destructor* (hereafter “varroa”) ectoparasitic mite and deformed wing virus (DWV), a killer pathogen transmitted by varroa mites (4). The varroa-DWV nexus is widely blamed for increased honey bee mortality across the temperate world and both mite and virus are nowadays ubiquitous, infecting more or less every hive (5); colony collapse is the outcome. Current treatments include a range of natural and synthetic miticides to kill varroa or high-tech solutions that induce a natural innate host defense mechanism,

within hosts. This approach seems to offer bees sustainable protection from varroa or DWV. Could this be a silver bullet for the honey bee?

RNAi is a biological process found in most eukaryotes that regulates endogenous as well as exogenous (foreign) RNA, such as that of viruses. Introducing exogenous double-stranded RNA (dsRNA) into a host cell causes that cell’s molecular machinery to degrade like-sequenced RNA. This can reduce the expression of a corresponding host gene (so-called gene “knockdown”) or lead to the destruction of a viral RNA, resulting in viral control (3). But there is a catch—dsRNA is expensive to produce in large quantities, inherently unstable, and difficult to direct into host cells, where it is needed.

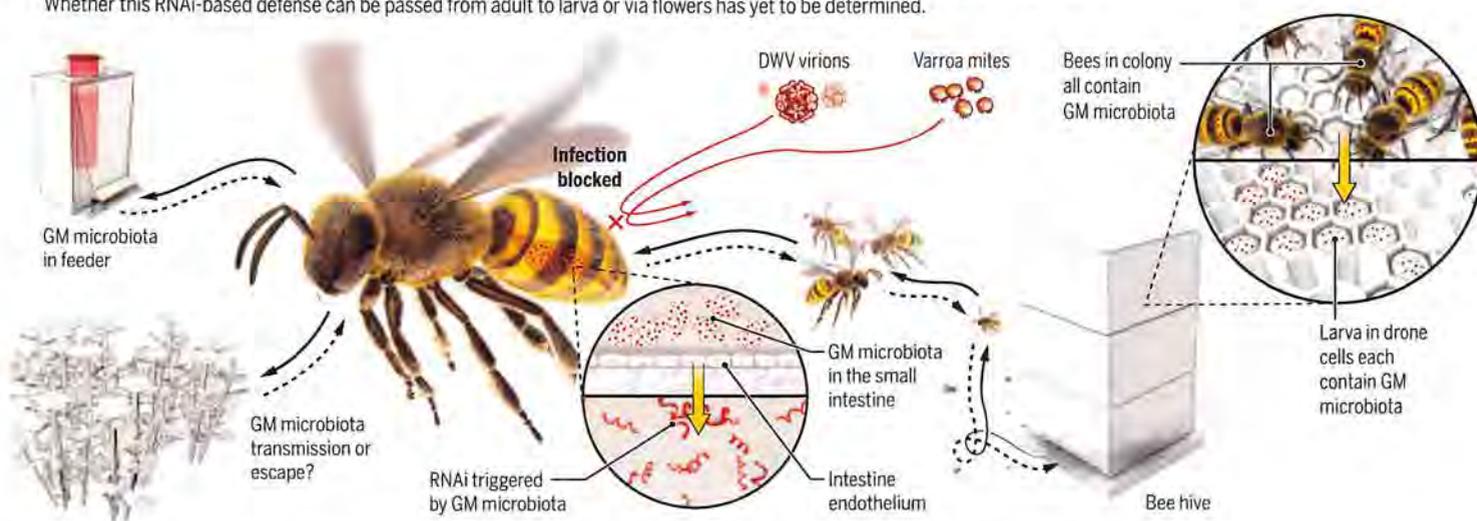
Whitten *et al.* (8) demonstrated that an insect’s gut bacteria—its microbiome—can be engineered to express copious dsRNA in a stable manner that acts systemically in

Leonard *et al.*’s laboratory-based experiments used handfuls of worker honey bees. The next step is to scale up with full-sized colonies, which contain up to 50,000 individuals, to demonstrate field-realistic feasibility. Furthermore, during spring and summer, varroa mites exert their most serious effects when feeding on honey bee pupae, upon which they also reproduce and to which they efficiently transmit DWV. If the honey bee larval microbiome reflects that of the adult, then a mechanism of delivery of RNAi from adult to larva exists, though whether RNAi-based varroa-virus defense can be passed on from larva to ensuing pupa awaits confirmation.

Leonard *et al.* also wisely advocate for further research to improve dsRNA production and transfer from gut bacteria to honey bee and to optimize the design of the genetically engineered target RNA sequence. Target sequence is of particular relevance for RNA viruses, such as DWV, because of

Improving honey bee survival

Symbiotic bee gut bacteria were genetically modified (GM) to release specific RNA that triggers an immune response in the host involving RNA interference (RNAi). Once RNAi was activated, honey bees survived infection by a particular virus or parasitic mite. Whether this RNAi-based defense can be passed from adult to larva or via flowers has yet to be determined.



RNAi, to reduce pathogen (including viral) burden (6). But the former has limited efficacy because mites soon evolve resistance; moreover, miticides can enter the human food chain through contamination of honey. The latter, by contrast, has proven effective in controlling DWV (7) but is expensive and the benefits are temporary—on the order of days or weeks. Now, Leonard *et al.* have genetically modified one honey bee gut bacterium, *Snodgrassella alvi*, thereby refining a system to induce RNAi

insect hosts. Leonard *et al.* have perfected this approach by engineering *S. alvi* to express varroa or viral genes and feeding the engineered bacteria to honey bees. When the corresponding varroa or viral dsRNA was produced by the ingested bacteria (and then taken up by the host—in the case of varroa, even passed on to mites feeding on honey bee tissue), the host’s RNAi machinery was activated to destroy those RNA sequences—self-destruction in the case of varroa. Thus, when treated honey bees were subsequently challenged with varroa or DWV, mites died and viral replication was suppressed: a major breakthrough in their control (see the figure).

their extremely high mutation rates (9). DWV itself comes in two widely distributed genotypes, A and B, the latter of which exhibits higher virulence (10) and is currently spreading across honey bee populations in the United States (11). Methods to optimize sequences that more efficiently target viral RNA [e.g., (12)] and that of other pathogens are likely to improve protection offered by Leonard *et al.*’s approach.

However, the major ethical issue of gene escape needs to be addressed before engineered bacteria are applied to honey bees in the field. The honey bee gut harbors a species-specific and astoundingly consistent core set of bacteria, its microbiome

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(13), which Leonard *et al.* demonstrated to be shared among nestmates while grooming and cleaning. This theoretically facilitates the treatment of an entire colony's workforce (and potentially those of neighboring hives) while limiting the probability that genetically modified microbiota colonize other animals. But bacteria are renowned for horizontal gene transfer. From an ecological perspective, the consequences of gene escape need to be scrutinized and the potential for release robustly evaluated. From an evolutionary perspective, high mutation rates confer considerable adaptive potential on RNA viruses, and the consequences of RNAi treatment for the evolution of virulence also warrant attention.

Although sociality—like that exhibited by honey bees—is a very successful ecological strategy, many social insects are invasive pests, such as fire ants (*Solenopsis invicta*) and Formosan termites (*Coptotermes formosanus*) in the southern United States. Could the silver bullet be turned onto these pest species by genetically modifying their core microbiota for effective, species-specific biocidal control? Research is still needed to determine whether their gut microbiota are highly conserved yet differ from those of native ants and termites.

Other major problems facing honey bees include insecticide (mis)use and loss of flower-rich habitat (1, 6). Honey bee gut bacteria engineered to alter host expression of genes involved in detoxification or pollen digestion might go some way to resolving these problems, too. As well as promising insights into fundamental aspects of biology, Leonard *et al.*'s approach has great potential to improve bee—and even our own—health (14). ■

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MATERIALS SCIENCE

Nested hybrid nanotubes

Material made with atom-thin tubular crystals portends the creation of inventive nanodevices

By Yury Gogotsi¹ and Boris I. Yakobson²

From the Stone Age to the Silicon Age, humans have crafted tools by carving them out of large pieces of material, such as bones or silicon crystals. In the nanotechnology era, scientists began creating—atomic layer by atomic layer—materials, building blocks, structures, or even entire devices that do not exist in nature but offer new combinations of properties. On page 537 of this issue, Xiang *et al.* (1) report on the synthesis of one-dimensional (1D) van der Waals heterostructures that stack in ways reminiscent of traditional Russian dolls.

Atoms-small zero-dimensional (0D), atom-thin 1D, and two-dimensional (2D) materials were first made from carbon (fullerenes, nanotubes, graphene) and later from other elements and compounds. With the current availability of numerous 2D materials, it is possible to combine them into heterostructures by mechanical transfer, self-assembly in solution, or vapor-phase growth. Mixing and matching 2D crystals with different properties produces van der Waals-bonded stacks with new functionalities (2). Unlike 2D layers, 0D cages and 1D tubules are topologically protected from being stack-nested and, until recently, were difficult to grow.

Xiang *et al.* created 1D heterostructures by depositing perfect boron nitride (BN) or molybdenum disulfide (MoS₂) shells onto single-walled carbon nanotubes. Unlike the results of early attempts to produce 1D heterostructures (3), the outer shells of BN and MoS₂ are single-crystalline seamless perfect cylinders. Moreover, the authors showed that a couple of layers of BN and then a layer of MoS₂ can be grown on a carbon tube, creating stacked tubular structures (see the figure).

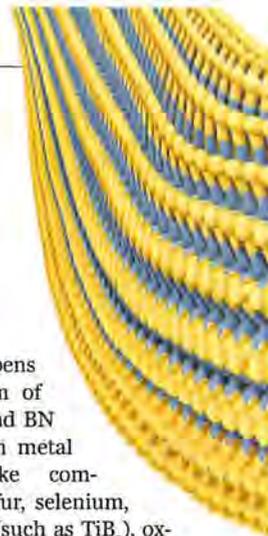
Scientists have envisioned 1D heterostructures in theory, but until now, synthetic attempts have produced only disordered shells on multiwall nanotubes (3). The chemical vapor deposition (CVD)-based growth method demonstrated by Xiang *et al.* extends the concept of van der Waals heterostructures to 1D

coaxial materials. This opens up an entirely new realm of 1D heterostructures. Beyond BN and MoS₂, other transition metal dichalcogenides (MoS₂-like compounds of metal with sulfur, selenium, or tellurium) and borides (such as TiB₂), oxides, and potentially carbides and nitrides (4) can be grown by CVD on carbon nanotube cores. Carbon nitride, silicene, borophene (5), and other materials made as 2D layers might be added as well, including predicted nanotubes that have not yet been produced [e.g., MXenes (6)]. Although Xiang *et al.* used single-walled nanotubes as a template, their available double- and triple-wall analogs offer a larger diameter (*d*) and lower curvature (*1/d*), which ease overgrowth by heterolayers. Also, the core tubes of noncarbon compositions [e.g., BN or dichalcogenides (7)] can be tried for coaxial growth. The combination of insulator BN with carbon tubes (which, depending on their chirality, can be either semiconducting or metallic) might result in new electronic functionalities, leading to versatile nanodevices and even nanoscale machines.

The newly described synthesis of 1D heterostructures has several implications for future research. The surface-to-surface templating, rather than atom-to-atom epitaxy, supports 1D tubular crystal growth; this might also be true for syntheses of many 2D materials wherein the interactions between crystalline layers are too weak to support the growth of new crystalline layers well-aligned with the substrate (epitaxy). Recently, it was shown that strong lateral interactions at the layers' edges alone are sufficient to guide planar BN growth on metals (8) without registry to the substrate; this growth shares similarities with that observed by Xiang *et al.* in which the outer shell can grow in a crystal direction that is different from that of the core nanotube. Moreover, no catalyst was present at the growing edge during nanotube shell growth in the study of Xiang *et al.* Again, this approach is transferable to planar 2D heterostructures. A further notable aspect of the new study is the role of curvature, which adds strain energy ($\sim h^2/d^2$) to the chemical potential of added atoms; this suppresses growth, on nanometer-thin core tubes, of both very narrow tubes and more rigid shells of greater thickness (*h*), as seen with MoS₂.

Not merely a fascinating concept, nested

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2020 Field Trip Schedule

An exciting series of field trips has been planned for 2020, with several new programs offered, including hands-on experiences in photography and biological sampling. Details and online registration information are available at illinoisaudubon.org.

Feb. 18-25	South Florida in Winter
March 28	Prairie Chicken Viewing – Camera-Friendly Saturday
March 29	Prairie Chicken Viewing – Shutter-Free Sunday
April 4	Prairie Chicken Viewing – Camera-Friendly Saturday
April 5	Prairie Chicken Viewing - Shutter-Free Sunday
April 16-21	Texas: Upper Coast Spring Migration
April 25	Walking in the Footsteps of Ridgway
April 25	Dixon Waterfowl Refuge at Hennepin-Hopper Lakes, Putnam County
May 11-13	Magee Marsh (Ohio) with Denis Kania
May 12-14	Birding Between the Rivers Adventure
May 13	Spring Migration: Chicago Lakefront Focus
May 16	Birds in the Viewfinder Field Trip: A Photo Field Trip to Kane County
May 20	Spring Migration: Chicago Lakefront Focus
May 26-28	Birding Between the Rivers (Relaxed Pace)
June 6	Hackmatack Birding Hike
June 12	Birding Midewin National Tallgrass Prairie with Jim Herkert
July 18	Photography Session at Illinois Raptor Center
July 22-24	Greater Kankakee Sands Ecosystem Exploration
July 25-Aug. 3	Southeast Arizona's Second Spring
Aug, 1	Livers of the Rivers: A Musseling Adventure
Aug. 1	Western Illinois Prairies and Pollinators
Sept. 9	Fall Migration: Chicago Lakefront Focus
Sept. 11-13	Birding the Illinois River Valley
Sept. 16	Fall Migration: Chicago Lakefront Focus
Dec. 5	After Dark Owling at Amboy Marsh Nature Preserve

■ Winter ■ Spring ■ Summer ■ Fall

Gardeners of Central Lake County

ANNUAL PLANT SALE



Saturday, May 9

8:30-11:00AM rain or shine

**CRAWFORD HOUSE
817 LAKE STREET
LIBERTYVILLE**

For more information...

Cindy 847.772.2186

juliancindy@hotmail.com

www.gardenersofcentrallakecounty.org

- . Annuals
- . Perennials
- . Natives
- . Herbs
- . Roses
- . Vegetables
- . Ground Covers

Cash or Check accepted

13 good reasons to check out the Gardeners of Central Lake County:

Informative Monthly Programs

Monthly Plant Competition

Flower and Garden Show

Care of Cook Park Rose Garden

Annual Photo Contest

Community Gardens

Friendly Members

Tasty Treats

Annual Plant Sale

Members' Open Gardens

Annual Dinner

Annual Picnic

Newsletter

For more information please see our web site at

gardenersofcentrallakecounty.org

Our Plant Sale, Saturday, May 9, 8:30 to 11 am, features perennials dug from members' gardens, native plants, vegetables and herbs.

Crawford Warming House at Butler Lake, on Lake Street in Libertyville. Come early for a good selection, but no shopping before 8:30 am. See our website **gardenersofcentrallakecounty.org**

Cook Park Rose Garden Maintenance (pruning and weeding) is ongoing during the summer. Call Andy Plaszc for work dates at 847-816-8007.

Libertyville Community Garden Plots Registration at Parks & Recreation Dept. Libertyville.com/libertyvillegardens
Open to All

2020

GARDENERS OF CENTRAL LAKE COUNTY
gardenersofcentrallakecounty.org

Monthly meetings include an informative program and a plant competition where members and visitors may display their plants, produce, or cut flowers.

Coffee and tasty treats are served.

The public is welcome at no charge.

For anyone wishing to join, membership is open to all: \$20 individual, \$30 family.

Members receive *The Secateur* (a monthly emailed newsletter).

2020 MEETINGS/PROGRAMS

January 13 – Photography by Jerry Cleland, and Club Photo Contest

February 10 – A Wild Bird Concern - Birds of Prey and Their Amazing Stories by Linda Breuer, Barnswallow

March 9 – How do Homeowners Help our Honey Bees? by Justin and Jerry Cleland

April 13 – Insects of Lake County by Lake County Forest Preserves

May 11 – It's Not A Bug, It's Abiotic by Sharon Yiesley, Horticultural Services

June 8 – Mini Flower and Vegetable Show

September 14 – The New Fall Cleanup by Kim Ellson, and Veggie Tasting

October 12 – Permaculture Gardening by Alicia Dodd

November 9 - Pie Social and Seed Exchange

We meet at the CrossLife Church at the corner of Garfield & Austin (431 W. Austin), Libertyville.

Programs are on the 2nd Monday of the month at 7 pm, **except** July, August and December 2020.

Visitors are welcome.

Mission Statement

The purpose of the club is to encourage and promote interest and knowledge of gardening, to promote a spirit of cooperation among gardeners and to promote civic pride in private and community gardens.

For information please contact Cindy Julian at 847-772-2186 or juliancindy@hotmail.com or see our website at gardenersofcentrallakecounty.org

ACTIVITIES

Green Living Fair - Libertyville Civic Center, Saturday, March 14, 10 am – 2 pm

Uncover Rose Garden - Cook Park, Libertyville, Saturdays, April 4 and 11. Begins at 8 am.

Plant Sale - Saturday, May 9, 8:30 - 11:00 am, Crawford Warming House on Butler Lake, 817 W. Lake St, in Libertyville.

Members' Picnic - Old School Forest Preserve Shelter 'D' on Friday, July 17. The social hour begins at 5 pm. Dinner is at 6 pm. Families invited.

Libertyville Garden Plots
Register at Libertyville.com/libertyvillegardens

Cover Rose Garden - Cook Park, Libertyville, Saturdays, October 31 and November 7. Begins at 8 am.

Members' Annual Dinner - Sunday, December 6. St. Lawrence Episcopal Church, Libertyville. Social at 4 pm. Dinner at 5 pm. Families invited.

Last Name	First Name	Street	City	State & Zip	email	Telephone	Cell Phone	Work Phone	Member Since	Type	Expires
Adams	John	362 Rye Rd	Mundelein	IL 60060	traderjohn64@comcast.net	847.727.4670			2012	family	12/31/2020
Austin	Charles	25229 Wayside Pl	Lake Villa	IL 60046	LCE41@comcast.net	847.587.6933			2002	family	12/31/2020
Austin	Lorraine	"			LCE41@comcast.net	"			2002	family	12/31/2020
Borodkin	Yung	14905 Imperial Dr	Libertyville	IL 60048	gardenyung@aol.com	847.680.1779			2009	regular	12/31/2020
Burnett	Bill	413 Second St	Libertyville	IL 60048	burnettwm@gmail.com	847.816.0806			unknown	honorary	12/31/2099
Carpenter	Joan	1116 Tamarack Ln	Libertyville	IL 60048	kcarpenter1116@sbcglobal.net	847.549.6861			2014	honorary	12/31/2099
Carpenter	Ken	"				"			2014	honorary	12/31/2099
Cleland	Jerry	122 Pleasant Av	Highwood	IL 60040	jwclel@comcast.net	847.748.8050			1988	life	12/31/2099
Deodhar	Subhash	1717 St. Andrews Dr	Vernon Hills	IL 60061	deodhar91@gmail.com	847.816.6439			2014	family	12/31/2020
Deodhar	Rekha	"			deodhar91@gmail.com				2014	family	12/31/2020
Doran	Arlene	1027 Lomond Dr	Mundelein	IL 60060	adoran2000@aol.com	847-417-9502			2007	regular	12/31/2020
Gee	Gunawardana	unknown			geetharaj1@aol.com	unknown			unknown	honorary	12/31/2099
Glass	Corrie-Lou	383 Banbury Rd	Mundelein	IL 60060	corrielou@icloud.com	847.566.4248			2017	regular	12/31/2020
Gressgott	Susan	1043 Lomond Dr	Mundelein	IL 60060	suzievg@yahoo.com	913.314.8382			2016	regular	12/31/2020
Hoover	Debra	285 Linden Dr	Round Lake Park	IL 60073	dhoover@symphonysystems.com	847.864.1787			2014	family	12/31/2020
Hoover	Grant	"			ghoover@symphonysystems.com	847.864.1887			2014	family	12/31/2020
Hudak	Patti	15311 W. Wildwood Ct.	Libertyville	IL 60048	hudathudak@sbcglobal.net	847.816.7852			2008	regular	12/31/2020
Hughes	Donna	207 Woodland Rd	Libertyville	IL 60048	dhugs50@yahoo.com	847.367.6791			2016	family	12/31/2020
Hughes	Art	207 Woodland Rd	Libertyville	IL 60048					2020	family	12/31/2020
Janssen	Barb	unknown			sbjanssen96@gmail.com	unknown			unknown	honorary	12/31/2099
Julian	Cyntha R.	629 Dawes St	Libertyville	IL 60048	juliancindy@hotmail.com	847.772-2186 (cell)			1997	regular	12/31/2020
Kimmel	Andrew	1120 Garfield Av	Libertyville	IL 60048	kimmelas@att.net	847.247.4836			1991	family	12/31/2020
Kirch	Jan	161 Fieldcrest Ct	Grayslake	IL 60030	ideasjan1217@comcast.net	847-502-0731			2001	family	12/31/2020
Kirch	Tony	"			tkirch40@comcast.net	224.541.4374			1999	family	12/31/2020
Kosmatka	Glory	324 Mitchell Dr	Grayslake	IL 60030	gloryadena@aol.com	773.771.5824			2017	regular	12/31/2020
Kosmatka	Steve	324 Mitchell Dr	Grayslake	IL 60030	shkoz@aol.com	847-456-8603			2017	regular	12/31/2020
Meehan	Pat	519 Lange Ct	Libertyville	IL 60048	meehan2727@yahoo.com	717.339.7707			2006	regular	12/31/2020
Merchant	Barbara	183 Hollow Way	Ingleside	IL 60041	btmerchant@yahoo.com	847.877.8658			2018	regular	12/31/2020
Nardo	Cathy	3000 Garlands Ln, Unit 3104	Barrington		c.olsen.nardo@gmail.com	847.727.6440			2000	life	12/31/2099
Neumann	Suzanne	1120 Garfield Av	Libertyville	IL 60048		847.247.4836			1994	family	12/31/2020
O'Brien	Sarah	28466 N. Shagbark	Libertyville	IL 60048	obrien7043@comcast.net	847.362.7043			2014	regular	12/31/2020
O'Connell	Delores	1125 Lomond Dr	Mundelein	IL 60060	delores21@comcast.net	847.566.4223			2003	regular	12/31/2020
O'Hayer	Karen W.	514 Meadow Lane	Libertyville	IL 60048	kohayer@sbcglobal.net	847.362.5492			2010	regular	12/31/2020
Paulson	Janice	508 E. Rockland Rd	Libertyville	IL 60048	janicepaulson560@gmail.com	847.680.7118			2008	regular	12/31/2020
Plasz	Andrew C.	1117 Garfield Av	Libertyville	IL 60048	zsalp@sbcglobal.net	847.816.8007			1977	family	12/31/2020
Plasz	Susan	"			smplasz@gmail.com	"			1993	family	12/31/2020
Popiolek	Joe	1425 Victory Dr	Libertyville	IL 60048	judyipop@sbcglobal.net	847.514.0052			2016	family	12/31/2020
Popiolek	Judy	"				"			2016	family	12/31/2020
Ransom	David	1037 Mayfair Dr	Libertyville	IL 60048	ddr1219@comcast.net	847.362.1498			2002	honorary	12/31/2099
Raymond	Carolyn	6142 Brookstone Pl	Gurnee	IL 60031	carolyn.raymond@att.net	847.680.8699			2012	regular	12/31/2020
Scales	Mark	1780 Sunnyview Rd	Libertyville	IL 60048	spstr2002@msn.com	847.680.7782			2009	family	12/31/2020
Scales	Pat	"			pbscales@msn.com				2014	family	12/31/2020
Schockmel	Janet	335 Banbury Rd	Mundelein	IL 60060	jmschockmel@gmail.com	847.949.1736			2020	family	12/31/2020
Schockmel	John	335 Banbury Rd	Mundelein	IL 60060	jmschockmel@gmail.com	847.949.1736			2020	family	12/31/2020
Schulman	Alan	3 Foxtail Ct	Riverwoods	IL 60015	alan@glenronics.com	847.541.4877			unknown	honorary	12/31/2099
Smith	Janice	716 Paddock Lane	Libertyville	IL 60048	smithlester@msn.com	847.362.7221			2004	regular	12/31/2020
Stuecheli	Susan	145 Blueberry Rd	Libertyville	IL 60048	smstuech@comcast.net	847.362.8927			2008	honorary	12/31/2099
Thompson	Barbara	461 Beckett Crossing	Mundelein	IL 60060	bjt2100@aol.com	847.566.2638			2008	regular	12/31/2020

Tiernan	Natalie	758 Kenwood Av	Libertyville	IL 60048	nft1932@gmail.com	847.680.1856	2008	regular	12/31/2020
Valente	Trudy	668 Valley Park Dr	Libertyville	IL 60048	truforever28@aol.com	847.366.7516	2017	regular	12/31/2020
Van der Wagt	Johannes	1430 Victory Dr	Libertyville	IL 60048	janattheweb@msn.com	847.421.1730	2012	family	12/31/2020
Van der Wagt	Val Munchez	"			vmunch@aol.com	847.651.0253	2012	family	12/31/2020
Washburn	Sandy	21159 W Sylvan Drive	Mundelein	IL 60060	sandrawashburn@comcast.net	847.949.1054	2018	family	12/31/2020
Washburn	Dan	21159 W Sylvan Drive	Mundelein	IL 60060	sandrawashburn@comcast.net	847.949.1054	2020	family	12/31/2020
Wilson	Jean	721 Cliente Ct.	Libertyville	IL 60048	norlandjean@yahoo.com	847.549.9717	unknown	honorary	12/31/2099
Worley	Sue	661 Fair Links Way	Gurnee	IL 60031	sueworley5@gmail.com	847.370.4251	2011	regular	12/31/2020
Wilson	Steve				stwilson46@gmail.com		unknown	family	12/31/2020
Wilson	Laura				lswilson49@aol.com			family	12/31/2020
Zimmermann	Paul	1382 Borde Ct	Libertyville	IL 60048	PCZ223@comcast.net	630-325-5460	2019	regular	12/31/2020