



THE NATIONAL *gardener*

SPRING 2020

BUCKWHEAT
AND BUTTERFLIES
-
UNDERGROUND
MOVEMENT
-
LANDSCAPING
WITH GOATS

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The National Gardener

Spring 2020 | Vol. 91, No. 2

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THE COVER

A wild rose, *Rosa acicularis*, provides a rich source of pollen for a foraging bee at Acadia National Park in Maine.

Acadia National Park, established in 1916, protects the habitats and natural beauty of the highest rocky headlands along the Atlantic coastline of the United States. Photo by Ed Downs Photography.

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Gay L. Austin
2019-2021 NGC President

President's Message

Seasonal changes vary throughout our world, but nonetheless, we, as gardeners, appreciate the time needed for our natural landscapes to rest during dormancy in order to prepare for each season of change. Some of our state garden club members are already enjoying a beautiful spring, while others are still experiencing the harsh, cold and snowy days of winter.

Change is a simple word with a multitude of definitions, each important in all aspects of our world. Change is useful in the development of ideas that lay the foundation for improvement. For members of NGC, change provides the platform to learn new skills, explore new opportunities and exercise our creative efforts to benefit our future.

As we continue to evolve in our changing world and are doing our best to "keep up," with our projects and

responsibilities, let us not forget to remember and appreciate the wisdom of our former NGC leaders. Their contributions have created a strong foundation for our organization's continued strength and growth.

Spring also ushers in the observance of National Garden Week, during the week of June 7-13, 2020. To assist garden clubs nationwide in their efforts to celebrate this week, NGC offers materials

to help clubs publicize their work in their communities. Please visit the NGC website at gardenclub.org to download two formats of National Garden Week posters – one poster is available in a PDF fillable form, which may be personalized with the name of your garden club. These posters may be printed in any size to accommodate your venue.

Enjoy the many articles featured in "The National Gardener," as this

Celebrate National Garden Week in your community



Please visit the NGC website to download the National Garden Week poster. The poster is available in two versions, including a fillable PDF file, so that you can customize it with the name of your local garden club.

[gardenclub.org/
projects/national-
garden-week](http://gardenclub.org/projects/national-garden-week)

venerable flagship publication of NGC was created to spotlight the many outstanding projects accomplished by NGC clubs in their communities. The commitment and concerted efforts by NGC members nationwide provide inspiration and underscore their dedication to our organization. Join with others to welcome spring and participate in the many activities that strengthen our

organization through our dedication to all things gardening.

As always, I am honored to serve as NGC president and look forward to representing our organization as the travels in 2020 begin. ■

Gay L. Austin

National Garden Week

JUNE 7 - 13, 2020

Calling all green thumbs! Join NGC clubs across the nation and share your love of gardening with your community by celebrating National Garden Week.

National Garden Week was founded by National Garden Clubs Inc. as an opportunity to encourage community pride and promote the NGC objectives of beautification, education of environmental efforts and gardening. It also provides the opportunity to reach out to potential new members and collaborate with other area groups.

Some ideas to consider:

- Plan an educational program and/or workshop at your local library, public garden or garden center.
- Sponsor a hands-on workshop at your local nursery on how to select flowers and shrubs.

- Plan a garden tour. This is a great opportunity to share your knowledge of growing while sharing ideas.
- Beautify a manageable blighted area or enhance an existing garden. Reach out to local groups to assist you in your efforts.
- Plan an activity with a youth group or at a local school.
- Do a planting at a public facility.

Download the NGC National Garden Week poster for use in publicizing your National Garden Week project!

gardenclub.org/projects/national-garden-week

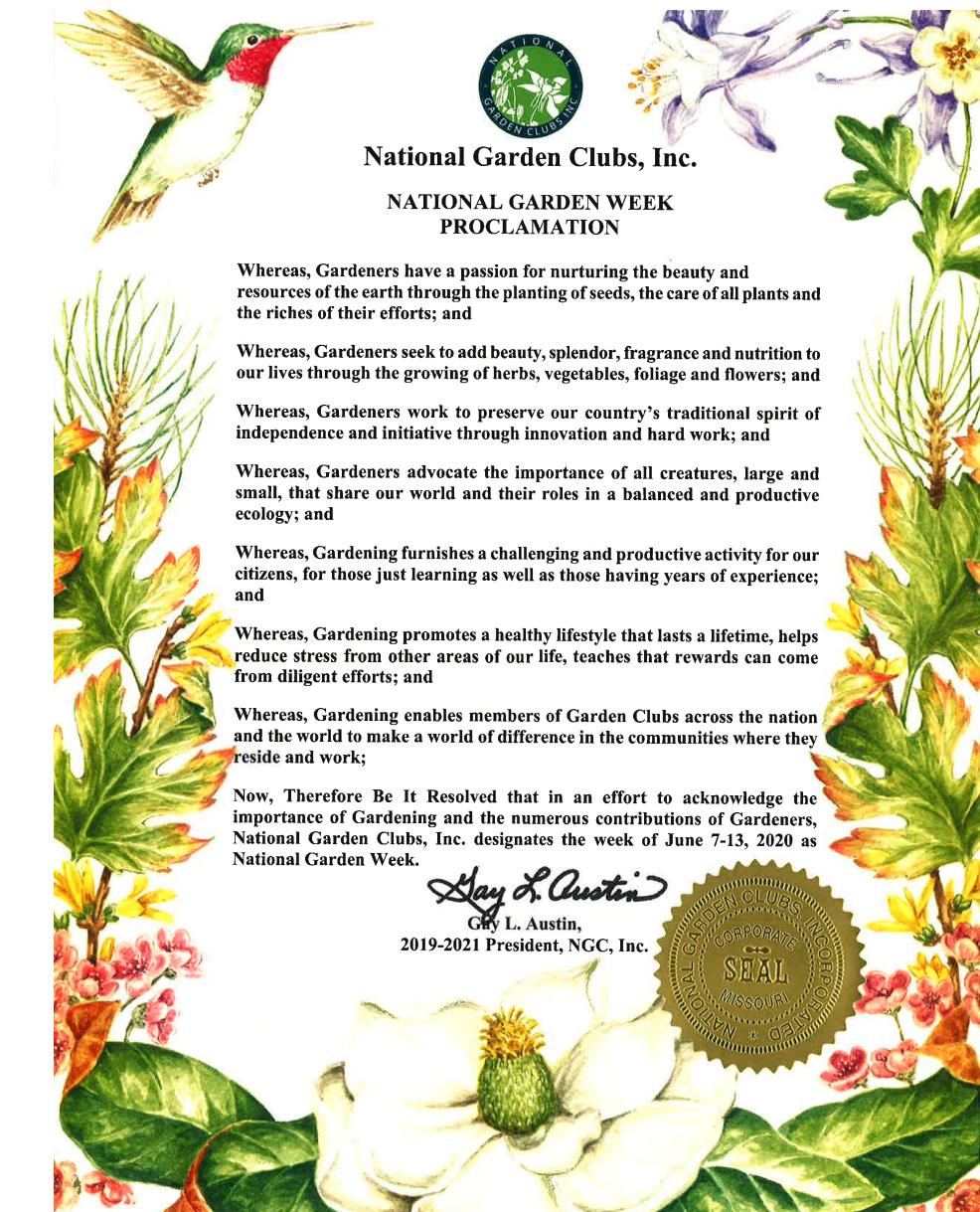
Sara Hemphill

Chairman, National Garden Week
SaraElisabeth@gmail.com

The National Gardener Schedule

SUMMER

July, August, September
Articles and Advertising
due: May 1



National Garden Clubs, Inc.

NATIONAL GARDEN WEEK PROCLAMATION

Whereas, Gardeners have a passion for nurturing the beauty and resources of the earth through the planting of seeds, the care of all plants and the riches of their efforts; and

Whereas, Gardeners seek to add beauty, splendor, fragrance and nutrition to our lives through the growing of herbs, vegetables, foliage and flowers; and

Whereas, Gardeners work to preserve our country's traditional spirit of independence and initiative through innovation and hard work; and

Whereas, Gardeners advocate the importance of all creatures, large and small, that share our world and their roles in a balanced and productive ecology; and

Whereas, Gardening furnishes a challenging and productive activity for our citizens, for those just learning as well as those having years of experience; and

Whereas, Gardening promotes a healthy lifestyle that lasts a lifetime, helps reduce stress from other areas of our life, teaches that rewards can come from diligent efforts; and

Whereas, Gardening enables members of Garden Clubs across the nation and the world to make a world of difference in the communities where they reside and work;

Now, Therefore Be It Resolved that in an effort to acknowledge the importance of Gardening and the numerous contributions of Gardeners, National Garden Clubs, Inc. designates the week of June 7-13, 2020 as National Garden Week.


Gary L. Austin,
2019-2021 President, NGC, Inc.



FALL

October, November, December
Articles and Advertising
due: August 1

WINTER

January, February, March
Articles and Advertising
due: November 1

SPRING

April, May, June
Articles and Advertising
due: February 1



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Cultivate our Garden Community WITH GARDENING TIPS, IDEAS AND PROJECTS

Members of National Garden Clubs are a wealth of knowledge and information on all things in the garden.

Do you, or your club, have gardening tips, tricks, ideas or project successes to share?



The National Gardener would like to tap into your skills and talents, as well as showcase your favorite projects.

PLEASE SEND:

- **A brief description** of your idea or how a unique project fostered success.
- **A photo or two** of your project is welcome. Photos must be high resolution 300 dpi with photo credit information provided.

SEND TO:

**Patricia Binder, editor
The National Gardener
patricia.b.binder@gmail.com**



the buckwheat and the butterflies

A phenomenon occurred in September, 2019, in the farm fields of Treaty, Indiana, a community situated between the cities of Marion and Wabash in Wabash County. The extraordinary chain of events, seemingly unrelated, had the potential to save the lives of hundreds of thousands of monarch butterflies that migrated through Indiana during this time.

A number of factors came into play. A farmer in Wabash planted 160 acres of buckwheat in July as a cover crop, because crops such as corn or wheat, or many other standard crops typically planted in Indiana, could not be planted last year due to an unusually wet summer and inaccessibility to overly saturated fields during prime planting time. Area farmers concluded there were few options available in which to plant cash crops.

One acre of land is equivalent in size to one football field – which provides readers with an idea on the immense scope of the planted buckwheat – and

even though the planting was not necessarily done in one large area, the farmer planted buckwheat over several adjacent plats of land, some divided by country roads.

For those unfamiliar with buckwheat, it is a seed plant, not a grain. It grows quickly and offers a number of benefits:

- It deters pests and is not susceptible to any major diseases.
- It is a magnet for bees and butterflies.
- It makes great fodder for cattle and other livestock.
- As a cover crop, it works like "green manure" to enrich the soil, if plowed under before it flowers.
- Buckwheat can grow in poor soil, decomposes easily and the seed is relatively inexpensive to plant.
- When buckwheat seed is harvested and ground, it makes gluten-free flour for tasty, high-protein pancakes.
- When bees make honey from the single source buckwheat flowers, the

honey is dark, very rich and flavorful.

- Another form of buckwheat is "groats" or kasha, which works as a high-protein substitute for rice, barley or other grains in soups or salads.

In conjunction with the planting of buckwheat in Treaty, our neighbor to the north had been experiencing an unusually warm summer. Third-generation monarch butterflies in Canada had not yet begun to migrate toward Texas and Mexico. The monarchs got off to a late start at the beginning of September, crossed the Great Lakes, and their route was through territory that did not typically offer ample food reserves. In Indiana, not the normal route of the major monarch migration, annuals and perennials were at the end of their growing season, but "species plants," such as weeds, would provide some nourishment. Monarchs rely on large supplies of rich nectar in this annual migration to their winter destination in the south. They also require the same levels of nourishment to fuel their trek back north in late spring, as well as to deposit the next year's generation of eggs.

Right time, right plant, right place

In early September, a series of unprecedented events, sparked by critical timing, took place in the fields of buckwheat. Area residents began to notice fields of white flowers in bloom, which beckoned to the hungry monarchs, and they were highly visible perched in the white pine, maple and oak trees adjacent to the fields. One neighbor, in particular, who lived on his

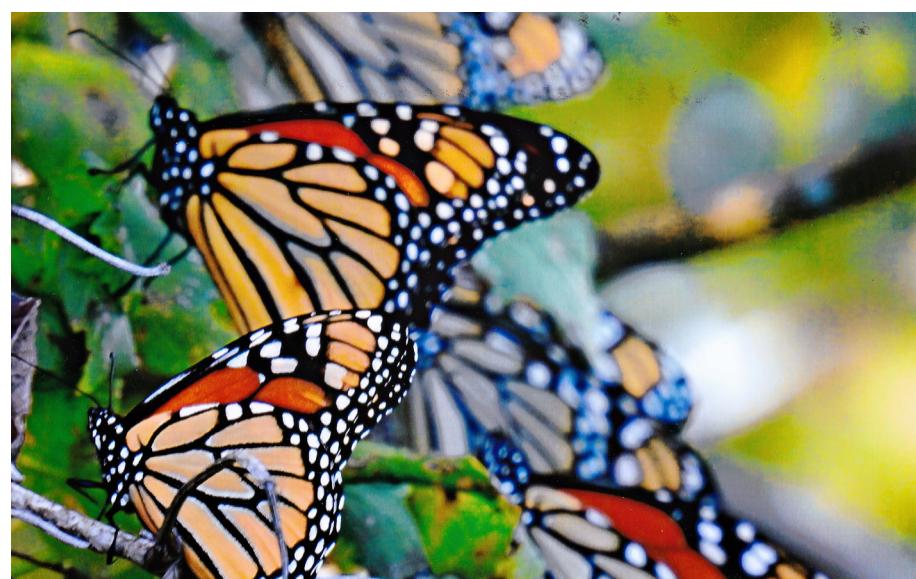
property since 1938, reported that the old, stately maple tree in his backyard was completely covered in monarchs each morning. Pear trees, oaks and pines nearby accommodated more butterflies. Colorful, fluttering wings could be seen throughout each day. The "festival" of butterflies was reported in the local newspaper.

Each morning, monarchs would arrive, get nourishment, rest and finally take to the skies heading southwest. And, each day, more butterflies would come from the

north to take their place to harvest nectar from the prolific white blooms of buckwheat. Of particular note: typically, if buckwheat were a standard crop for the area, the plants would have been blooming in early June, not September. But, due to the area's unusual weather



“...a series of unprecedented events, sparked by critical timing, took place in the fields of buckwheat...”



pattern, which impacted the regular crop-growing season, buckwheat was planted and planted late. The plants flourished – some reaching as high as 24 inches – and offered a heavy production of blooms and nectar.

For three weeks, hundreds of thousands of monarchs fed on buckwheat in those 160 acres, gathering energy to continue their flight toward the warm climates of Texas and Mexico.

The 'Monarch Mamas'

The "Monarch Mamas" team of the Garden Club of Marion presented a tagged butterfly release in Wabash earlier in the summer. Organized six years ago, team members make it their mission to find and raise butterfly eggs throughout each summer, as well as provide monarch education to people in communities and organizations throughout the state. The team released 586 monarchs in 2019. In years past, the team sometimes released more than 2,000 monarchs in one year. In the audience at the Wabash release event

was the observant neighbor of the farmer who had planted buckwheat. The team was thrilled at the neighbor's invitation to see the spectacle of the monarchs at his home and at the adjacent farm fields.

Another generation of monarchs has been aided by one farmer, one particular crop of late buckwheat, an observant neighbor, the educational goals of a garden club's dedicated "Monarch Mamas," and the events that aligned to bring these elements together.

While we won't know the final fate for the many butterflies in that migration, at least in Treaty, Indiana, those butterflies reaffirmed hearts, amazed new minds, brought awareness and provided renewed energy to continue the fight for monarchs and the environment. ■

Ruth Moorhead

Chairman, Horticulture
The Garden Club of Indiana Inc.
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Photos by Tom Bell

GARDEN CLUBS IN FLORIDA SPRING INTO ACTION WITH PLANT AMERICA WITH TREES: each ONE, plant ONE

With unique and multiple opportunities to garden year-round, and in recognition of Florida Arbor Day held each January, NGC garden club members, supported by the leadership of consultants from NGC Gardening Schools, partnered with several community groups to plant native trees and further public education on carbon sequestration. The efforts were orchestrated in conjunction with NGC President Gay Austin's new initiative, Plant America with Trees: Each ONE, Plant ONE.

Members of Greenacres C.A.R.E.S. Junior Garden Club and its club sponsor, Oleander Garden Club of the Palm

Beaches, Florida, planted six varieties of native trees while participating in a Florida Arbor Day dedication. The dedication included officials with the City of Greenacres, and members from the county parks department. Funds for the tree-planting project were obtained through monetary donations from local community members in memory of loved ones.

Seventy-three high school students representing five area Latinos in Action organizations arrived on a dig site, a natural area of a park in Palm Beach County, with shovels in hand. Several varieties of native trees were planted.

Photos courtesy of the City of Greenacres, Florida. ▾



▲ Photos courtesy of Palm Beach County Parks and Recreation Department. ▾

Latinos in Action works with schools and students across the nation to instill leadership qualities and empower and strengthen Latino student communities to create positive change.

In a joint dedication in observation of Florida Arbor Day and Plant America with Trees: Each ONE Plant ONE, area NGC Flower Show judges partnered with Port St. Lucie Botanical Garden in Port Lucie, Florida, in a Judges' Council "Mother Earth"-themed Flower Show.

In addition, members of Rio Lindo Garden Club in Port St. Lucie, area Master Gardeners and representatives of the Port St. Lucie Botanical Garden, as well as from other local and state organizations, visited fourth-grade students at three area elementary schools to speak about Florida Arbor Day and the important role trees play in the environment. Also in attendance were



representatives from "Keep Port St. Lucie Beautiful," a community beautification initiative and an affiliate of Keep America Beautiful, which engages individuals through education, responsibility, public and private partnerships and volunteer action. Representatives from the Florida Forest Service, a division of the Florida Department of Agriculture and Consumer Services, distributed over 1,200 slash pine seedlings to students to take home, plant and nurture. Slash pines are conifer trees found in the North and Central coastal plains of Florida and Southeastern United States.

Photos courtesy of Port St. Lucie Botanical Garden. ▾





◀
Photo
courtesy
of Troop
199.

Members of Boy Scout Troop 199 of the West Palm Beach area and part of the Gulf Stream Council, dig in to plant 60 native saplings as part of merit badge activities for the Boy Scouts of America.

In addition to the activities profiled, garden clubs in Florida plan to implement Plant America with Trees: Each ONE, Plant ONE in Earth Day activities on April 22 and at end-of-school ceremonies.

Community outreach, participation and education in the planting of trees, bolstered by dynamic fundraising efforts, are key elements to the success of a Plant America with Trees: Each ONE, Plant ONE initiative. Please note that the careful selection of planting sites should include

a plan that provides ongoing professional maintenance. This will ensure that native trees will reach maturity and continue to give the planet the carbon sequestration necessary to offset the effects of a changing climate, as well as support critical wildlife corridors. ■

Barbara Hadsell

*Chairman, Gardening Schools
Vice-chairman, Plant America with Trees: Each ONE, Plant ONE
BarbaraHadsell@cs.com*

*The Plant America with Trees: Each ONE, PLANT ONE projects in Florida are available on:
YouTube <https://youtu.be/3i2-ISI1T7g>
WordPress <https://pbcparks.wordpress.com/2020/01/31/local-students-help-increase-tree-canopy-in-palm-beach-county-at-florida-arbor-day-event/>*

NGC Calendar

National Conventions

- | | |
|------|---|
| 2020 | Milwaukee, Wis., May 12-16 |
| 2021 | East Rutherford, N.J., May 17-20 (installation) |
| 2022 | Orlando, Fla. Dates TBD |

Fall Board Meetings

- | | |
|------|---------------------------|
| 2020 | Fargo, N.D., Sept. 24-26 |
| 2021 | St. Louis, Mo., Dates TBD |

MASSACHUSETTS GARDEN CLUB RAISES THE LEVEL OF GARDENING WITH sensory garden

Members of the Lexington Field & Garden Club in Lexington, Massachusetts, facilitated a project to install a sensory garden in raised garden beds at the Lexington Community Center, a public meeting space that offers a wide range of services, programs and activities for people of all ages and abilities. The community center is a division of the Lexington Recreation and Community Programs Department.

The garden club implemented the project with funding from a grant provided by the Lexington Friends of the Council on Aging, which works with the town's Council on Aging and Human Services Department to enrich the quality of life for older adults. The raised garden beds, built over the winter months by staff members of the Department of Public Works (DPW) in Lexington, are designed to serve as a barrier from weeds, as well as to keep pests, such as slugs and rabbits, at bay. The raised design also prevents soil compaction and provides good drainage for multiple plantings.

In fall 2019, staff members of the DPW installed a compacted cinder walkway in front of the beds. The path extends beyond the raised garden beds to usher guests to a side patio of the building. In addition, a rain barrel was installed to collect and store the runoff from rain

water on the roof of the community center building. By harvesting rain water to provide irrigation for the gardens, the rain barrel provides a public awareness of eco-friendly gardening solutions.

The Lexington Field & Garden Club was founded in 1876 and is a member of The Garden Club Federation of Massachusetts Inc. The club offers an extensive community outreach program to maintain and supply plant materials for public spaces, including at a number of significant historic sites.

Ashley Rooney

*Co-president
Lexington Field & Garden Club
Earooney27@gmail.com*

Photos courtesy of Lexington Field & Garden Club



Longwood Gardens

SUPPORTS, SPONSORS NGC'S ANNUAL CONVENTION IN MAY

Longwood Gardens, considered one of the world's great gardens and a premier horticultural destination in Pennsylvania, donated \$2,500 in support of Perfect Vision 2020, NGC's upcoming annual convention in May in Milwaukee, Wisconsin.

Longwood Gardens has long been an advocate of the programs of National Garden Clubs Inc., and actively hosts or sponsors a number of initiatives by local garden clubs. By extending its outreach to become the first cash sponsor of an NGC annual convention, Longwood Gardens has stepped onto the NGC's national stage.

“We are proud to be a part of what promises to be an informative and inspiring event, and look forward to furthering our shared vision of a world that recognizes and celebrates the importance of horticulture.”

- LONGWOOD GARDENS

NGC Sponsorship Committee

Members of NGC's sponsorship committee assess and identify potential sponsors from like-minded organizations that support NGC's mission statement: "To provide education, resources and national networking opportunities for its members to promote the love of gardening, floral design, and civic and environmental responsibility."

The committee plays an advisory role to the leadership of NGC. Sponsors have the opportunity to support a vast number of NGC programs or targeted activities, which may include Plant America, NGC's highest level of national sponsorship, or in support of specific NGC programs.

Members of the sponsorship committee are excited to welcome Longwood Gardens, a collaboration that began with outreach from Patricia Wolanski, a member of the NGC sponsorship committee and active garden club member in Pennsylvania.

About Longwood Gardens

Longwood Gardens, located in the picturesque Brandywine Valley 30 miles west of Philadelphia, Pennsylvania, is renowned for its spectacular horticulture displays, grand conservatory, natural woodlands, architectural grandeur and majestic fountains that welcome more



▲ Photo by Becca Mathias.

than 1.5 million guests each year.

Longwood's foremost influence on American horticulture and educational programs is in keeping with NGC's mission, as well as the desire of founder Pierre S. du Pont's (1879-1954) to establish "a school where students and others may receive instruction in the arts of horticulture and floriculture."

Just as NGC has many offerings to choose from, such as programs for youth, scholarships, schools, horticulture, gardening and floral design, so does Longwood Gardens. Each year, Longwood provides educational and career development experiences to more than 55,000 individuals from early elementary students to lifelong learners. Its extensive onsite programming attracts more than 30,000 students, with an additional

15,000 students impacted through free virtual field trips. Longwood's professional horticulture program, continuing education courses and the Longwood Fellows Program, an intensive residential living and working experience that develops high-potential leadership skills and education, demonstrates that with so many offerings to choose from, Longwood — just like National Garden Clubs Inc. — is committed to educating and inspiring future and current generations of gardeners through a variety of programs.

“Each year, Longwood provides educational and career development experiences to more than 55,000 individuals...”

Longwood Gardens was a featured tour destination at NGC's 89th annual convention in Philadelphia in 2018. In addition, Paul B. Redman, president and chief executive officer, Longwood Gardens, was a recipient of the 2018 NGC Award of Excellence. The Award



▲ Photo by Larry Albee.

of Excellence recognizes exceptional individuals, organizations or institutions that make significant contributions to their communities in areas such as environmental responsibility, conservation and community beautification through gardening. It is

NGC's highest honor for non-members.

National Garden Clubs Inc. and the NGC Sponsorship Committee welcome the shared vision of our organization and new and potential sponsors, a collaboration that we hope will grow as we continue to create programs and initiatives that benefit

NGC members. To learn more, please visit the NGC sponsorship committee and Longwood Gardens at the Vendors and Exhibitors area at Perfect Vision 2020 in Milwaukee, Wisconsin! ■

Diane Dawson
Chairman, Sponsorship Committee
dianedawson@dawsonsales.com

Photos courtesy of Longwood Gardens

For more information on Longwood Gardens, visit longwoodgardens.org

For more information on the NGC sponsorship committee, please visit gardenclub.org

MEMBERS OF GARDEN CLUB IN THE EMPIRE STATE SHARE A LOVE OF gardening through community projects

Members of Dix Hills Garden Club in Dix Hills, New York, are the first to jump in when there is an opportunity to work on a community project that involves gardening.

The club, founded and federated in 1974 to encourage an interest in gardening, began with 19 dedicated gardeners. Membership in the club has grown to 51 people who enjoy sharing a knowledge and love of gardening. ■

Kathy Posillico

Dix Hills Garden Club

Federated Garden Clubs of New York State Inc.

knana@optonline.net

Photos by Wendy Aull



▲ The garden club restored a garden in a planter at a local high school.



Do you have a community project? Apply for Espoma's 'Plant America' Grant!

The NGC Espoma Plant America Grant program was introduced in 2017. Grants for \$250 of Espoma products can be awarded to up to 20 NGC clubs annually. Since that time, over 30 grants have been awarded to clubs in 22 states. These creative garden clubs have used this resource to beautify their local surroundings and improve the quality of life for their friends and neighbors.

Espoma is selecting up to 20 clubs with projects in 2020 to receive a \$250 grant for Espoma plant foods and potting soils.

Grant applications for 2020 are accepted October 1, 2019 through May 31, 2020. For more information visit:

gardenclub.org/projects/espoma.aspx
gardenclub.org/projects/plant-america-community-project-grants.aspx
espoma.com/garden-clubs/

Garden Clubs Across the US Dedicate blue star memorial markers



Photo by Betty Tang.

One of the most visible and popular initiatives offered by National Garden Clubs Inc., is the **Blue Star and Gold Star Families Memorial Marker** programs. The following garden clubs share news of recent projects:

Blue Star Memorial Marker at Ronald Reagan Presidential Library in California

Members of Southern California Garden Club provided the impetus for a Blue Star Memorial Marker installation ceremony and dedication in December, 2019, at the Ronald Reagan Presidential Library in Simi Valley, California. The NGC Blue Star Memorial Marker is believed to be the first of its kind installed at a presidential library in the United States.

According to the Ronald Reagan Presidential Foundation & Institute, the Ronald Reagan Presidential Library is the repository of presidential records from the administration of Ronald Reagan, 40th president of the United States, and the burial place of the president and First Lady Nancy Reagan. The library's holdings include over 60 million pages of documents, over 1.6 million photographs, a half million feet



Greg Pokorski, president, Southern California Garden Club, unveils the new marker. Photo by Hank Vanderhorst.

of motion picture film, tens of thousands of audio and video tapes and over 40,000 artifacts. Perched atop a hill with sweeping views of the southland, the library is one of California's most beautiful and unique destinations.

Southern California Garden Club is a member of California Garden Clubs Inc.

Photos courtesy of Southern California Garden Club

Visit reaganfoundation.org



Diane Franchini (left), project chairman, Pacific Region Garden Clubs, Robin Pokorski (center), director, ▲ Pacific Region Garden Clubs and Greg Pokorski were the driving forces to place an NGC Blue Star Memorial Marker at the Ronald Reagan Presidential Library. Photo by Steve Franchini.

Eagle Scout Project in Utah

The installation of a new Blue Star Memorial Marker was selected as an Eagle Scout project by Peter Robinson, a Fillmore Junior High School student in Fillmore, Utah.

Robinson began his quest to attain Eagle Scout – the highest achievement or rank in the Boy Scouts of America – by eagerly taking on the scope of the project, which required the removal of an older marker and the installation of a new Blue Star Memorial Marker.

The eighth-grade student developed a comprehensive plan, which included extensive research to determine if the original marker should be restored or replaced, purchasing or acquiring donations of goods and services, the coordination of volunteers, the installation of the marker

and new landscaping. Approximately 300 bags of compost variety soil were donated by a local feed and garden supplier and placed by members of The Neighborhood Garden Club, as well as volunteers from several other local organizations, who also assisted in the planting of flowers. The Blue Star Memorial Marker was dedicated in July, 2019.

According to the Boy Scouts of America, becoming an Eagle Scout requires perseverance, discipline, motivation, leadership, accountability

“The purpose of an Eagle Scout project gives the scout an opportunity to plan, develop and be a leader to others.”

and achievement. The purpose of an Eagle Scout project gives the scout an opportunity to plan, develop and be a leader to others. Projects are evaluated on the benefit to the organization being served and on leadership provided by



The unveiling and display of the new marker.

the candidate.

The new Blue Star Memorial Marker, surrounded by fresh plantings and landscaping, is the culmination of the many efforts, talents and skills from garden club members, the scouts and community volunteers.

Connie MacKay

President, The Neighborhood Garden Club
The Utah Associated Garden Clubs Inc.
Mcm31@icloud.com

Photos courtesy of The Utah Associated Garden Clubs Inc.



▲ Boy scouts remove the older marker.

Bicentennial in Kentucky

To mark the bicentennial of Simpson County, Kentucky, in 2019, Franklin Garden Club members in Franklin helped to create a Veteran's Plaza at the local post office. In addition to providing landscaping and preparing the area for the new plaza, a new Blue Star Memorial By-Way Marker was installed.

To raise funds for the project, club members collaborated with a custom brick-engraving company to offer memorial bricks that could feature the names of local veterans. The club worked with a local construction company to place the engraved bricks at the base of a flagpole in the plaza.

As part of the landscaping plan, garden



also attract pollinators. The new Blue Star Memorial By-Way Marker was installed and is illuminated at night. A formal dedication was held on Veterans Day in November.

Garden club members did not fully anticipate the enormous impact the project has made on the community. For example, when people come to the post office to buy stamps or pick up mail, they pause to search the bricks for the names of people they recognize. Even though the post office is located on a busy street, the plaza functions as a healing garden – people enjoy the flowers and wildlife, share stories of their military service, reminisce about loved ones and build connections.

Janeen Grohsmeier

President
Franklin Garden Club
The Garden Club of Kentucky Inc.
franklynkygardenclub@gmail.com

Photos courtesy of Franklin Garden Club

club members created two garden beds on either side of the plaza culminating in a V-shape. Plants native to the state were selected for the area, as well as for their specific color palette of red, white, blue and gold to honor the five branches of U.S. military service. The new plantings



◀ LEFT: The Blue Star Memorial By-Way Marker is set near five large bricks engraved with the logos of the five branches of U.S. military service.

RIGHT: A local resident makes a rubbing of one of the engraved bricks on the official program of the plaza's dedication.



Delaware Dedication

The dedication of an NGC Blue Star Memorial Marker was held in November, 2019, in Bethany Beach, Delaware. Attendees included members of Gardeners by the Sea Garden Club, state representatives and local dignitaries.

Members of the garden club are active

in their community. Club activities regularly include a "coastal cleanup" of nearby beach areas, as well as at area school yards and roadsides; garden therapy programs that emphasize environmental projects; the presentations of container plants to new Habitat for Humanity families; maintaining sections of community

gardens; and working with youth on gardening education and projects.

Pat Fulton

*Gardeners by the Sea Garden Club
The Delaware Federation of Garden Clubs
beachbumsf@verizon.net*

Photos courtesy of
Gardeners by the Sea Garden Club

Empire State Dedication

In June, 2019, members of the Dix Hills Garden Club in Dix Hills, New York, dedicated a Blue Star Memorial By-Way Marker at the Dix Hills Fire Department and participated in a ribbon-cutting ceremony at the new firehouse. The project is the culmination of years of fundraising efforts by the members of the garden club. ■

Kathy Posillico

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knana@optonline.net*

Photo by Wendy Aull



PLANT AMERICA community project grants

Congratulations to the various garden clubs of National Garden Clubs Inc. that have been awarded a 2020 Plant America Community Project Grant. NGC takes great pride in the vision and commitment by the members of these clubs to green communities across the nation.

Members of the NGC Plant America Community Grant Committee marveled at the scope of the diverse and unique projects undertaken by club members. Listed below are the NGC garden clubs that were awarded up to \$1000 in support of their local efforts.

Start planning your next gardening project, and take advantage of the 2021 Plant America Community Project Grant application, which will be posted on the NGC website at gardenclub.org following the annual convention in May. ■

David Robson

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- Fairbanks Garden Club
Alaska Garden Clubs
- Wildflowers Garden Club
Alaska Garden Clubs
- Marion Garden Club
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- Star City Garden Lovers Club
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The Federated Garden Clubs of Maryland Inc.
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The Federated Garden Clubs of Maryland Inc.
- Bittersweet Garden Club
The Federated Garden Clubs of Missouri Inc.

'underground movement'

GARDEN CLUB USES GARDENING AND RED WIGGLER WORMS TO GROW EDUCATION AND FUNDRAISING

Members of MGM Garden Club of Arizona Federation of Garden Clubs Inc., regularly tend the Robert J. Moody Demonstration Garden in Yuma. Developed and maintained by garden club volunteers, the two-acre botanical garden opened in 2004 and provides education to the public about plants that grow well in the desert. The garden features a shady walking path, plants that grow well in Yuma, which is located in the USDA's Zone 10, and an amphitheater. It is open year-round and free to the public.

***“Developed
and maintained
by garden club
volunteers...”***



Red wiggler worms are raised in MGM Garden Club's worm bin. Worm castings are a nutrient-rich fertilizer perfect to amend the soil of houseplants and in gardens.

The climate in Yuma, typically offers mild, delightful winters, with temperatures ranging from 60 to 70 degrees Fahrenheit. However, hot summers are the norm, where temperatures can reach up to 115 F. The arid and semi-arid climate offers a variety of volunteer gardening opportunities. For example, the garden is divided into different sections that showcase plants that grow well in a tropical garden, xeriscape garden, vegetable garden, children's garden, cultivated garden, herb garden and



▲ The worm bin at Robert J. Moody Demonstration Garden in Yuma, Arizona, was easy to make using two-by-four pieces of lumber. Worm castings from the bin are used to fertilize areas in the garden and are sold to the public to raise funds for the garden.

cactus garden. Members of the garden club choose a section to tend and dedicate one morning each week in that designated area.

Worms Provide 'Black Gold' in the Garden

MGM Garden Club members constructed a worm bin at Moody Demonstration Garden with the goal of using the beneficial nutrients found in worm castings to amend the garden's soil. In addition, worm castings are sold to club members and the public as a fundraiser.

Red wiggler (Eisenia fetida) are extremely efficient at breaking down decaying, organic material and are considered nature's master composters. The castings (manure) they create are packed with minerals and beneficial microbes essential for plant growth, soil aeration, moisture retention, natural pest resistance and protection from disease. Garden club members place castings in

one-gallon plastic bags and sell them to local gardeners and growers. The club uses the funds to enhance the Moody Demonstration Garden, including the recent purchase of informational signs that feature each plant's botanical and common name.

Mike Rosner, MGM Garden Club member, is in charge of the worm bin, which now is filled with hundreds of red wigglers, whose numbers grew from the purchase of just 50 worms from a local bait store. Red wigglers also may be purchased online at websites such as unclejimswormfarm.com

Creating a Worm Bin

- To create a hospitable environment for the worms, Rosner researched and applied a layering technique, first placing a layer of sand in the bottom of the bin, followed by a layer of commercial garden soil. A layer of wet material, such as grass clippings, or branches, buds or roots pruned from trees or shrubs, was added. Rosner then introduced red wiggler worms into the mix. A layer of dry material, such as dry leaves or slightly moistened shredded newspaper, was then placed on top of the worms, and another layer of wet material was added. Lastly, a layer of damp newspapers was



▲ Worm castings are odorless and feel like crumbly soil. The castings amend the soil in a garden by providing a multitude of minerals and nutrients and will not "burn" plants.



◀ **Mike Rosner, MGM Garden Club member, tends the worm bin at Moody Demonstration Garden. Wet and dry materials are added to the bin weekly to keep the hungry worms fed.**

placed on top to help hold moisture in the bin. The lid is kept partially open to allow air to move freely in and out of the bin. Strategically located under the shade of a

deciduous tree, the bin stays cool in summer and warm in winter.

- Garden club members donate table scraps from vegetables to the garden each week and toss them into the bin for the hungry worms to feast on. Rosner adds the rest of the worms' food, which includes additional wet and dry materials. According to Rosner, the ratio of wet-to-dry material in a worm bin is important. The pile should feel like a damp sponge. Worms will not tolerate a bin that is too wet or too dry.
- Newspaper featuring color ink or glossy advertisements, onions and onion skins, potatoes and potato peelings, citrus fruit and rinds, animal feces, meat, fats, and dairy products are not allowed in the worm bin.



◀ **The Robert J. Moody Demonstration Garden has a small seating area with audio services for special events. The red barn-like shed houses the garden club's tools. University of Arizona's Yuma County Cooperative Extension partners with MGM Garden Club to maintain the garden.**

- Since red worms can consume up to one pound of organic waste each day, it is Rosner's weekly job to fill the worm bin with plenty of wet and dry materials to keep the worms munching away.
- Once each year, Rosner moves the worms out of the bin to harvest the worm castings, which have no odor and feel like crumbly soil. This highly valued "black gold" is used wherever needed in the garden or is sold to club members and the public for use in their own gardens.
- You can amend a houseplant's soil by digging a furrow in the soil around the plant and adding one-quarter cup of castings to the furrow. Fill in the furrow with soil and water well.
- Before planting a vegetable garden, sprinkle castings over the soil and dig the castings in. Nutrients in the castings will aid in the growth of vigorous plants that will produce plenty of vegetables for harvesting.
- Worm castings can be used as a liquid fertilizer. Fill a one-gallon jug with water, add one-half cup worm castings and allow the castings to dissolve. Use this as you would any commercial liquid fertilizer. It will not "burn" your plants. ■

Uses for Worm Castings

- Worm castings offer many benefits. They improve the soil's structure, add microbes to the soil, suppress several soil-borne diseases and add over 60 micronutrients and trace minerals to the soil at a slow rate. Nitrogen, phosphorous and potassium also are found in worm castings. The castings contain 50 percent more humus than topsoil.

Karen Bowen

MGM Garden Club

State Chairman, Horticulture

State Chairman, Birds, Bees and Butterflies

Arizona Federation of Garden Clubs Inc.

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Photos by Karen Bowen

◀ **The Robert J. Moody Demonstration Garden is a two-acre botanical garden in Yuma, Arizona, whose purpose is to showcase plants that grow well in the desert southwest. Pictured is the section of the garden that features cacti and native plants. The tree in bloom is a palo verde, Arizona's state tree.**

How does your garden grow?

A garden-inspired project fosters learning at an elementary school in Michigan



Kindergarten students, known as the "little gardeners," at Southwood Elementary School in Kentwood, Michigan, near Grand Rapids, harvested vegetables from a garden project launched in spring, 2019, and enjoyed the tastes of their hard-earned efforts as first-graders at the fall harvest.

During the summer, the garden was teeming with activity, including visits from pollinators. A new watering system provided consistent, reliable moisture. Students attending summer school classes and parent volunteers took on the important tasks of weeding and deadheading plants, as well as overall garden maintenance. When the little gardeners returned to the school as first graders in the fall, they were delighted

to see the bounty of tomatoes, peppers, cucumbers and green beans that had grown in the school garden. They also sampled and shared the vegetables with others.

“When the little gardeners returned to school...they were delighted to see the bounty...”

eat, but only ate the skin of the tomato, not understanding that the flesh inside was edible, too. The students also were eager to schedule a popcorn party from the popcorn plants that would mature

Julie Vanlier, a kindergarten teacher at Southwood Elementary School, worked closely with the "little gardeners" on the project. As her previous little gardeners came to "taste-test" some of the vegetables they helped grow, she reported that some were unaccustomed to what to do with whole vegetables from the garden. For example, one student selected a large tomato to



▲ A variety of vegetables were harvested from the school garden.

later in the fall.

As with all things gardening, the students learned that even the best of plans may go awry. For example, the spring radish crop sprouted beautiful green tops, but the radishes did not develop. In addition, fall carrots did not germinate as planned.

The school gardening project translated to other academic areas of learning. For example, Vanlier integrated lessons learned from the garden into language arts activities by showing her students how to extract words from their writings and apply them to gardening. The students also made wreaths from the flowers in the garden for their

classroom door, and dried flower heads served as "paint brushes" in art projects.

In the spring of this year, Vanlier will introduce the garden to her new crop of little gardeners, and they will explore ways in which to build on past gardening endeavors. She also will introduce lessons and activities on composting.

Members of Kent Garden Club offer gardening insights to teachers and students at Southwood

Elementary School, from the recent renovation of raised garden beds, to the many benefits of square-foot gardens. Members also work with students and parent volunteers to perform garden maintenance. The club also provides funding for ongoing and new gardening projects at the school.

Mary Ann Sheline

Kent Garden Club
Grand Rapids, Michigan
Kengardenclub.org
Michigan Garden Clubs Inc.

◀ Photos courtesy of Kent Garden Club



◀ Students at the elementary school learn about vegetable gardening. Their experiences were integrated into classroom lesson plans and projects.

environmental, gardening and landscape design SCHOOLS

Good news! The upcoming courses for NGC Environmental Schools, Gardening Schools and Landscape Design Schools are now being listed on the NGC website, as well as in "Keeping in Touch." Symposia also are being listed on the NGC website.

- If you are an ES, GS or LDS chairman in your state, please post all courses for your school on your state website, region website, as well as on the websites of surrounding states and in their publications.
- The Environmental, Gardening, Landscape Design Schools "Guide for Students and Consultants" can be located on the NGC website under Schools. Please scroll down to the very last heading to download this informational guide.
- All current and updated information and forms for Environmental Schools, Gardening Schools and Landscape Design Schools can be located on the NGC website in Schools. Please note that the heading "Forms," at the top right corner of the home page on the NGC website does not currently contain the most recent 2019 forms.

NGC Schools continue to provide education, resources and networking opportunities to its members, while promoting the love of gardening, protection of the environment and ways in which to creatively landscape the home and community in a sustainable manner.

To find the NGC School nearest to you, consult "Keeping in Touch," or log on to the NGC website, region website and/or your state website or publication. ■

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flower show SCHOOLS

Please note the following updates to the "Handbook for Flower Shows, 2017."

- There is an adjustment to the Flower Show Schools article that appeared in the winter 2020 issue of "The National Gardener." In the "Handbook for Flower Shows," (HB) page 46, chart, NGC Top Exhibitor Awards. Arboreal Award, far right column, Awarded to: Cut and Container-grown branches of trees and/or shrubs. Please also note, at the top of page 41 c. Cut portions or container-grown vines are not eligible.
- Flower Show Horticulture Classification Chairman, review HB page 61, IV. B. Petite specimens are never in competition in the same class with standard-size specimens and therefore are listed in the flower show schedule as a separate class, or subdivided into their own class or subclass.
- Judging Procedures, "Handbook for Flower Shows," Chapter 11. Judges please review this chapter. Please pay particular attention to H. on page 98. When a judge receives a flower show schedule, it is his or her responsibility to read the schedule and must notify the Judges Chairman or General Show Chairman of any errors as soon as possible.
- "Handbook for Flower Shows" Glossary, correction: Artificial, Page 140, Delete: Artificial plant materials are only permitted in the Exploration Class in the Botanical Arts Division of an NGC Flower Show. Treated Plant Material, page 153, Add: The Exploration Class in the Botanical Arts Division is the only class permitting treatment of fresh plant material.
- Summary Chart for Exhibiting and Judging Credits. All judges, Student, Accredited, Life and Master are eligible to earn judging credits in all divisions, with the exception of the Photography section. Page 2. At the bottom of the page, Delete IV. Please include in communications sent to the FSS Committee your name, where you live and if you are a garden club member, flower show chairman, judge, etc. This information is helpful to the committee when researching and responding to your questions. Thank you. ■

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Please visit NGC Schools
Course Calendars at
www.gardenclub.org

THE Happy Guide GARDENER'S

BLUE IS THE BERRY I LOVE

The blueberry. *Vaccinium angustifolium*. The perennial flowering plant with the ubiquitous fruit is arándano in Spanish. Myrtille in French. Native Americans called them star berries, and used them for food and medicinal purposes for centuries. In any language, the blueberry spells deliciousness. To propel the taste of a blueberry up a notch: pick one straight from the bush – still warm from the sun – and pop it in your mouth. Let the juice linger a moment. One blueberry is never enough. Less is not more. Birds will confirm these truths if allowed.

Every blueberry on the three bushes in my garden is a prized treat, so much so that there's never enough left over to make a fabulous pie. This powerful appreciation for the naked berry is the main reason the bushes were planted. An added bonus is the robust fall color that the leaves impart when the summer steps aside.

There is, however, a "tax" that must be paid on the two-week fresh eating binge of the blueberry. Every spring and fall, the soil around the bush must be enriched with an acidic fertilizer (in areas whose soil registers highly alkaline). This scope of work is why I have determined that three bushes suffice for me.

Though most varieties are self-

pollinating, it's recommended to plant two varieties of blueberry plants to ensure a good harvest. My plantings are "Tomcat 1 and Tomcat 2." I chose those particular cultivars because of their interesting backstory: the owner of the blueberry company that I was researching had purchased former farmland that came with an old tomcat. He developed a fondness for the old tom and decided to honor him with the new blueberry cultivars, "Tomcat 1 and Tomcat 2," that he brought to market. At the time, I also had "Blackjack," a tomcat that had warmed up to me and became my gardening companion. So, my decision was sentimental — more tomcats in my garden please!

Having blueberry bushes may alter one's gardening perspective. For example, birds are typically welcome guests in my garden. Several birdbaths were installed for their benefit, and I also take great joy in watching them splash about. The towering heads of sunflowers are allowed to go to seed for their snacking pleasure. But I am selfish about my blueberry bushes — no birds are allowed! It has become a ritual: birds know exactly when the berries ripen, so I am diligent in my efforts to thwart their attempts to feed on the delectable fruit. Right before the blueberries ripen,

I wrap the bushes with a translucent gauze fabric, which creates a mummified appearance. Although this is not a desirable appearance, I am content to live with the sight for a few weeks, because it allows me to harvest the full bounty of berries.

I have only one regret from planting blueberries. This occurred early one morning as I walked barefoot to the kitchen sink, and suddenly experienced an awful sensation between my toes. "How could a slug be on the floor beside my sink?" I thought. On closer inspection,

I discovered the culprit was not a slug; it was a blueberry from a recent pick, which had accidentally dropped to the floor unnoticed the previous evening. The "squish" was exactly the same degree of awful as previous encounters with slugs in the green grass and gardens of home! ■

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 Photo by Arabella Dane



deep roots

PROTECTING ENDANGERED PLANTS THROUGH THE NATIVE PLANT TRUST'S SEED ARK INITIATIVE

In response to multiple threats on native plant species in recent years, the Native Plant Trust has launched the \$5 million Seed Ark campaign to save the imperiled plants of New England. The Native Plant Trust, the first plant conservation organization in the United States, was founded in 1900 as the Society for the Protection of Native Plants. The organization, based in Framingham, Massachusetts, long known as the New England Wild Flower Society, continues in its efforts to conserve and promote New England's native plants to ensure healthy, biologically diverse landscapes.

According to the Native Plant Trust, one-fifth of the New England region's native plants are on the brink of being lost. Securing and providing funding in which to bank the seeds of these plants is critical to preserve genetic diversity and reintroduce, or augment, populations of plants in the wild. The goal is to collect seeds from most of the 3,300 populations of the 388 globally and regionally rare plants of New England by the end of 2020. The targets and timeline were established by the United Nations' Global Strategy for Plant Conservation.

Once collected, the seeds are preserved in a climate-controlled

© Arabella Dane



American Ginseng, *Panax quinquefolius*, a rare native plant in New England and globally.



▲ Damage to trees by the emerald ash borer.

environment, with the goal of keeping viable seeds in perpetuity to grow and reintroduce into suitable habitats. The Native Plant Trust is halfway to its goals, but needs to accomplish these efforts before the end of this year.

Members of National Garden Clubs Inc. can help by contributing to the Seed Ark campaign, becoming a member of the Native Plant Trust, and by volunteering.

Why are these plants so rare, and so important?

These plants are rare, in part, due to habitat loss, global warming/climate change, and new pathogens, pests and diseases. They may be what are called "narrow habitat specialists," which live only in an extremely small range. If these plants disappear, industry experts predict a co-extinction of other species that depend upon them as host plants.

“These plants are rare, in part, due to habitat loss, global warming / climate change, and new pathogens, pests, and diseases”

The habitats most at risk include:

- Alpine and subalpine
- Mixed Northern hardwood forests
- Rivers and streams
- Sandplain grasslands and heathlands
- Estuarine marshes

A green menace

The emerald ash borer is an exotic beetle native to Asia that was introduced to North America during the 1990s via wood shipping pallets or wood packing



▲ Native seaside golden rod.

materials. Since its initial discovery in 2002, the emerald ash borer has eliminated millions of ash trees throughout the Central and Northeastern United States and Canada. According to agricultural experts, the emerald ash borer is considered the most destructive tree insect ever to be introduced to North America. It is anticipated that 20 native moths and other pollinators in New England that depend upon the ash tree will in all likelihood go extinct unless they can adapt to an alternative host plant.

Tales of success

There are a number of successful stories on how native plants assist in the survival of other endangered non-plant species. For example, on the coastal dunes of Cape Cod, the native seaside goldenrod, *Solidago sempervirens*, has been reintroduced, as it is the preferred cover plant for the endangered roseate tern, which nests in the dunes.

State and local entities in New Hampshire are working to protect the habitat for the Karner blue butterfly, designated the state butterfly of New Hampshire, at Concord Municipal Airport. In 2019, officials with the New Hampshire Fish and Game Department conducted a prescribed, controlled burn in conservation zones at the airport. This

initiative was part of continuing efforts to maintain the health of Concord pine barrens, an ecosystem with sandy or acidic soil that supports plants, such as wild lupine that thrive after fires come through an area. These plants, in turn, support several endangered or rare species and associated species, including the Karner blue butterfly. In 2009, New Hampshire became the first state in New England to establish a Prescribed Fire Council, a government-sanctioned group that establishes best practices for these deliberate fires to reintroduce plants and pollinators to restored habitats. ■

Arabella Dane

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For more information on the Seed Ark and Seed Ark Campaign, visit the Native Plant Trust at nativeplanttrust.org

References: <https://www.concordmonitor.com/prescribed-burn-concord-nh-airport-karner-blue-butterfly-24616183>
and <https://csfs.colostate.edu>

 Photos by Arabella Dane

The endangered Karner blue butterfly is entirely dependent upon its host plant, wild lupine, *Lupinus perennis*. ▶





As many gardeners or landscapers can attest, clearing land of weeds and brush to create areas receptive for introducing gardens and landscaping can be a daunting, and often costly, task.

Have you 'herd' about goatscaping?

"Goatscaping" is a natural and eco-friendly practice of clearing land using goats, according to the Permaculture Research Institute. The method introduces a "tribe" or herd of goats to achieve "goat mobbing," which taps into the goats' natural ability to browse and forage nearly everything in sight when they are placed in a large group in a designated area. Goats, known for their voracious appetites and unique digestive systems, often will consume

noxious weeds and brush that may include kudzu, poison ivy, poison oak, sumac, raspberry, briars and brambles. Depending on the scope of the project, goats have the potential to clear acres of brush in a relatively short time.

“...goats have the potential to clear acres of brush in a relatively short time.”

lake. The effort was part of a plan to clean up and clear public areas, including Como Lake Park, of noxious plants that had infiltrated a number of area landscapes. The goats were recruited through a

Goatscaping in New York

In Lancaster, New York, a suburb of Buffalo, a small tribe of Alpine goats from Let's Goat Buffalo, a local goatscaping resource, was called into action to clear an area of invasive Japanese knotweed along the shoreline of a small

◀ The goats of Let's Goat Buffalo cleared invasive plants and overgrown areas on acres of designated lands in and around the cities of Lancaster and Buffalo in Erie County, New York. Opal (right), is a favorite forager.



goatscaping program offered by the Erie County Parks, Recreation and Forestry Department, under the auspices of Mark C. Polancarz, executive, Erie County, New York.

In addition, goats were tapped to clear other sites around Buffalo, including the iconic 145-year-old Richard Olmstead Campus, a National Historic Landmark, and the meadow restoration at Stella Niagara Preserve, an important cultural, natural and recreational link in the Niagara River Greenway. Goats also cleared invasive phragmites, common, non-native perennial grass reeds that flourish in wet and moist locations, along an area creek and the shores of Lake Erie. The project also targeted some of the city's historical residential areas, which had become overrun by Japanese knotweed.

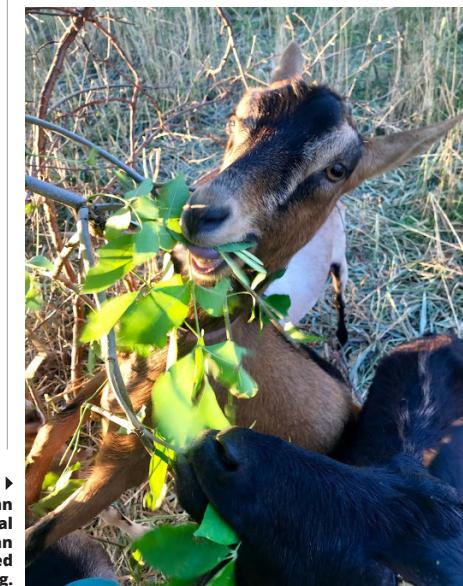
Goatscaping has grown in popularity as an organic alternative to using chemicals to clear areas overgrown with weeds. Goats prefer weeds and thorny plants, not grass. Their prodigious appetites and digestive systems efficiently process materials. For example, seeds of invasive plants

become "sterilized" through the digestive process, thereby neutralizing any seeds from propagation in the manure left behind, which is odorless and breaks down quickly.

The process and business of goatscaping

According to industry sources Let's Goat Buffalo and the Permaculture Research Institute, goatscaping is a way to effectively manage lands in an economical, sustainable, carbon-friendly manner, without the use of herbicides or heavy machinery. It also is an important way to manage brush in fire-hazard areas.

Introducing a tribe of goats to a generous buffet of weeds and brush may seem a simple concept. However, according to Jennifer Zeitler, owner of Let's Goat Buffalo, there are many steps to consider prior to launching a goatscaping project:



► Autumn and Opal eat an unwanted sapling.

- Calculate the animal density (AD) of your area to be cleared. This will determine how many goats will be needed.
- An experienced goatscaping team will assess the area to check for possible hazards, including the removal of trash and weeds toxic to goats.
- A trained, insured herdsman will install a low-voltage electric fence around the perimeter of the area to be cleared. Experienced goats become respectful to this boundary.
- A small trailer will be delivered to the site. Goats will be secured and sleep in the trailer each night.
- Supervision is key. The team will provide daily care and observe goats as they graze. They will remove objects previously hidden under brush that has been cleared that may pose a problem. Herders assess the daily progress. Fences may be rotated to targeted areas of more invasive growth and additional goats may be recruited to help. Progress reports are compiled and a long-term maintenance plan is provided.



TOP: Clearing phragmites in South Park, Buffalo, New York. RIGHT: The meadow restoration at Stella Niagara Preserve. The 'before and after' images show how the goats worked efficiently to clear targeted areas.



▲ Helcha eats phragmites at South Park in Buffalo, New York.

- According to the Permaculture Research Institute, goatscaping projects in some areas of the United States may introduce a livestock guard animal to provide protection for the goats.

Goatscaping offers many benefits. "Goatscaping is a practical and eco-friendly method in which to clear land, often providing access to neglected areas



“Goats are ‘eating machines,’...”

where tree stumps and other debris may have been hidden from view for decades," Zeitler said. "Goats are ‘eating machines,’ often climbing or stretching to high areas that may be challenging for humans or machinery to reach," she added.

The experts at the Permaculture Research Institute agree. "Using



TOP: Clearing an area near a building on the Richard Olmstead Campus. BOTTOM: Clearing Japanese knotweed.



This article addresses landscape maintenance – and eco-friendly maintenance at that!

Please note the article may be used as the reading exam in NGC Landscape Design School (LDS) courses. It relates to the LDS curriculum in the following topics, if not more: "Learning about Your Ecosystem," (Course 1); "Overused, Often Invasive Plants and Native Alternatives in Your Area," (Course 2); and "Herbaceous Materials in the Landscape and Landscape Design with Maintenance in Mind," (Course 3). Additionally, landscaping with goats could be a special interest topic/supplemental subject in any of the four courses.

Students who research landscaping with goats, or "goatscaping," will find references to its use all over the nation. The cost-effective practice has the potential to save energy and reduce waste. Goats can also play an important role in clearing flammable brush, especially in urban settings, as part of wildfire prevention programs.

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▲ Families enjoyed meeting the goats that will clear areas at Como Lake Park in Lancaster, New York.

goats to clear land has been used as a technique from the dawn of agriculture. The novel thing is the use of goats in urban and suburban areas. Goatscaping seems complementary with the ideas of permaculture. If permaculturalists can get on board with this technique, they might discover new ways to utilize these animals, while also giving back to the local landscapes.” ■

Phyllis Besch

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Photos courtesy of Let's Goat Buffalo

For more information, visit goatbuffalo.com and permaculturenews.org

References:

Let's Goat Buffalo. Web. January 2020. <http://www.goatbuffalo.com/>

Permaculture Research Institute. Web. January 2020. <https://permaculturenews.org/2017/04/11/goatscaping/>



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