

The National Gardener

Summer 2016





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National Garden Clubs, Inc.

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The Cover

Hearts Are Flowers

A Creative Design using two black metal containers and red Anthurium, Fatsia leaves, and Kuwa vine. The designer is Barbara Bruce.

Photograph by Cheryl Collins

President's Message

“Leap Into Action”

He who plants trees loves others besides himself. ~Thomas Fuller

Spring is a time for planting and our thoughts turn to trees, Arbor Day, and Earth Day activities. Trees are an important part of every community. How many of your childhood memories are connected with the trees in your backyard? Did you plant a tree on your birthday or plant the evergreen Christmas tree each year? Trees planted in memory or in honor of special people in our lives are living memorials that hold special meaning for us.

Man has long used trees for tools, shelter, medicine, as houses for children, shade from the hot summer sun, shelter for wildlife, and as peaceful spots for picnics. The first Arbor Day was held in 1872, in Nebraska City, Nebraska, through the efforts of J. Sterling Morton, with the planting of an estimated one million trees. The Arbor Day Foundation was formed in 1972 to celebrate the 100th anniversary of Arbor Day and to carry on the mission of the tree planters' holiday. During the last 43 years the Foundation has planted and distributed 250 million trees.

National Garden Clubs, Inc. plants thousands of trees every year for Arbor Day, Earth Day, and as part of community service projects in public and private spaces. Trees in urban and rural settings play important roles in our modern, hectic lives by creating a “green state of mind.” USDA Forest Service and NGC's partnership, “Penny Pines,” is a reforestation program to plant on burned-over and brush-covered areas, which are



potentially productive timberlands. Members donate \$68 for a plantation of trees indigenous to a particular area of their choice. Plantations may be planted to honor or in memory of someone. Clubs donate generously to this on-going project while promoting conservation and increased awareness of our National Forests.

Garden Clubs traditionally support Earth Day with tree plant-

ings and other environmentally conscience activities. Earth Day 2016 celebrated the theme “Trees for the Earth.” To celebrate the upcoming 50th anniversary organizers are promoting the planting of 7.8 billion trees during the next five years. That is one tree for every person on the planet.

Why plant trees? Each minute the equivalent of 48 football fields of trees are lost, or 15 billion trees each year. Annually, it takes 96 mature trees to absorb the CO₂ produced by each man, woman, and child on the planet. A recent report of ACTrees noted the enormous monetary, social, and ecological value of trees to society. The report states:

- The average annual net benefit of a mature tree is \$85 in a yard and \$113 on public land.
- Urban forests can reduce annual storm-water runoff by 2-7%, and a mature tree can store 50 to 100 gallons of water during large storms.
- Trees clean the air by absorbing carbon dioxide, sulphur dioxide, nitrous oxides, and other

pollutants, and also shade cars and parking lots, reducing ozone emissions from vehicles.

- Mature trees absorb 120-240 pounds of particulate pollution each year.

- Trees and other plants help remediate soils at landfills and other contaminated sites by absorbing, transforming, and containing a number of contaminants.

- A study of children with attention deficit disorders discovered that the effect of a walk through a park is equal to two typical ADHD medications.

- Researchers from Columbia University found childhood asthma rates were highest in parts of the city where tree density was lowest.

- Green environment impacts worker productivity: In one study, workers without nature views from their desks claimed 23% more sick days than workers with views of parks.

- Patients recovering from surgery in hospital rooms with window views of natural scenes had shorter postoperative hospital stays and received fewer negative evaluations in nurses' notes.

- Trees absorb high-frequency noise, which is most distressing to people.

- Trees improve driving safety.

- Studies have found general increases of up to 37% in residential property values associated with the presence of trees and vegetation on a property.

- Planting 100 million urban trees can store and avoid up to 357 billion tons of carbon over the next 50 years.

- The net cooling effect of a healthy tree is equivalent to 10 room-size air conditioners operating 20 hours a day.

- Urban forests help create and enhance animal and plant habitats and can act as "reservoirs" for endangered species.

"In nature, nothing is perfect and everything is perfect. Trees can be contorted, bent in weird ways, and they're still beautiful."

~Alice Walker, African-American writer and poet (b. 1944).

Leap Into Action; plan for the future by planting a tree today while improving your green state of mind and the environment.

Andrea A Robinson

Gardening For Birds

Small ocean islands, like backyards, can lead to delusions. They seem like places where control over nature is possible. With their distinct boundaries, islands seem manageable, places where people can influence which species live and which do not. I find myself pondering this reality as I prepare for my 43rd year working to bring puffins back to Maine islands.

I founded Project Puffin in 1973 when I brought the first six puffin chicks from Newfoundland to Eastern Egg Rock, a treeless, seven-acre jumble of rock and meadow located six miles out to sea near New Harbor, Maine. Puffins disappeared here and at several other Maine islands because locals hunted the birds for food and feathers. By





1901, just one puffin pair remained where many colonies had once thrived. When I started the project, I had no idea that I would be doing this for a lifetime. I set out naively to restore a bit of the “balance of nature.” But now I find that I am part of that balance, and if I stop tending this restored colony, the 150 pairs of puffins and thousands of rare terns will certainly vanish.

I didn’t know it when I started, but I was practicing what Michael Rosenzweig calls “reconciliation ecology”: “The science of inventing, establishing, and maintaining new habitats to conserve species diversity in places where people live, work, or play.” My original vision was to bring back the puffins, then to remove myself. To accomplish this, I invented new methods to encourage puffins to reclaim the island—and in this I succeeded.

Bringing the puffins back to Egg Rock involved translocating, hand-rearing, and fledging nearly 1,000 puffin chicks—a first for any seabird. When they returned as adults, we lured them ashore with puffin decoys. It took eight years before the first pair nested, in 1981. Then came the predators—the gulls, eagles, peregrine falcons, mink and otters—all hungry for puffin protein. Likewise, invasive weeds, such as wild mustard and bindweed, crowded out the seabirds as they overran the island, fueled by the guano-soaked soil.

I have concluded that ongoing stewardship is necessary to deter predators and invasive plants, so that the rare seabirds can thrive. Now it is clear—despite its rugged granite shore, Egg Rock is not really an island at all. For all its remoteness, it is tied to the surrounding sea and to people by a myriad of connections.

My plan to create a self-sustaining, restored puffin colony has morphed into a form of bird gardening. This experience has led me to believe that as the impact of humans on our planet increases, the only way many of Earth’s rare species will survive is through direct intervention on their behalf.

The same lesson can apply to managing backyard habitats. Gardening that mimics natural habitats can help increase the diversity of life in our backyard “islands,” but ongoing tinkering is necessary to keep it there. Once we attract bluebirds, cardinals, woodpeckers and other birds to our gardens, we want them to stay. Gardeners are already good at this. They know that without paying attention to the weeds, their favored plants will be lost. Although the boundaries of backyard habitats are as porous as the shores of an ocean island to a myriad of interconnections beyond property lines, it is possible to make a difference—your backyard can be an oasis for wildlife.

Here are some tips for managing your backyard bird islands:



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Blue Grosbeak

©Photograph by David Wolfson

birds throughout the year. The border can take the form of a hedge or wind-break, depending on your property size. Plant several of each species adjacent to each other, selecting a mix of plants, with the tallest planted at the back edges of your property, and shorter species tiered toward your home. Include at least one thorny tree or shrub species, such as hawthorn or raspberry, for nesting. Also include evergreens, such as spruce, holly, or juniper, for cover during extreme heat and cold. Plant berry-producing shrubs—such as dogwood, service-berry, and viburnum—that will provide fruit for the birds throughout the seasons.

- **PLANT NATIVE PLANTS.** They are pre-adapted to your local climate and are more likely to leaf out and produce the right foods (e.g. caterpillars and fruits) at the right time for native birds. Native plants are adapted to local temperature extremes and they are the best bet for future changes because of their long history with local climates. If you are trying to attract birds to your backyard, the single best thing you can do is to **plant native ground covers, shrubs, vines, and trees.**

- **PROVIDE A WATER SOURCE** near protective shrubs during the summer months. On hot days, birds are especially eager to bathe and drink. Bird baths should be only an inch or two deep with a shallow slope. A dripping effect will lure even more birds. Mount the bath on a pedestal if cats prowl your neighborhood. Clean it weekly with a stiff brush.

- **CREATE A SONGBIRD BORDER** along your property edge by planting native trees and shrubs that meet the needs of



Cedar Waxwing

- **PLANT LONG-LIVED NATIVE TREES** like oaks and maples. Such trees can provide food, shelter, and singing perches for birds for centuries to come. Planting a long-lived tree is a gift to future generations of both birds and people.

- **CREATE A BRUSH PILE**

in a corner of your property. Each time a storm drops limbs, pile them up. During spring cleanup, save those downed branches and tree trunks from the community wood chipper. Layer the larger logs as a foundation, then build up the pile in successive layers. In large fields that are growing into young forest, create living brush piles by cutting neighboring saplings most of the way through the trunks, then pulling them down to the ground into a collective heap. Songbirds will find shelter from extreme weather in such cover throughout the year.

- **RAKE LEAVES UNDER SHRUBS**

to create mulch and natural feeding areas for ground-feeding birds, such as sparrows, towhees, and thrashers. Earthworms, pill bugs, insects, and spiders will thrive in the decomposing leaf mulch, and will in turn be readily eaten by many songbirds. Many people are comforted to learn that, in general, messy gardeners are the best bird gardeners!

- **REDUCE YOUR LAWN**

to favor meadow plants and taller grasses. Tall grasses provide seeds and nesting places for birds. Cut this meadow just once a year, and let the remainder of the lawn grow at least three inches tall before cutting. Take the “healthy yard pledge” (<http://tghyp.com>) to avoid lawn pesticides and herbicides.

- **NEST BOXES**

provide a helping hand for cavity-nesting birds, such as house wrens, tree swallows, chickadees, and bluebirds. Remove old bird and mouse nests each spring. When setting out new nest boxes, consider the preferred habitat for different species, as well as the size of the entrance hole, and its distance above the ground. Face boxes to the east in northern latitudes to provide extra warmth. In forests, play “woodpecker” by using a power drill to create one and a half-inch holes into dead snags about five feet off the ground. These holes will serve as nest cavity starts for chickadees and titmice.



Dr. Kress with a puffin.

Photograph: Bill Scholtz

Suggested reading:

- *Project Puffin: The Improbable Quest to Bring a Beloved Seabird Back to Egg Rock.* Stephen Kress and Derrick Jackson. 2015. Yale University Press.

- *The Audubon Society Guide to Attracting Birds.* 2006. Stephen W. Kress. Cornell University Press.

- *The Audubon Society Bird House Book: Building, Placing and Maintaining Great Homes for Great Birds.* 2014. Margaret Barker and Elissa Wolfson. Voyageur Press.

Learn more about **Project Puffin** and how you can **Adopt-a-Puffin** to support ongoing seabird conservation in Maine; visit www.projectpuffin.org. To learn more about birds and bird gardening, consider taking a course with Dr. Kress at the **Hog Island Audubon Camp**, in Maine.

© **Dr. Stephen Kress** is Director of the *Seabird Restoration Program*, National Audubon Society, Ithaca, NY 14850.

NGC Award of Excellence Non-Member #23

The Frederik Meijer Gardens and Sculpture Park

Sponsored by Michigan
Garden Clubs, Inc.

Grand Rapids, Michigan's Frederik Meijer Gardens and Sculpture Park's goal is to share high quality gardens and art with their members and the general public.

It opened in April 1995, after 13 years of planning and fundraising by the West Michigan Horticultural Society, and has continued to grow into one of the Midwest's top cultural destination thanks to its internationally renowned gardens and art.

A non-profit organization, privately funded by grants, foundations, and individual and corporate gifts, Meijer Gardens is operated by almost 200 full- and part-time staff, more than 1,000 volunteers, and supported by

gifts from more than 27,000 member households and donors.

Meijer Gardens is committed to creating a legacy of lifelong learning, enjoyment and a rich cultural experience for generations to come.

The Frederik Meijer Gardens and Sculpture Park's mission to promote the understanding, enjoyment and appreciation of gardens, sculpture, the natural environment and the arts is exceptional.

George Weigel

Sponsored by The Garden Club
Federation of Pennsylvania

George Weigel, a certified horticulturist, writer, designer, and lecturer is best known for the garden columns he's written for various Pennsylvania publications over the last 20 years.

In 2008, the Garden Writers Association named George one of America's five



Award of Excellence winners (from left): Steve LaWarre, Director of Horticulture, Frederik Meijer Gardens, Joy Bossi, and George Weigel.

best garden writers. His columns and blog articles support environmental responsibility, a cause close to his heart. He founded Harrisburg's version of "Plant a Row for the Hungry," which encourages gardeners to donate surplus produce to anti-hunger agencies.

George's tireless efforts and expansive garden-related work continue to support NGC's goals and objectives. He is a member of the PHS Gold Medal Plant Committee and a former board member of Hershey Gardens, where he helped design the one-acre Children's Garden. As an educator, George teaches gardening classes for GCFP LDS, Harrisburg Community College and Hershey Gardens.

Joy Bossi

Sponsored by The Utah
Associated Garden Clubs, Inc.

When the residents of Utah think of gardening, they think of Joy Bossi. A garden enthusiast, Joy received a degree in Botany from Brigham Young University. A certified secondary educator, author, Master Gardener, and Certified Nursery Professional, Joy has taught gardening to both novice and experienced gardeners for over 30 years.

While working for a landscape company, Joy made connections that led to her well-known radio program, "Joy in the Garden," which led to garden segments on several television programs. Joy has authored two books, *Joy in your Garden* and *The Incredible, Edible Landscape*.

Joy appears weekly on television offering timely garden advice and suggestions. For 20 years she has hosted an early morning call-in radio show, "Joy in the Garden," a lively potpourri where she fields questions about lawn, garden, and plant care. Joy is a proponent for planting from seed resulting in a bounteous harvest.

Joy's resumé of presentations, tours, classes, workshops, and demonstrations is extensive. Her work with the Weber Basin Conservancy District Demonstration Garden and Water Conservation Garden Park pro-

vided opportunities to encourage individual responsibility in conserving water resources.

Joy is a well-respected, knowledgeable gardener spreading her love of gardening in a simple, practical, and fun approach that continues to encourage Utah citizens to enhance their landscapes.

NGC Award of Excellence State Garden Club #24

The Garden Club of Georgia Inc.
Membership over 8000

Action in the Environment was an excellent two-day action workshop and Tri-refresher, in which 88 participants practiced activities that they were encouraged to take back and share with their communities. Each activity was designed to educate and demonstrate Service in Action. Experts from the University of Georgia, GA Extension Agents, and the GCG presented a series of programs designed to enlighten each participant on the why and how of our role in the environment.

Some of the activities and lectures included:

BIO INDICATORS: Betty Frog shared excerpts from *The Frightened Frog* detailing how amphibians indicate the health of our environment, amphibian habitats, and tips for providing habitats on your property.

THE DECLINE OF THE HONEY BEE POPULATION: Participants were taught how to make simple bee houses using a kit. **WHERE HAVE THE BUTTERFLIES GONE?** A lesson in why the butterfly population is in trouble and how to help ameliorate this problem by establishing your own butterfly garden.

CONTAINER GARDENING: How to use container plantings to enhance indoor and outdoor environments with an emphasis on plants that attract pollinators.

STATE PARKS: Offered insight into the Georgia state parks and their need of support from garden clubs.

Invasive species and Ecosystems; Native plants; Pollutants; Houseplants' impact on the air we breathe; Bee GAP, and more.

At the conclusion of the workshop, participants recited the NGC Conservation Pledge, signed and placed a leaf in the bog garden confirming their commitment to "ACTION in the Environment."

**South Dakota Federation
of Garden Clubs**
Membership up to 999

Life Light Gardens is a three-acre oasis located 12 miles south of Sioux Falls on the South Dakota prairie. SDFGC received a \$450 grant that went towards the purchase of seeds, native trees, and shrubs. A Monarch station was implemented to educate garden club members and the public. Members donated plant material and maintain the beds that surround the pond, promoting hands-on education.

The ecosystem that the pond and plantings have created allows children to watch turtles, frogs, and pollinators, involving them as future gardeners and volunteers. The children have participated in weeding and plantings.

Programs held in the gardens range from "About the Blue Star Marker," and "Why Wild Flowers?" to "Frogs, Bees, and Monarchs, Oh MY!"

Any fool can destroy trees. They cannot run away; and if they could, they would still be destroyed -- chased and hunted down as long as fun or a dollar could be got out of their bark hides, branching horns, or magnificent bole backbones. Few that fell trees plant them; nor would planting avail much towards getting back anything like the noble primeval forests. ... It took more than three thousand years to make some of the trees in these Western woods -- trees that are still standing in perfect strength and beauty, waving and singing in the mighty forests of the Sierra. Through all the wonderful, eventful centuries ... God has cared for these trees, saved them from drought, disease, avalanches, and a thousand straining, leveling tempests and floods; but he cannot save them from fools.

~John Muir, Our National Parks (1901)

A Year In the Life of a Kentucky Bee Keeper

(Extremely Abbreviated)



Welcome to my world as a bee keeper. Let's start with some basics and some definitions. What is the hive's make up? The bottom board of the hive is called the bottom board—go figure. You can have a fancy landing board under the bottom board but it is not needed. The next two large containers on top of the bottom board are called deep hive bodies. That is where the bees raise their family and store their food. There are two top boards, an inner board you can't see, and an outer board that fits over the top of the hive. There are smaller containers that are placed on top of the deep hive bodies, one at a time, during a nectar flow for the bees to store the extra honey that the bee keeper will harvest at the end of the season. Inside each hive body and each super are ten honey storage racks called frames. These hold the wax comb that is made into the perfectly polished cells that contain the honey, pollen, and baby bees. Bees always fill the lowest container first and then move upward. The bee keeper does not fool with the deep hive bodies, those belong to the bees. Clear as mud?

There are three types of honey bees: One queen, drones, and workers. The queen mates soon after she hatches with a drone (male) at exactly 20 feet off the ground one time and then lays eggs constantly for three to five years. Drones mate with a queen, if they are lucky (they die immediately after this happens), and they eat—that's it. The worker bees (females) do all the work. They live only 35 to 45 days. The first two days they clean cells and keep the brood warm. The next three days they feed the older larvae. The next six days they feed the younger larvae. The next six days they produce wax, build comb, and transport food

within the hive. The next four days they spend guarding the entrance. For the rest of their lives they visit flowers, pollinating them, and collect pollen and nectar. Okay, let's get started.

January

The weather starts to get really cold so the bees spend most of their time huddled up around the queen inside the hive. There is only one queen per hive. When the hive needs a new queen, the workers (female bees) spread royal jelly on a half dozen pupae to produce new queens. The first queen to hatch kills all the other unhatched queens. Sounds familiar.

February

This is a critical time for the bees, especially if they have not stored enough honey and pollen to survive the winter. The bee keeper may have to feed the bees with watered down honey or sugar water on warm days to prevent the bees from starving. Winter kill is a serious problem in the northern states. Remember, bee keepers allow the bees to have two large containers called deep hive bodies for their living quarters and food storage.

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March

This is decision month to prevent the hives from swarming. This is the time of the year for a nectar flow and the queen starts laying more and more eggs for more and more bees. Swarming happens when the hive becomes too crowded and the queen leaves with the most productive





half of the bee population. The queen flies to a nearby bush or tree and the bees form a football around her. Sentries are sent out to look for a new home. Within 48 hours they come back and do dances to tell where new locations may be. The queen chooses one of the dances and off they all go to that new location. After a swarm, there is very little chance of much honey production from that hive, so, the beekeeper tries to prevent the swarm. He does this by putting small containers, called supers, on top of the hive one at a time. Too soon and the super won't be full, too late and the hive will swarm; this is a critical decision and not one for an amateur. The bees start filling up the supers (pictured at lower right). They deposit the nectar in the cells and fan them to evaporate the water until it is just the correct consistency. They then seal the cells with wax.

April

The beekeeper continues to monitor the hive and continues to add supers as needed. The only time bees make more honey than they can eat is during a nectar flow. In Kentucky, the main nectar flow is from March to July or August. After that, we

usually have some sort of drought that will end the nectar flow.

June

Continue to monitor the hive and add supers when appropriate.

July

Continue to monitor the hive and add supers when appropriate. Get equipment ready for harvest which includes tools, jars and, of course, the extractor (centrifuge).

August

In some states, the honey is taken twice a year, in early summer and late fall. In Kentucky, I take it only once a year, in early fall, because once the summer drought starts and the nectar flow slows, the bees start eating out of my supers instead of their



hive bodies. So maximum harvest comes before that happens. Three days before I take the honey, I put “bee escapes” in the hives that let the bees exit the supers but they can’t get back in. Then when I take the supers off to harvest the honey there are practically no bees in the supers. Very important, you can’t harvest the honey if there are thousands of bees all over the honey cells. I also use my smoker (pictured at left) every time I work with the hive. They think there is a forest fire and they are going to have to fly a long way or die so they start eating the honey. That calms them and they really don’t care about what you are doing because they are too busy enjoying the honey. I then extract the honey from the frames in the supers. We don’t have time to discuss this in this article but if you go to YouTube, type in Bud Qualk in the search window, my TV shows will all come up and you can scroll down to my show called “BEES” and see the whole process in color.

September

I take the empty frames, after extraction, back near the hives to let the bees feed on the honey remnants and clean the frames at the same time. After they are clean, I put the frames, super and all, in plastic bags with moth crystals to keep away the wax moths and worms. The worms can eat all your frame wax and render them useless in weeks.

October

I continue to monitor the hive and, like some beekeepers, I sometimes put Mite strips and virus patties to overwinter in the hive to protect them from varroa and tracheal mites and foul brood diseases. These will be removed in early spring, weeks before the first super goes on.

November

By this time of the year, most of the honey and pollen is stored for the winter. By lifting up on the hive, one can tell how heavy it is and so how much honey is inside. Heavy

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from North Island,
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hives are good to go but light hives will have to be fed all winter and watched closely or the bees will starve. I continue to monitor the hives, especially the entrance. There are a number of problems that can be spotted by what is happening at the hive entrance. One of the sadder issues with the hive is that all the drones are thrown out of the hive before winter. No drones are allowed to overwinter in the hive because they drain the food supply.

December

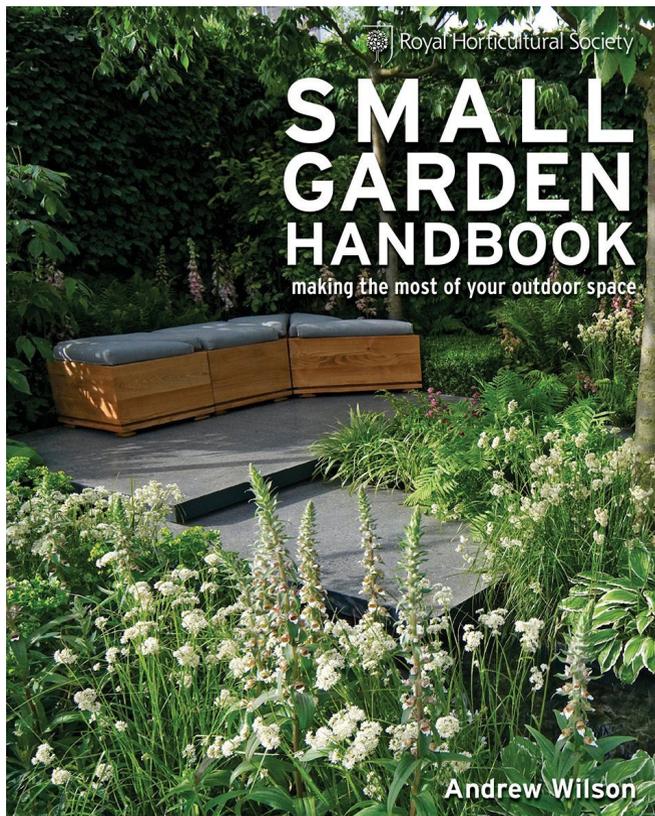
I feed sugar water to the weak hives and continue to monitor the hive entrance. It is time to repeat the cycle again.

I hope you enjoyed my trip though the year at my apiary. Yes, that is what it is called. If you are interested in bee keeping give me a call, I would gladly help you get started. And, don’t forget to go to YouTube and watch the whole show. Until then, Bee good.

—**Bud Qualk**, *NGC BeeGAP Chairman*;
budqualk@gmail.com

Book Reviews

Linda Jean Smith
NGC Book Review Chairman



● ***Small Garden Handbook: making the most of your outdoor space*, by Andrew Wilson, photographs by Steve Wooster, Firefly Books, Buffalo, NY, 2013. Large paperback, 224 pp., ISBN-13: 978-1770851924, \$24.95.**

Author Andrew Wilson is an award-winning designer of contemporary gardens worldwide, as well as the founding editor of *The Garden Design Journal*.

Steve Wooster is a well-known photographer and artist who specializes in garden photography and has contributed to many books and publications.

The book has more than 300 full-color photographs and illustrations and is divided into nine sections. Wilson states, “The book will help from the start of a project to the detailed choices for materials and appropriate species that will complete the garden. Guidance on maintenance and management is also included to enable the garden to evolve sustainably into the future.”

Each section has 15 ways to help the gardener. The sections include Basics, Design, Styles, Materials, Boundaries, Structures, Water, Planting, and Upkeep.

This is an easy-to-follow book on landscape design for anyone wishing to create or revitalize a garden. Although it is geared to small gardens, the main concepts can be applied to any size garden. There is very little not discussed in the book. It covers raised beds, types of boundary material, from fences to hedges, and how to use them or hide them. Water features and water use is covered. Types of gar-

dens, from cottage to Mediterranean; minimalist and modern, are discussed and how to add the gardeners ideas to the design. The language is not overly technical and so can be easily understood by the beginning gardener or landscaper. It is also a handy reference book where the reader can find answers to landscaping questions or come up with fresh design ideas.

Everybody needs beauty as well as bread, places to play in and pray in, where nature may heal and give strength to body and soul alike.
~John Muir, *The Yosemite* (1912)

● **Attracting Native Pollinators: The Xerces Society Guide, Protecting North America's Bees and Butterflies**, by Eric Mader, Matthew Shepherd, Mace Vaughan, Scott Hoffman Black, in collaboration with Gretchen LeBuhn, Storey Publishing, North Adams, MA, 2011, Large paperback, 384 pp., ISBN-13: 978-1603426954, \$29.95.

There are several contributing authors to this book. The first four are part of the Xerces Society: Eric Mader is the Assistant Pollinator Program Director; Matthew Shepherd is the Senior Conservation Associate; Mace Vaughan is the Pollinator Program Director; and Scott Hoffman Black is the Executive Director. Gretchen LeBuhn is an Associate Professor of Biology at San Francisco State University. The Xerces Society is a non-profit organization, founded in 1971, for the protection of invertebrates worldwide. It is named after the extinct Xerces blue butterfly.

Although printed in 2011, this book is still available and can be purchased on Amazon for \$22.67. With some of NGC's projects focusing on bees and butterflies, I thought this book might be of interest to NGC members. The book consists of four parts and begins with "Pollinators and Pollination."

Part two is "Taking Action," and is the largest section of the book. This section covers what can be done to protect and attract pollinators in a myriad of areas, from homes, school and community gardens, farms, natural area, greenspaces, parks, and golf courses. There are chapters on nesting and egg-laying sites, pupation and overwintering sites, and providing foraging habitats.

Part three discusses "Bees in North America." This is an overview of the diversity and taxonomy of bees. There is a section that helps you distinguish bees from flies, wasps, and other insects. The last section is an identification guide, with photographs and profiles of bees, and includes conservation concerns.

Part four, "Creating a Pollinator-Friendly Landscape," does just that by giving you drawings and ideas for your home, field, or farm, as well as drawings and ideas for a border habitat, roadside planting, school and botanical garden. Tables of plant lists are divided by regions, so whether you live in the northeast or southwest or anywhere in between, there are plants and ideas you can use. Here, too, are pictures and a list for identification—but of butterflies. The book ends with an appendix with lots of reference information on other books, seed sources, and useful information.

If you are concerned about pollinators and what you can do, this is a very extensive book and is easy to read. There are great illustrations, photographs, and graphic designs to make understanding easier. There are lots of boxes with interesting facts and information, such as planting over a septic field with pollinator-friendly wildflowers or pollinator friendly shrubs or ground covers on slopes too steep to mow. The book would make a nice field guide, but its hefty size might get in the way.

THE XERCES SOCIETY GUIDE

Attracting NATIVE POLLINATORS

Protecting North America's Bees and Butterflies



Ensure pollination in your garden, orchard, or farm

Identify the flower-visiting insects of your region

Provide host plants and nesting sites for bees and butterflies

Create a landscape that is beautiful, diverse, and pollinator friendly



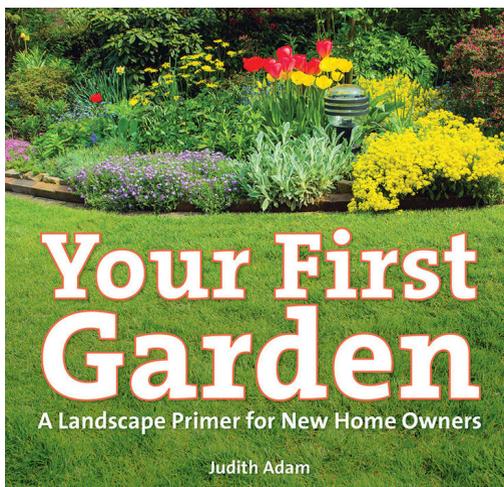
FOREWORD BY DR. MARLA SPIVAK

● **Your First Garden: A Landscape Primer for New Home Owners**, by Judith Adam, Firefly Books, Buffalo, NY, 2016, Large paperback, 120 pp., ISBN-13: 978-1770857087, \$19.95.

Author Judith Adam is a horticulturist and landscape designer from Toronto, Canada. She is the author of several gardening books and also writes for many magazines, including *Canadian House and Home* and *Canadian Gardening*. She is a frequent guest on gardening shows on HGTV and Discovery television networks.

Although the title says: *Your First Garden*, this book would work for anyone wanting to landscape their yard. It is a beginning book, but that's what makes it interesting as it keeps things basic and covers the most asked questions and does not try to answer everything.

There are seven chapters to the book. The first chapter, "Adding Value & Enjoyment," begins with making a plan and how to get it onto paper, starting with a ten-point assessment survey and the elements of landscape design. There are pictures and diagrams and checklist to help you. Chapter two, on "Soil," talks about the chemistry of the soil, the types of soil, and amending the soil. Chapter three gets us to work with "Planning & Creating Garden Beds." Where do you want the beds? What kind of beds do you want? This chapter also covers the tools you will need and the requirements of water and light for the gardens. "High Performance in a Low-Maintenance Garden" is the topic for chapter four. Here the reader will learn fertilizer basics and plant nutrition, winter hardiness, staking, and mulching. Chapter five discusses "Annuals & Perennials," and chapter six covers "Trees & Shrubs." These last three chapters also give suggestions for plants that you may want in your garden in ten different charts (with pictures) of plants either by season, use, or care. Each of these charts has about six choices. The final chapter, "A Visit to the Garden Center," helps the reader navigate what to look for, how to read the labels, what zones are, when they visit a garden center.



If you've taken a Landscape Design School or a Gardening Study School, you probably won't need this book, but if there is someone in your club who is just starting out, this would make a great gift and is a good way to start. It also simplifies things, so reading it also helps focus, if you are going to redo a garden or change some landscaping.

Begonia San Francisco™ F1 *Begonia boliviensis*

Looking for a plant with lots of color and personality that's easy to care for? Begonia San Francisco™ is your answer! The huge, warm salmon-pink flowers look a lot like a fuschia, but can handle all the sun and heat that Mother Nature can dish out. The full, lush plants will flower better in full sun, but can also tolerate some shade.

—National Garden Bureau, ngb.org

Future 4/5 Stars?

- NGC Schools are a wonderful membership promotion! Learn about new things that improve our gardening practices.
 - A combined application handbook—completion, hopefully, by 2017.
 - Only one refresher is allowed per year. NGC members must learn about how neonicotinoid chemicals are destroying our butterflies!
 - NGC Schools can now be registered with Katie Roth at NGC Headquarters by sending in \$5. Use the top of form # 05 – 1 without listing the instructors. This is a helpful plus for all school chairmen! The schools are then immediately posted on the NGC Website.
 - Hummingbirds are extremely attracted to red!
 - An extensive list of plants that attract hummingbirds can be downloaded at www.pollinator.org.
 - If applied for, a Four-Star Certificate is available to an NGC Member who has successfully passed all four of the schools and has become a Flower Show Judge.
 - If applied for, a Five-Star Certificate is available to a NGC Member who holds “master” status for all four schools.
 - Both 4- and 5-Star interactive application forms are to be found on the NGC website—gardenclub.org. Be certain to have your state president sign your application.
 - Extend your knowledge and join this prestigious group.
- Julie Schoenike**, NGC 4/5 Star Chairman



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The National Gardener

- Winter Issue - Jan-Feb-Mar**
Will be mailed January 1
- Spring Issue - Apr-May-June**
Will be mailed April 1
- Summer Issue - July-Aug-Sept**
Will be mailed July 1
- Fall Issue - Oct-Nov-Dec**
Will be mailed October 1

Deadline
for the Fall Issue
Copy due by August 1, 2016



Don't Let the Frogs Croak!

By Jacqueline Unger

■ **Greg the Frog:** Hi Gracie, how are you doing today?

■ **Gracie the Frog:** I just heard terrible news on the Toad Day Show. Al Croaker said that amphibians are the most endangered group of animals on Earth. According to Animal Planet, frogs are in a perilous condition with 170 species lost in the last ten years.

■ **Greg:** Wow. I guess I wasn't imagining that there were fewer relatives at our last family reunion.

■ **Gracie:** It's only going to get worse because there are so many problems. Climate changes are causing many habitats to dry up. The frog neighborhoods have to move further up the mountainsides so they can find places with enough moisture to lay their eggs. What is going to happen to them when everything dries up?

■ **Greg:** You're right...this sounds really serious.

■ **Gracie:** It is serious, Greg! My favorite swamp just got drained, the forests are getting cut down, and the dammed river

is preventing me from getting good water. Frogs everywhere are losing their access to important resources like food, water, and shelter. Every year, millions of frogs get taken from their homes to be used in lab dissections, as pets, bait, or eaten for food! People love to eat our legs!

■ **Greg:** Well, I mean...I know I look delicious and all, but my legs are mine. No one else can eat these babies.

■ **Gracie:** I think you're missing the point. If the frog population dies off, the world is in for some big issues.

■ **Greg:** Obviously! It'd be a sin to kill something as good-looking as me.

■ **Gracie:** It would be a sin to let your head get any bigger. Frogs really are important though. Here, let me explain. Frogs eat a large quantity of insects, including those that can transmit fatal diseases like malaria. The mosquitoes actually happen to be one of my favorite snacks to eat. Not only do we help with eating deadly disease-carrying bugs, but we also help with medical advancement. There are many frogs that can produce skin secretions that have potential to improve human health. The secretions can be used as pharmaceuticals and protect from drug-resistant microbes. Humans need the frogs in order to stay healthy, even though they will rarely admit it.

■ **Greg:** Wait, so let me get this right. Humans need us so they can stay healthy?

■ **Gracie:** Yup! Helping humans isn't the only thing that the frogs do, either. I still have a lot more to tell you about how important we are. Frogs are thought to be accurate indicators of environmental stress. The health of the biosphere can be indicated by the health of frogs. That's because we frogs have permeable skin which easily absorbs toxic chemicals. It makes us much more susceptible to changes and disturbances in the environment.

■ **Greg:** So we warn humans when things aren't right with the environment?

■ **Gracie:** That's right! We clean the environment, too.

■ **Greg:** Whoa, whoa, whoa, we clean the environment?

■ **Gracie:** You probably can't remember being a tadpole since it was so long ago for you. As tadpoles, we fed on the algae to keep the waterways clean and we filtered the drinking water, too.

■ **Greg:** Does that mean that when my mom says I didn't do my chores when I

was younger, I can say that I cleaned the water?

■ **Gracie:** I don't think it works that way, but if it did, then frogs should get an award. While the tadpoles keep waterways clean and water filtered, adult frogs serve as important meals for a wide range of predators. We are such an integral part of the food web that if our population were to become extinct, the entire web would be in trouble. Negative effects would ripple throughout the entire ecosystem.

■ **Greg:** I never realized how much our existence really mattered to the rest of the world. I always thought we just looked and sounded really cool. I guess it goes a lot deeper than that.

■ **Gracie:** It does, but that doesn't mean we don't still sound cool. Our voices are lovely as long as people don't let us croak.

—**Jacqueline Unger**, *Ship Bottom, New Jersey*, is the 2015-2016 NGC High School Essay Contest winner. She's in 10th grade at Southern Regional High School, in Long Beach Island, New Jersey. The Central Atlantic Region sponsored her in the contest.



At the 2016 NGC Convention, “worker bees” fashion floral designs that will decorate tables for the Life Members Banquet.

How to Prevent and Treat Blackspot

Blackspot is a fungus that affects rose bushes. Black spots appear on leaves which enlarge over time and make the foliage around the spots yellow. The leaves will go from green to yellow and then drop to the ground. If left untreated, it can defoliate the entire plant. The disease spreads by rain or overhead watering and can affect other nearby plants. Heirloom Roses' Head Grower, Don Merrick, provides some tips on how you can prevent and treat Blackspot.

■ **Plant disease-resistant roses:** There are many varieties that have strong resistance to Blackspot and other fungal abnormalities. Some of our favorite varieties that exhibit good to great disease resistance are: 'Apricot Abundance,' 'Electron,' 'By Appointment,' 'Welsh Gold,' 'Morning Has Broken,' 'Care-free Beauty,' and 'Highfield.'

■ **Find the right spot:** Plant roses in an area that gets 6-8 hours of sunlight daily. They also need good air circulation. Space them out to give good air movement

and prune out some of the inner branches to allow more air movement into the center of the plant. Also, plant them in a spot that has good drainage. You can also add well-composted organic matter into the soil to make the soil friable and well drained. This will also encourage an abundance of beneficial organisms.

■ **Water correctly:** Too much water and water at the wrong time of day will encourage the outbreak of Blackspot. The best rule of thumb is to water when the soil is dry to the touch at about 2-3" below the surface. If it is during the cooler spring months, a deep thorough soaking once a week is sufficient. If it is raining, check the soil to determine if watering is necessary. During the hotter summer months, it will be necessary to water more frequently and deeply.

■ **Keep the foliage dry:** If using an overhead sprinkler, it is best to water mid to

late morning, giving the roses a chance to dry off during the day. The best method to keep foliage dry is to water the soil only. This can be accomplished by using any of the excellent drip systems or soaker hoses on the market. Also, avoid standing water around your roses and keep the area around your



roses debris free. Blackspot spores will fall to the ground and stay in the leaf matter/mulch at the base of your roses. Avoid splashing water as the spores can reattach to the undersides of the leaves when they are carried by splashes of water.

■ **Prune properly:** Remove any weak or damaged branches to keep your roses happier and healthier. Cleaning up the debris is paramount to keeping Blackspot at bay. All trimmings, debris and dead leaves need to be removed and destroyed immediately.

■ **Know your enemy:** Recognizing the disease quickly allows you to nip it in the bud. Look for circular black spots that are serrated in appearance on the surface of the leaves. Always check the lower leaves, as they will become infected first. Upper leaves will be yellow and fall off easily. Roses with Blackspot start to grow less vigorously and blooming will be reduced or stop all together.

■ **Treat immediately:** If your rose has been affected, remove all infected leaves from the rose and the ground. Do not compost these leaves. Keep the ground surrounding your roses free of leaf debris and weeds. Then, apply the right type of chemical controls at the right frequency and duration during the most critical times.

■ **Prevent early:** An ounce of prevention is worth a pound of cure. If you can get ahead

of the game and have your roses sprayed before there is noticeable damage, then your problems will be reduced or possibly eliminated. It is a good idea to spray a fungicide once every 7-14 days during the growing season. There are many different chemicals to use and there are several organic sprays that can be used with fairly good success. It is vitally important to change up the chemistry, or alternate chemicals throughout the growing season to avoid chemical resistance by the fungus.

■ **Prune in spring:** Not all varieties respond the way we want them to with spring pruning. The once-blooming types of roses will need to be pruned hard just after flowering in the spring and summer to encourage flower bud set for the next spring. This is also a good time to clean them up and take out any diseased wood. Make your cuts well below the Blackspot-damaged area of the plant to ensure that you are removing anything that may be on or in the canes. In the spring, be sure to cut back the canes that are infected with Blackspot. It should be fairly easy to see the black spots on the canes and easy to remove them. Again, whenever you are pruning or cleaning up around your rose, it is imperative that you clean your area up completely.

■ **Clean your pruners:** Another good tip is to disinfect your pruning tools with Lysol disinfectant spray every 15-20 minutes. A 10% bleach solution is also a great way to keep the spores at bay.

—Heirloom Roses



At left: blackspot on leaves; healthy leaves are pictured on the right.

National Garden Clubs, Inc



International Photography Competition
Celebrating the National Parks System - USA
entitled:

"In wilderness is the preservation of the world"
Henry David Thoreau

The contest is open May 1 - August 1, 2016. All the admissions will be juried. The 30 highest scoring images will be displayed and judged in Portland, Maine, September 21-24, 2016, at the NGC Fall Board Meeting. Competition Submission - login at: <http://cgburke.com/ngc/>
This competition is open to members of National Garden Clubs, Inc. and its affiliated organizations.
For more information: arabellasd@aol.com



Fees:

You may enter as many as three images. The fee for the first image is \$15 (U.S.) and \$5 (U.S.) for each additional image.

Image Preparation Guidelines:

All images must be submitted in the "JPG" format.

Image Resolution:

Each image must have a minimum of 300 pixels per inch.

Dimensions:

When the image resolution is 300, the maximum allowable dimensions for an image are 14 inches (4200 pixels) on the long side and 11 inches (3300 pixels) on the short side.

For images having a resolution greater than 300, a proportional increase in their dimensions is allowed. As an example, for an image with a resolution of 350 pixels per inch, the long side dimension may be 4900 pixels and the short side be 3850 pixels.

File Size: Minimum two Megabytes.



Blue and Gold Star Markers

Effective May 1, 2016, through May 1, 2018, the following price increases for the 2016 Blue and Gold Star Markers are as follows:

- **Highway/Memorial Marker**—Delivered with a 7' Pole (Includes Shipping) = \$1,470 (an increase of \$60)
- **Memorial By-Way Marker**—(Includes Shipping) = \$490 (an increase of \$20)
- **Replacement Posts**—\$325 (No Change in Price)
- **Highway or Memorial Marker Refurbishment—No Post**—(Round Trip Freight included) = \$800 (No Change in Price)
- **Highway or Memorial Marker Refurbishment With Cap Repair—No Post**—(Round Trip Freight included) = \$900 (No Change in Price)
- **Extra Shipping Charge** (Western States) **Highway and Memorial Markers ONLY**—\$50 (No Change in Price)

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each Blue Star chairman and garden club president.

Thank you for your continued dedication and support of this vital NGC Blue Star and Gold Star Families Program.

If this NGC chairman can be of assistance, please call or email; I'm here to serve.

Semper Fi,

—**Andrea T. Little**, *NGC Blue Star Memorial Markers Chairman*; Ph: 508-329-1630 or Cell: 352-682-6758

Anthropocentric as [the gardener] may be, he recognizes that he is dependent for his health and survival on many other forms of life, so he is careful to take their interests into account in whatever he does. He is in fact a wilderness advocate of a certain kind. It is when he respects and nurtures the wilderness of his soil and his plants that his garden seems to flourish most. Wilderness, he has found, resides not only out there, but right here: in his soil, in his plants, even in himself...

~**Michael Pollan**, *Second Nature: A Gardener's Education*

Gardening Study School News



Please note that the school registration process has been greatly simplified. Upon state approval, a GS School can be registered directly at NGC Headquarters by sending in \$5 with Registration form 05-1, which has been signed by the State School and Region Accrediting Chairmen **without listing the instructors**. This allows the information to be immediately posted on the NGC website. Of course, the instructor information should follow as quickly as possible.

As part of the Gardening Study Schools “Reconciliation Ecology” series, please read the article about managing your backyard bird islands, “Gardening for Birds,” by Dr. Stephen Kress, beginning on page three of this issue. Dr. Kress, founder of Project Puffin, in Maine, is Director of the Seabird Restoration Program and Vice President for Bird Conservation of the National Audubon Society.

Bring Gardening Study Schools to your state!

—**Barbara Hadsell**, *NGC Gardening Study Schools Chairman*; barbarahadsell@cs.com

At our National Convention, in Grand Rapids, many of your state presidents reported on the wonderful projects our members and member clubs have in progress across the country to help our pollinators—congratulations! NGC has a quarterly teleconference with the organizations that are part of the pollinator network and we love to share your stories—and they love to hear about them! If you have a special project that you would like to share, please send me the particulars! Pictures would be wonderful! At this time, the country is almost one-fifth of the way to one million gardens! Remember to register your sites at millionpollinatorgardens.org and **make sure to select NGC as your organization!**

You should be proud—You Are Truly “Leaping Into Action” and Making an Incredible Difference!

—**Becky Hassebroek**, *MPGC Liaison*, beckyhassel@aol.com

Inviting Pollinators

Invite pollinators to your neighborhood by planting a pollinator-friendly habitat in your garden, farm, school, park, or just about anywhere.

Though native plants are most helpful to local ecosystems and pollinators; here is a list of plants that do pretty well everywhere and are widely available:

Lavandula spp. (Lavender)

Rosemarinus officinalis (Rosemary)

Salvia spp. (Sage)

Echinacea spp. (Coneflower)

Helianthus spp. (Sunflower)

Cercis spp. (Redbud)

Nepeta spp. (Catnip)

Penstemon spp. (Penstemon)

Stachys spp. (Lamb’s ears)

Verbena spp. (Verbena)

Phacelia spp. (Bells or Phacelia)

Aster spp. (Aster)

Rudbeckia spp. (Black-eyed Susan)

Origanum spp. (Oregano)

Achillea millefolium (Yarrow)

—**Million Pollinator Garden Challenge**,
millionpollinatorgardens.org/



**NATIONAL
WILDLIFE
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Would you like your garden to be highlighted on our partner's website? Here's your chance!

The National Wildlife Federation's **Garden For Wildlife** team needs your help! We are in need of photos of Certified Wildlife Habitats to be used on our website, publications, and other materials. Photos of all Certified Wildlife Habitats, including native plants, wildlife, and/or the Certified Wildlife Habitat sign are welcome.

Please make sure the photos you send are high quality. And, a photo release will be required. Please contact me, and I will be glad to forward you more information.

—**Becky Hassebroek**, *NWF Liaison*, beckyhasse@aol.com

As members of National Garden Clubs, Inc., we work hard to make our homes, neighborhoods, communities, and our world safer and more beautiful for all of those who inhabit it—whether they be human, animal, or plant. Along the way, we form lifelong friendships with those who work by our sides.

Two of our “buddies” are retiring from their positions, even though we know they will forever remain a part of our garden club community.

THANK YOU
Kathy Romine,

our Headquarters Administrative Assistant,
and

Susan Davidson,

our *TNG* Editor,
for your many years of service to
NGC and to us.

OUR WORLD is definitely a better place
because of your hard work and dedication!

With love,
Your NGC Family

NGC Mission Statement

NATIONAL GARDEN CLUBS, INC. provides education, resources, and national networking opportunities for its members to promote the love of gardening, floral design, and civic and environmental responsibility.

NGC Calendar Conventions

- 2017 Richmond, Virginia
May 16-21 (Installation year)
- 2018 Philadelphia, Pennsylvania
May 21-24
- 2019 Biloxi, Mississippi
April 30-May 5 (Installation year)
- 2020 National Garden Clubs needs a state or region to host the 2020 convention. Please consider giving us the opportunity to visit your state.
- 2021 New Jersey (Installation year)

Fall Board Meetings

- 2016 Portland, Maine
September 19-25
- 2017 St. Louis, Missouri
September 12-16
- 2018 Orlando, Florida
September 25-30
- 2019 St. Louis, Missouri
- 2020 North Dakota
- 2021 St. Louis, Missouri

NGC Schools News

NGC's Schools Committees are kept busy. Nineteen of our twenty-seven members met in sessions lasting seven hours at the recent convention in Grand Rapids, and nine of us attended the Tri-Refresher at Frederik Meijer Gardens and Sculpture Park, one of the leading cultural destinations in the Midwest. New 4- and 5-Star Members were announced at convention, and we congratulate committee members Victoria Bergesen and Patricia Rupiper who achieved 5-Star status.

We are delighted that **schools are taking place all over the country**—the NGC website lists scheduled Courses 1, 2, 3 and 4 for all three schools (Environmental Studies, Gardening Study, and Landscape Design). Five Multiple Refreshers have taken place this year and four more are scheduled, including one following the NGC Fall Board Meeting, in September, in Portland, Maine.

At our meetings some **member misconceptions** were discussed:

- Some states that have not held schools (or that have only held Flower Show Schools) think they cannot conduct our schools because they may be too much work and cost too much and they may not find any instructors that NGC would approve. Rather than holding these beliefs, please **contact our Schools Chairmen or the Accrediting Chairman assigned to your region to discuss and obtain more information**. With several local committee members, holding a school may not be so hard, and many schools make money. There are many options for obtaining instructors. You are not limited to a very small pool of approved instructors, as is the case with Flower Show Schools. Generally you utilize local talent and are not paying for airfare and lodging, as is the case for FSS.

- Some think that you have to be a Consul-

tant in all three schools in order to receive refresher credit at a Multiple Refresher. Not true. Any Consultant from any school who is in good standing can receive refresher credit for at least one school.

- Some think that only Master Consultants may attend a Multiple Refresher. Not true. These events should be open to everyone, Consultant or not. Consultants and Master Consultants may receive refresher credit. Master Consultants may receive multiple refresher credits for all schools in which they are Masters.

Some **suggestions and reminders** from our convention meetings:

- When recruiting instructors, provide information about NGC and NGC Schools (and about your State Garden Club) so that they understand they are not just being asked to give another “garden-club talk.”

- Send your school course registration forms to your NGC Accrediting Chairman, as well as to the NGC Schools Secretary. Follow the Handbook instructions for each school as there are some procedure differences for each school.

- Don't create your own forms (this is unnecessary time and work). Use the Schools Forms on the NGC website. Each NGC schools chairman deals with multiple schools in multiple states so your information will be processed most efficiently when it is provided within a standard format.

- The role of the course proctor is very important in ensuring that all tested material has been covered by the instructor. This increases the likelihood that students will pass the exams. When possible, utilize Consultants as proctors.

- Test for success, not failure. Local and state schools chairmen should screen exams to make sure they are not confusing and do not contain trick questions (before they even go to the NGC Accrediting Chairmen). Work with your instructors to help students understand rather than memorize and test on core concepts rather than specific details.

- Administer tests daily—at the end of each

day of classes or immediately after the class, rather than using the “old model” of having all tests on a third day (which requires travelers to incur an additional day of lodging expense).

■ Students/Consultants need to maintain and track their own school records, in addition to those records kept by state schools chairmen and NGC.

■ If your state has school councils or a tri-council, students are eligible to join when they become Provisional Consultants (after completion of two courses of a school, including passing the exams). Give them “homework” on the first day of Course II—information about the council (including your newsletter) and a dues form. Then follow-up the next day. Many may join when they are a “captive audience.”

■ If your good-standing status expires this year (December 31, 2016), be looking for refresher opportunities.

■ All involved in the administration of school courses and refresher events need to **make sure that outlines, exams, and handouts, as well as promotional materials and registration forms, are neat, professional, and correct.** Materials should be screened and proofed at every level (local, state, national). State chairmen should not receive messy materials, typos, grammatical errors, etc. from local chairman and should not pass poor quality materials on to national chairmen—and these kinds of materials should never reach our students. Our work product should reflect the pride we have in National Garden Clubs, and in our State Garden Clubs, and should always make a good impression on the public, our students, and our instructors.

Leap into Action to plan, promote,



A floral design by Patricia Bazany, in honor of Central Atlantic Region Director Anne Bucher, greeted NGC conventioners in the foyer of the Amway Grand Plaza Hotel, Grand Rapids, Michigan.

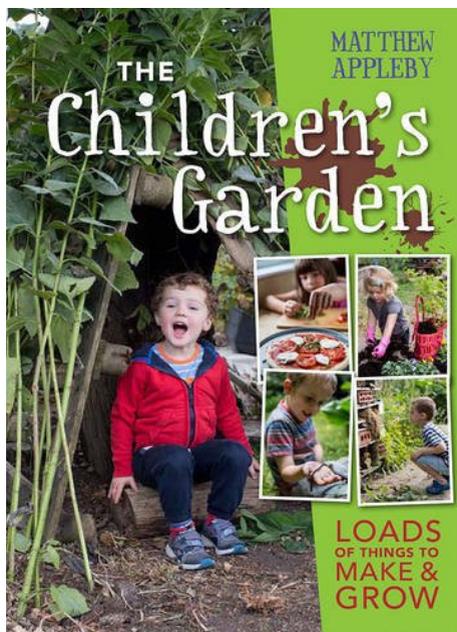
conduct, support, and attend NGC schools and refreshers, which can help educate club members and the public about good environmental, gardening, and landscape design practices.

—**Greg Pokorski, ES, GS and LD Schools Coordinator, GregPokorski@earthlink.net**

Children's Book Reviews

Diana Bonner

NGC Children's Book Review Chairman



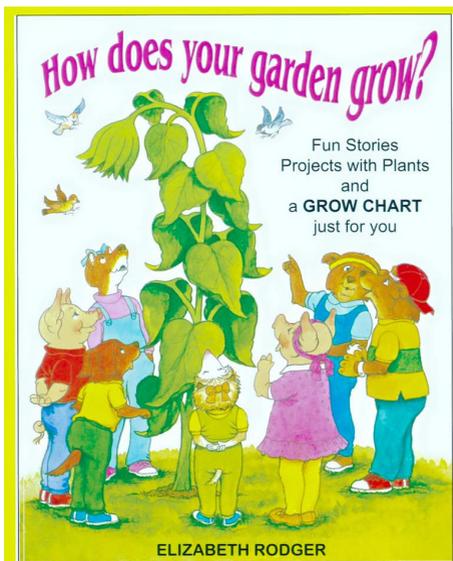
***The Children's Garden—Loads of Things to Make and Grow* by Matthew Appleby, 144 pages, hardcover, \$22.99, Ages 5+, Frances Lincoln, ISBN 978-0-7112-3633-2**

An excellent activity book just released March 2016. The book offers 52 family projects, one for every week of the year and is divided into seasons. Activities include nature trails, cooking, crafting, growing plants and vegetables, and so much more. *The Children's Garden* is an invaluable guide for families looking to enjoy and engage with the natural world.



I have always befriended animals and have said many a good word for them. Even to the least-loved mosquitoes I gave many a meal, and told them to go in peace.

~John Muir, John of the Mountains



***How Does Your Garden Grow?* by Elizabeth Rodger, 8.5x11, 64 Pages Lillibett Books, \$17.00, ISBN: 978-0-9839239-7-8, Order at [www.lillibettbooks.com/Little Kids.html](http://www.lillibettbooks.com/LittleKids.html)**

Another new book just released March 2016. This is a super fun book that is an introduction to children to the joy of gardening. There are stories, many projects with plants, and a grow chart. Does your child know how to build a scarecrow, plan a butterfly garden or make a bird feeder? If not, this is the book for you!

The Children's Garden and *How Does Your Garden Grow?* are two excellent sources to encourage children to get "down and dirty," learn about nature and enjoy being outdoors. It is hoped these books will inspire a lasting and magical relationship between children and nature.

Few are altogether deaf to the preaching of pine trees. Their sermons on the mountains go to our hearts; and if people in general could be got into the woods, even for once, to hear the trees speak for themselves, all difficulties in the way of forest preservation would vanish.

~John Muir, 1895

garden therapy

Spread Your Needs to
Those with Special Needs.

Everyone should have the pleasure of gardening! Garden therapy (horticulture therapy/therapy gardening) is defined as the use of garden-related activities as an aid to the recovery and rehabilitation, the enjoyment and pleasure, of our disabled—physical or mental, young or old.

Garden Therapy has long been one of the most rewarding and popular objectives of garden club work. Club members are willing and eager to share their time, knowledge, plant material, imagination, and enthusiasm to others, who may have special needs, and to share some joy they have found in their own garden club activities and experiences.

Garden related is defined as: the growing of plants; the artistic use of plants and other natural materials; study of birds, butterflies, nature, and conservation; and the exhibiting of knowledge, interests, and skills in these areas.

When you are planning your garden club programs and projects this year, please try to include a comprehensive project or program on Garden Therapy. It may be in a school, hospital, or institution; or for home-bound, lonely people, including children, and children with special needs.

Member Services has a Garden Therapy Manual. The price is \$10. This manual has 70 pages and contains useful suggestions for projects and programs.

Be sure to apply for NGC Award No. 19,



or No. 48. Also, be sure to follow all award requirements and submit by deadline.

—**Bonnie Borne**, NGC *Therapy Gardens for the Disabled* Chairman

Landscape Design Schools

he Landscape Design Committee congratulates the many state presidents and state LDS chairmen who have responded to the theme of NGC President Sandra Robinson, to “Leap Into Action.” In 2016, there are already planned about 50 schools and refreshers, as well as Multiple Refreshers involving Landscape Design. One does not have to be a consultant or a garden club member desirous of becoming a consultant to be able to attend any of these events. Master Gardeners are also welcome. All are invited to take advantage of these most educational opportunities.

LDS students and all consultants are reminded that they are responsible for knowing the dates of their courses attended and refreshers taken. State LDS chairmen are urged to present to all students and consultants a copy of LDS 16, the “Mini-Guide for Students and Consultants,” at events.

Printed on each LDS form is the information where all the LDS forms are to be sent and the required material needed. Timely submissions ease the process of setting up courses and refreshers. Publicity for, and promotion of, events is the result. Early submission of the instructor’s bio, outline, and exam questions (five for each topic, all multiple choice) is crucial. Different numerals for courses and series are used. The courses are in Roman numerals, I, II, III, and IV. Series are in Arabic numerals, 1, 2, 3, etc. Series numbers are important to maintain correct national files, especially when a state is running more than one series at a time.

Please note: The site for Course IV required reading of Laura Lawson’s *History and Development of Community Gardens* is now available at: <http://agriurban.rutgers.edu/WhatisUrbanAg.html>. On the web results that appear, click on “The Office of Agriculture & Urban Programs.” The home

page for “Urban Agriculture in New Jersey” appears. Go to the bottom of the page and select/click “A Brief History of Urban Garden Programs in the United States.” When “Lawson UGPlecturew...ppt” appears, click on it and the Power Point of the article appears. Increase the percentage at lower right to better read the article and move down for all the pages.

I am excited to announce that both Alaska and Arizona have begun preparations for their first ever series of Landscape Design Schools. Maine has begun again to hold LDS courses. Our IA members are holding courses, and Argentina has their first ever Landscape Design consultants. Congratulations to all these gardeners.

—**Jane Bersch**, NGC LDS Chairman
Janebersch@aol.com

Garden Club Plant Sale Opportunities

as your club taken advantage of the broad scope of NGC President Sandra Robinson’s President’s Special Projects? How about featuring a display or exhibit, as well as special plants that attract butterflies, birds, and other pollinators at your club’s plant sale? Santa Rosa Garden Club, a member of Luther Burbank District, in California Garden Clubs, Inc., did just that at their April 23, 2016, annual plant sale.

A display board of the various habitat certifications available from National Wildlife Federation (NWF), North American Butterfly Association (NABA), Monarch Watch, Xerces Society, and the Pollinator Partnership S.H.A.R.E. sign, with the Million Pollinator Garden Challenge, was borrowed from a fellow member for the special habitat exhibit. In addition, the life cycle of a monarch poster, butterflies of Central California poster and a tri-fold display board, *Creating your Own Butterfly Garden*, were included. Staging was indoors using a six-foot table and easels. Two *Asclepias* (milkweed) plants were included on the display table.

The exhibit table also included display copies of NGC's free publication, *Inviting Butterflies into Your Garden*, general pollinator information, sample habitat applications from NWF, NABA, and Monarch Watch. A butterfly plant list was free for the taking to help customers shop for special habitat plants, as well as membership information about joining the Santa Rosa Garden Club.

Consider noting habitat plants available for sale with special colored tags and add an additional amount to the price depending upon the size of the container. During this particular five-hour plant sale, almost \$2,500 was made, the public was educated, and interest was generated about gardening for butterflies. Net proceeds from fundraisers of this nature allow Santa Rosa Garden Club to pursue its educational objectives, including a scholarship program at Santa Rosa Junior College, community garden grants, educational programs, and also meet the expenses of general operations.

Check out the 2015-2017 NGC President's Special Projects to "Leap into Action" by taking advantage of this **easy** opportunity

to raise additional funds for your club, its objectives, and perhaps gain a few new members at the same time!

—**Julie A. West**, *President's Special Projects: Monarch Watch Vice-Chairman & NGC 4-star Member.*



Escuela de Exposiciones de Flores

El conocimiento es de dos clases. Conocemos un tema nosotros mismos, o conocemos donde encontrar la información
~Samuel Johnson, (1709-1784)

 *El Manual de Exposiciones de Flores*, pág. 1, expresa los propósitos de una Exposición Estándar de Flores: *educar a los socios del club y a las visitas, y estimular el interés por la horticultura y diseño floral al proveer oportunidades para la expresión creativa* mientras se transmite a la comunidad los *objetivos de NGC*.

Felicitemos a los cientos de clubes, distritos, consejos y estados/países quienes aspiran anualmente a estos objetivos, planeando, montando y participando en las Exposiciones de Flores. Algunas son pequeñas, involucrando a los socios inmediatos, otras buscan la atención del público con mucha publicidad y están presentes en el calendario de eventos de la comunidad.

Sin embargo, lamentablemente no siempre los deseos e intenciones de los miembros del club se convierten en exposiciones de flores superiores. ¿Dónde sucede el cortocircuito? Todo lo que necesita saber el participante se encuentra en las publicaciones de NGC. El club puede perfeccionar los mecanismos de una Exposición Estándar de Flores siguiendo minuciosamente cada uno de los puntos de la Escala de Puntos para la Evaluación del Programa y de la Exposición de Flores, de la pág. 267/8 del Manual.

Los aspectos creativos son más escurridizos, pero no imposibles de conquistar. Solamente se necesita analizar y planear, a veces entre varias personas. Una persona no puede hacerlo sola. Las tormentas de ideas con los comités y sus miembros influyen en el tamaño de la exposición, el tema y el montaje. Vivimos en un mundo atareado de constante motivación elec-

trónica, visual y audible. El tema de una exposición de flores tiene que captivar la atención de los miembros y espectadores. Ya no alcanza que sea basado en algo familiar, esperado, ni siquiera práctico. Elija un tema interesante, original, curioso, innovador o pertinente al presente.

Los títulos para las Divisiones, todas la Secciones y la Clases de Diseño son importantes. Es importante que el tema del montaje se utilice a través de toda la exposición.... desde la entrada hasta el rincón más alejado, en todas las Divisiones. En vez de montar las mesas a lo largo de las paredes, con algunas en el centro, haga grupos con pedestales, cubos, cajas, bloques, sillas, etc. buscando variedad. Use colores fuertes para llamar la atención a las áreas y secciones diferentes. Use cortinados o mamparas para crear espacios donde se pueda desarrollar cierta parte del tema general. No es necesario que los carteles tengan letras sofisticadas, pero si deben ser fáciles de leer y ubicados en un lugar obvio. Las visitas pueden encontrar que la iluminación y el sonido dan más vida a la exposición.

■ **Pregunta:** Después de haber terminado de juzgar y que la exposición abriera al público, se descubrió que un Juez había participado en varias clases donde había juzgado. En el momento, ninguno de los otros jueces sabía de la situación. ¿Qué deberíamos hacer al respecto?

Respuesta: Indudablemente después del hecho, “no sirve cerrar el establo una vez que se escapó el caballo”... pero si decide obtener otro caballo, construya un estable más seguro! Hay varios recursos, que si se aplican, esto no volverá a suceder. 1) En la carta a los jueces del Director de Jueces que acompaña el envío del Programa, se le puede recordar al juez que no puede juzgar una sección donde tiene una exhibición. En el caso de que no se pueda remediar, el juez debe comunicarse con el Director de Jueces, y pedir que lo asignen a otra clase. 2) El día de la exposición, el Director de Entradas debería tener una lista de todos

los Jueces y las clases que deben juzgar. Si se descubre un conflicto de intereses, se puede solucionar el problema antes de empezar a juzgar, con la modalidad descrita arriba. 3) Además, en la reunión informativa antes de juzgar, el Director de Jueces puede preguntar si algún juez tiene una exhibición, y si están seguros de no juzgar en aquella sección. (No pregunte en que clases han exhibido, sino "si" han exhibido en esas.) 4) Para terminar, en un mundo ideal nada de lo anterior sería necesario si el Juez actuara de acuerdo con la Ética de Juzgamiento de la pág. 245 del MEF.

■ **Pregunta:** Es obligatorio que un Juez Acreditado pertenezca a un Consejo de Jueces local y/o del estado/país?

Respuesta: *El Manual de Exposiciones de Flores* no requiere que un Juez Acreditado sea miembro de algún consejo de jueces, aunque recomienda fuertemente que los Jueces Estudiante y Jueces Acreditados de todos los niveles lo sean. ¿Por qué? Los Jueces Acreditados deben renovar cada tres años. Mucho puede acontecer en ese lapso. Los jueces necesitan mantenerse vigentes en todos los aspectos de juzgar y exhibir. La mejor manera de hacer esto es concurrir a las reuniones de jueces y disfrutar de estas "mini" reválidas varias veces al año. Los consejos de jueces deberían incluir segmentos referidos a la actualización/clarificación del Manual, oportunidades para exhibir horticultura y diseño, y sesiones de práctica de juzgamiento de exhibiciones con posterior discusión. El Director del Consejo de Jueces debe planear una reunión interesante, oportuna y eficiente, para asegurar que asistir a la reunión valga la pena. Asimismo, el Consejo de Jueces puede proveer la información sobre las exposiciones venideras, y las oportunidades de exhibir y juzgar. La EEF NGC recomienda fuertemente que los jueces aprovechen lo que el Consejo de Jueces tiene para ofrecer.

—**Dorothy Yard**, *NGC Flower Show Schools Chairman*

Flower Show Schools

Knowledge is of two kinds. We know a subject ourselves, or we know where we can find information upon it.

~Samuel Johnson, (1709-1784)

The *Handbook for Flower Shows*, Part 1, states the purposes of holding a Standard Flower Show: *to educate club members and the viewing public and to stimulate interest in horticulture and floral design by providing an outlet for creative expression while conveying to the community objectives of NGC.*

We applaud the hundreds of clubs, districts, councils and states that aspire annually to those lofty goals by planning, staging, and entering Standard Flower Shows. While some are small, involving mainly the immediate members, others seek the public's attention with extensive advertising and being listed on their communities' calendars of events.

Regretfully, garden club members' desires and intentions don't always translate into superior flower shows. Where is the breakdown? Everything a participant needs to know is found in one of the NGC publications. By methodically following the Scales of Points for Evaluating Schedules and Flower Shows, found on pages 305-308, and including each and every item listed on those Scales, the club can perfect the mechanics of a Standard Flower Show.

The creative parts are more elusive, but not impossible, to capture. It just takes thought and planning, often from several people. One person can't do it alone. Brainstorming sessions with committees and committee members influence the size of the show, its theme, and its staging. We live in a busy world with constant stimulation from electronics, visual and audible. The subject of a flower show has to reach out and grab the attention of the members and viewers. It is no longer enough that it be based on something familiar, expected,

or even sensible. Choose a theme that is interesting, original, whimsical, innovative, or pertinent to today.

Theme-related titles for the Divisions, all the Sections, and the Design Classes are a must. It is critical that the theme staging be used throughout—from the entry way to the farthest reaches of the show, in all Divisions. Instead of lining tables along the walls with a few across the center, group them using pedestals, cubes, crates, blocks, chairs, etc. for variation. Use bold colors to draw attention to different areas and sections. Use drapes or temporary screens to create “rooms” where a certain portion of the theme’s story can be explored. Signage need not have fancy lettering, but must be easy to read and in prominent places. Sound and special lighting can make the show come alive to the visitor.

■ **Question:** After the judges had finished judging and the show was opened to the public, it was discovered a judge had entered several classes which he/she judged. Neither of the other judges was aware of the situation at the time. What is the proper course of action?

Response: Well, it does no good to “lock the gate after the horse is stolen...” but, if you ever decide to get another horse, build a stronger barn! There are a number of actions, which, if instituted conscientiously, can prevent this from ever happening again.

1. In the letter from the Judges Chairman to the judges, which accompanies a copy of the Schedule with the judging assignments, the judge should be reminded to refrain from entering a class to which he/she has been assigned. In the event it is just unavoidable, the judge should contact the Judges Chairman and ask to be reassigned to another class.

2. The day of the show, the entries chairman should have a list of all the judges and the classes to which they have been assigned. If a conflict of interest is discovered, the problem can be solved before judging begins by either of the previously mentioned options.

3. As a further precaution, at the judges

briefing, the Judges Chairman should pointedly ask the judges if any have entered the show and, if so, are they sure they will not be judging those classes. (Don’t ask which classes they have entered, only “if” they have entered those certain ones.)

4. Finally, in the ideal world, none of the above would need to be done if the judge had only behaved according to the accepted “Ethics for Judges,” *HB*, page 281.

■ **Question:** Are Accredited Judges required to belong to a local and/or state Judges Council?

Response: *The Handbook for Flower Shows* does not require an Accredited Judge to be a member of any Judges Council, but strongly recommends Student Judges, as well as all levels of Accredited Judges do so. Why? Accredited Judges are required to refresh every three years. Much can happen in that length of time. Judges need to stay current on all facets of exhibiting and judging. The best way is to attend a Judges Council meeting and enjoy “mini” refreshers several times a year. Judges Council agendas should include segments on *Handbook* updates and clarifications, opportunities for exhibiting horticulture and design, and sessions of actual point-scoring exhibits with discussion following. To make attending Judges Council meetings worthwhile, Judges Council chairmen must plan to make the gatherings interesting, timely, and efficient. Judges Councils can also act as a central source of information about upcoming flower shows and judging and exhibiting opportunities. NGC FSS strongly recommends all judges take advantage of what their local Judges Councils have to offer.

—**Dorothy Yard**, *NGC Flower Show Schools Chairman*

But wildness is more a quality than a place, and though humans can’t manufacture it, they can nourish and husband it....

The gardener cultivates wildness, but he does so carefully and respectfully, in full recognition of its mystery.

~**Michael Pollan**, *Second Nature: A Gardener’s Education*

NGC Roster Changes

Executive Committee— Elected Officers

Add: President Elect: Nancy Hargroves

2015-2017 Board of Directors

Chairmen

Calendar Committee

IA Calendar Chairman: **Cheryl Obediente**,
(U.S. mailing address) PTY-0281, 8530 NW
72nd St., Miami, FL 33166-2300

Communications: Non-Print Committee

**Add: Social Networking/Education/Pinter-
est/Facebook**

Phyllis White, P.O. Box 921, Bozeman, MT
59771-0921; gardens@bresnan.net

Conventions and Fall Boards Committee

Add: 2018 NGC Convention—Philadelphia

Chairman: **Patricia Wolanski**, 3245 Water
Street Road, Collegeville, PA 19426-1535;
pwolanski@verizon.net

Vice Chairman: **Flossie Narducci**, 278 Country
Club Drive, Telford, PA 18969-2287

flossienarducci@gmail.com

Gardens Committee

Coordinator/Arboreta/Public Gardens Chairman

Add: Mary H. Dixon, 132 Moonlight Pt., Suffolk,
VA 23434-9300; Mdixon2643@aol.com

COMAAI Executive Committee

IA Activities Chairman, Protocol Chairman

Delete: **Sara V. Lambarri** (resigned)

Add: Gloria E. Remedi, Uruguay 768, Salto,
Uruguay CP 50000; gloriaremedi@gmail.com

Roster of State Presidents

New Hampshire Federation of Garden Clubs,
Inc.

Jane E. Goodwin, #6 Monarch Way, Kingston,
NH 03848-3271;

penguinlongy@comcast.net

The Utah Associated Garden Clubs, Inc.

Website: www.utahagc.org

Environmental Studies Schools

Course I

Normandy Park, WA October 11-13

*State Chairman: Lana Finegold, 1414 179th
Ave NE, Bellevue, WA 98008; 425-747-5742;
lanafinegold@msn.com

*Co-chair and contact person: Linda Haas;
lindahaas@comcast.net

Holland, MI October 15-17

State Chairman: Rita Crawley; 734-529-2907

Derwood, MD (NCA) November 3-4

State Chairman: Lydia Barbour, 717 Kings
Lane, Fort Washington, MD 20744; 301-203-
6696; lydiabarbour@hotmail.com

Lowell, MA November 3-4

State Chairman: Leigh Cameron, 130 Stone-
bridge Drive, Dracut, MA 01826; 978-703-
0813; leighb.cameron@gmail.com

Course II

Derby, CT September 28-30

School Chairman: Polly Brooks, P.O. Box
1045, Litchfield, CT 06759; 860-567-4292;
mLbrooks@optonline.net

Course III

Black Bayou, Monroe, LA August 16-17

State Chairman: Jean Gilstrap, 161 Donna
Drive, Farmerville, LA 71241; 318-680-1984;
jeangilstrap@gmail.com

Course IV

Black Bayou, Monroe, LA August 18-19

State Chairman: Jean Gilstrap; 318-680-1984

East Brunswick, NJ September 29-30

School Chairman: Louise Davis, 106 Old
Denville Road, Boonton Township, NJ 07005;
973-402-4043; ldavis106@gmail.com

*In the same way that the picturesque de-
signers were always careful to include some
reminder of our mortality in their gardens—a
ruin, sometimes even a dead tree—the act of
leaving parts of the garden untended, and call-
ing attention to its margins, seems to under-
mine any pretense to perfect power or wisdom
on the part of the gardener. The margins of our
gardens can be tropes too, but figures of irony
rather than transcendence—antidotes, in fact,
to our hubris. It may be in the margins of our
gardens that we can discover fresh ways to
bring our aesthetics and our ethics about the
land into some meaningful alignment.*

~Michael Pollan, *Second Nature: A Gardener's
Education*

Flower Show Symposiums

Athens, GA July 10-12

Registrar: Sally Holcombe; 404-403-9645

St. Louis, MO August 10-11

Registrar: Judy Sheets; 573-760-4252

Birmingham, AL August 10-11

Registrar: Sybil Ingram; 205-733-9536

Grand Rapids, MI August 17-18

Local Registrar: Lynn Dinvald, 6802 Springbrook Lane, Kalamazoo, MI 49004-9665; 269-343-3827; Ydoublelne@aol.com

Winston-Salem, NC August 21-23

Registrar: Trish Sumners, 194 Sonata Dr., Lewisville, NC 27023; 336-945-4433; brssmm@yahoo.com

Nashville, TN August 22-23

Registrar: Kathy Rychen; 615-406-5716

Portland, OR August 23-24

Local Registrar: Grace Emori, P.O. Box 1904, Jacksonville, OR 97530-1904; 541-899-9099; tgemori@charter.net

Marshalltown, IA August 29-30

Registrar: Sandra Quam, 1646 243rd Street, Jefferson, IA 50129-7556; 515-386-4679; zeldaq@hotmail.com

Minneapolis, MN September 9-10

Local Registrar: Barbara Isaacson, 15169 19th St. N, Stillwater, MN 55082; 651-998-1200; blisaacson@yahoo.com

Independence, OH September 13-14

Registrar: Janice Koster, PO Box 802, Burton, OH 44021-0802; 440-669-8531; j.koster@sbcglobal.net

Sumter, SC October 5-6

Local Registrar: Jerry Weise, 1507 Lorenzo St., Mt. Pleasant, SC 29464; 843-884-8998; jerrywbobw@juno.com

Milford, MA October 18-20

Local Registrar: Linda Jean Smith, 23 Bentley Lane, Chelmsford, MA 01824; 978-256-3101; lindajeane.smith@comcast.net

Saratoga Springs, NY October 26-27

Registrar: Laura McLaughlin, 315 Lakeview Avenue West, Brightwaters, NY 11718-1712; 631-666-0029; laurakingmclaughlin@gmail.com

Tampa, FL November 5-7

Registrar: Christy Linke; 813-752-8392

Richmond, VA November 9-10

Registrar: Brenda McManaway, 5531 Bethlehem Rd, Boones Mill, VA 24015-3231; 540-580-3838; brendamc@shentel.net

Flower Show Schools

Course I

Grove City, PA August 24-26

Registrar: Cindy Jarzab; 814-726-2924

Nordland, WA November 1-3

Registrar: Mary Lou Waitz, 15 East Bachelor Rock Drive, Port Angeles, WA 98363; 360-928-3728; marylou.94@hotmail.com

Course III

Springfield, VA July 22-24

Registrar: Poss Tarpley; 703-660-8661; Posst@aol.com

Lafayette, LA July 28-30

Registrar: Mary Jane Peters, 189 Oakdale Loop, Houma, LA 70360-5932; 985-580-2864; maryjanegarden@comcast.net

Middlesboro, KY August 18-20

Registrar: Ann Summate, 104 Kingsbury, Middlesboro, KY 40965; 606-269-2669; kshumate@twc.com

Poway, CA September 12-14

Registrar: Jill Coleman, 5512 Malvern Way, Riverside, CA 92506-3548; 915-684-2635; benjill@hotmail.com

Johns Creek, GA September 26-29

Registrar: Cookie Roland, 2771 Anscoot Ct., Snellville, GA 30078; 770-972-0219; r_cookie@att.net

Course IV

Lynchburg, VA August 29-September 1

Registrar: Glynis Hopkins, 1030 North Fork Rd., Bedford, VA 24523-3904; 540-586-6955; ghopkins13@msn.com

Buckhannon, WV October 13-15

Registrar: Vivian Shomo, 369 Bull Run Road, Parsons, WV 26287; 304-924-5773; vshomo72@gmail.com

Port St. Lucie, FL November 1-3

Registrar: Michele Myers, 152 Seabreeze Avenue, Palm Beach, FL 33480-6127; 561-308-4260; m.s.myers@mac.com

The 2017 VISION of BEAUTY

calendars are now available

at: www.gardenclub.org

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\$4.00 (100 - 999 copies), plus S&H

Gardening Study Schools

Course I

Colorado Springs, CO September 14-15
Local/State Chairman: Margie Soileau, 8555
Freemantle Drive, Colorado Springs, CO 80920;
719-648-8025; margie.soileau@gmail.com

Ridgefield, WA October 25-27
Local Chairman: Ruth Miller, 379 N Hayden
Bay Drive, Portland, OR 97217-7950; 503-
289-2049; flwrlidy250@aol.com

Course II

Appleton, WI September 9-10
Local Chairman: Marion Books, W8490
County Hwy MM, Hortonville, WI 54944;
920-779-6656; gemabooks@att.net

Chattanooga, TN September 27-28
Local/State Chairman: Maggi Burns, 8258 Chula
Creek Rd., Chattanooga, TN 37421-3283; 423-
499-9751; maggitfgc@epbf.com

Baltimore, MD November 15-16
Local/State Chairman: Susan Somerville-
Hawes, FGCMD, Inc., 4915 Greenspring Ave,
Baltimore, MD 21209; 410-396-4842; office@
fgcofmd.org

Course III

New Haven, CT September 13-15
Local/State Chairman: Katherine Patrick, 196
Shadyside Lane, Milford, CT 06460; 203-878-
5302; kmpatrick@snet.net

Davie, FL October 26-27
Local Chairman: Marylou Ruiz, 7124 N.W.
169th Street, Hialeah, FL 33015; 305-822-
2717; hazeleyes58@comcast.net

Course IV

Madrid, IA September 15-16
State Chairman: AdaMae Lewis; 515-232-0608

Bi-Refresher

(GSS & LDS)

Eureka, CA August 10-13
Event Chairmen: MaryLou Goodwin/Maria
Krenek, 1312 Gates St., Eureka, CA 95501;
707-442-1387; mLgoodwin@outlook.com

Tri-Refresher

(ESS, GSS, LDS)

Portland & Bar Harbor, ME . September 25-27
Event Chairman: Mary Ericson, 36 Lord Rd.,
Lebanon, ME 04027; 207-457-2188; travilr@
metrocast.net

Landscape Design Schools

Course I

College Station, TX September 26-27
State Chairman: Diane Perez; 713-984-1901

Elkhorn, NE October 6-8
State Chairman: Alice Hemsath, 110 East 39th
Street, E-1, Kearney, NE 68847; 308-224-
3771; dhemsath@charter.net

Fairbanks, AK October 8-10
State Chairman: Becky Hassebroek, 518 Slater
Drive, Fairbanks, AK 99701; 907-456-3066;
beckyhasse@aol.com

Kalamazoo, MI October 24-25
State Chairman: Terry Harding; 231-947-0568

Phoenix, AZ November 12-14
State Chairman: Joyce Girvin, 70 Box Canyon
Road, Sedona, AZ 86351; 928-284-4263; cell
phone: 774-217-8253; joycegirvin@gmail.com

Course II

Fairbanks, AK October 22-24
State Chairman: Becky Hassebroek, 518 Slater
Drive, Fairbanks, AK 99701; 907-456-3066;
beckyhasse@aol.com

Falmouth, ME November 16-17
State Chairman: Harriet Robinson, 107 Bow
Street, Otisfield, ME 04270; 207-743-7236;
harriettewisrobinson@gmail.com

Course III

Wellesley, MA October 27-29
State Chairman: Maureen O'Brien; 781-407-
0065

New Smyrna Beach, FL November 9-10
State Chairman: Sally Flanagan, 312 Gleneagles
Drive, New Smyrna Beach, FL 32168; 386-428-
3170; sfflan@aol.com

Course IV

Canton, OH July 27-29
State Chairman: Pat Smith, 822 Sandlot
Circle, Louisville, OH 44641; 330-875-9317;
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State Chairman: Karen Gott, 3040 NE 9th
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Native Plants for the Home, Garden, and Landscape

Native plants are among the best new plants for American gardens, yet they have been growing in North American prairies, woods, and deserts for hundreds of years. However, the term native is often misunderstood and misused because all plants are native to some region of the world. The term is used here to identify a plant that was growing naturally in what we now call the United States, Canada and Mexico before European settlement. A plant that was originally discovered growing in southern Florida is native even though it doesn't grow in Minnesota or California. A native plant may also be called an indigenous species. Other plants, often referred to as exotics or aliens, were originally brought here from another part of the world, but have become established as part of a local environment. They are not native but often have become naturalized.

Many of these beautiful, yet hard-working, plants are as equally at home in garden beds and borders as they are in larger wildflower plantings and prairie restorations. In fact, many North American natives may already be growing in your garden. Purple coneflower (*Echinacea purpurea*), California poppy (*Eschscholzia californica*), columbine (*Aquilegia canadensis*), butterfly weed (*Asclepias tuberosa*), Texas bluebonnets (*Lupinus texensis*) and black-eyed or brown-eyed Susans (*Rudbeckia triloba* and *R. hirta*) are among the popular natives planted by American gardeners.

Once established, native plants can be easier to maintain because they require less watering, and may have fewer pest and disease problems. Some plants have deep root systems that prevent water run off and soil erosion, and enable them to withstand drought. Their growth also brings earthworms and beneficial soil microorgan-

isms to enhance soil health. Many natives are important because their flowers attract bees and other valuable pollinators. Native plants are a wonderful source of nectar, pollen, and seeds which provide food for butterflies, insects, birds and other animals.

The key to successfully growing natives is to plant them in the habitat they like. Some natives have very specific soil, water, light, temperature, and fertility requirements and won't grow outside of a very narrow geographic range or set of conditions. Other native plants are easier to grow because they have adapted to a wide range of environments. Before choosing plants for your garden find out what plants are native to your region and what type of growing conditions are needed. Does the plant like full sun, partial sun, or a shaded location? Does it require constant moisture or will the plant survive periods of drought during the year? Does the plant like rich, fertile soil or does it grow better in a poor soil with lower fertility.

Native plants can be started from seed or purchased from a mail-order nursery or from your local garden center. Digging plants from the wild is not recommended and might be illegal. State and federal laws protect some native plant species that are threatened or endangered. Collecting seed must be done carefully. Removing too much seed could reduce or destroy a wild plant population.

There are many sources available to help you find the best natives for your garden. The Lady Bird Johnson Wildflower Center has an extensive database of commercially available native plants that can be searched to provide recommendations by state. Local native plant societies and government organizations are also good sources of regional information. The National Garden Bureau has several members that sell North American natives in retail stores, online, and wholesale. Choosing the right native plants for your garden will create a beautiful landscape while preserving a piece of our environmental heritage.

—**Janis Kieft**, *Botanical Interests*, for nbg.org

Application of Xeriscaping Principles

s described in an article by Jane Bersch in the Spring 2015 issue of *TNG*, xeric landscaping, or xeriscaping, is a landscaping concept suited for use in regions where water is scarce. A xeriscape is a landscape or garden in harmony with drier climates; one which reduces the need for supplemental water. It blends with local arid and semi-arid environments, and avoids using plants and water features that depend on significant amounts of water, a precious resource in drier regions. A xeriscape relies on planting appropriate drought-tolerant plants and efficient watering techniques, including rainwater capture and drip irrigation. When done properly, a xeriscape can be visually pleasing, affordable, water-efficient, and attractive to wildlife.

The earlier article described seven principles that guide xeriscaping. These principles are most appropriate for landscaping in the dry environments common in the western United States. In this article we'll focus on the application of these principles, but first here's a quick refresher on what these are (from *Xeriscape: Landscaping with Style in the Arizona Desert*). They include:

- a well-considered landscape design
- use of appropriate drought-tolerant plants
- reduction or elimination of turf areas
- rainwater capture and/or efficient irrigation
- soil analysis and use of amendments, if needed
- use of mulches
- maintenance

Perhaps the most important principle is the first, the creation of a well-considered design. Important initial factors in the development of a xeriscape design include

determining the purpose and goals to be achieved, and identifying elements to be featured. Why are you creating the xeriscape? What do you hope to accomplish? And what features or elements will be incorporated into your dryland landscape?

Key design considerations include:

- determining what is feasible within the space being considered and with the resources available
- understanding the soil conditions of the site
- researching the climatic conditions of the site
- site topography
- developing a supplemental water plan

The first of these is fairly self-explanatory. Space available and resources available will help to define what is possible. The second consideration requires some thought. It's not enough to simply understand soil type and composition, it's also critical to understand how porous the soil is in order to ensure proper drainage and water requirements. A percolation test can help with this. If the soil drainage is poor, it may require amendments. If amendments won't correct the problem, perhaps as a result of the presence of caliche or rock, you may need to find a new spot for the plant. Know the soil conditions before you get too far into the design.

Climate conditions will have a major influence on plant selection. High and low temperatures, total average rainfall, and the seasonal distribution of rainfall all need to be considered. In Cochise County, Arizona, where I live, we have low-elevation regions of hot sub-tropical Sonoran desert where it rarely drops below freezing, and cooler higher-elevation Chihuahuan desert. We also have mountain ranges covered in Sierra Madraen oak woodland, and semi-

arid grasslands. Each area has its own climatic conditions, which influence plant selection and xeriscape design. The same holds true for other regions of the Southwest.

A critical step in xeriscape design is assessing your site's water resources and determining how to optimize the use

of these natural sources into your design. How much water does your site normally receive throughout the year, and from what sources? The sources can include rainwater, as well as water flowing through drainages. Do some areas retain moisture longer than others? As you consider your water plan for the site, also consider site topography. Is the site located on a slope or in a natural drainage? These factors can have a major impact on what to plant and where. This will certainly take some research, and projected runoff can be calculated for your site, as well as for any roofed, man-made feature on or near the site.

Rainwater can be captured, slowed, or diverted. One of the simplest ways to optimize natural water is to slow runoff flow by use of mounds or carefully sited rocks or logs. Swales can be used to guide runoff to specific plants and to hold the water until it has time to percolate into the ground. Consider how you can capture rainwater from a roofed structure or nearby driveway



A xeriscape employing both gravel and bark mulch and accented with boulders, river rock, and branches. Note the use of multi-colored flags to denote the location of a buried 1/2" drip line and where to place plants.

and provide it to your xeriscape. Your plan might include rainwater capture and storage in tanks and cisterns. This will allow you to release the water to specific plants at specific times, either by use of a hose or by incorporating captured rainwater into your drip irrigation system.

How you incorporate water, both natural and supplemental, into your xeriscape will have a big impact on design and cost. This holds particularly true if you plan to install drip irrigation. While most drip irrigation uses non-rainwater sources as supplemental water for plants, it can also use captured rainwater, though doing so requires some creative effort. I designed and installed a drip irrigation system that can use either captured rainwater, via a solar-powered pump, or potable water. This system has operated with minimal maintenance for over seven years.

Mulches and amendments can help improve water absorption and retention in the soil around your plants. Mulches can

also minimize weeds and cool the soil. A variety of mulches can be used, including small-diameter gravel and organic mulches, such as bark or woodchip. Weed-block can be placed below the layer of mulch, but use of weed-block, also called fabric cloth, has both advantages and disadvantages that should be considered before making a decision.

Are you looking for a natural, informal look or one more formal? Do you want year-round color? What accents do you wish to include? Do you want to attract hummingbirds, butterflies, and other native pollinators? How much shade is present or desired? Keep in mind that, over time, the amount of shade can change significantly as plants grow. All these and more will influence your design.

Once you've completed your initial

research and the basic xeriscape design has taken shape, it's time to select your plants and decide on where you intend to plant them. Do you want to use only native plants, or include non-native drought-tolerant plants? Do you want to use a variety of forms and textures, mix in trees, shrubs, sub-shrubs, perennial, and annual herbaceous plants? An accent feature that can also have practical use is the creation of an artificial wash, complete with river rock. What about creating micro-habitats for certain plants? Soil can be amended to meet the needs of specific plants, but this should be kept to a minimum.

Climate, soil type, topography, and landscape purpose and goals will be key factors in determining plant selection, as will your supplemental watering plan. While we may think of the Southwestern U.S. as a land of



A 1550 gallon rainwater tank supplied with water captured from the roof of the ramada. Note valve boxes protecting the solar-powered pumping system used to water the xeriscape.

hot, dry deserts, conditions vary considerably. Local Master Gardener Programs, as well as county extension agents, can help with plant selection.

When using drip irrigation, sections of the xeriscape may be hydro-zoned so plants with similar water needs are grouped together. Usually those plants needing less additional water are located farthest from the supplemental water source and those needing the most will be located nearest to the source. I highly recommend not incorporating turf into your xeriscape. In most regions of the west, high summer temperatures, low humidity, and wind can make keeping non-native grasses alive an almost impossible chore, no matter how much water you apply. If you choose to grow grass, try native grasses, such as blue grama. "Rainwater Harvesting for Drylands and Beyond," Volumes 1-3, is a great resource for assessing water availability at a site and to optimize its use.

You are now ready to finalize your drip irrigation design. Start by determine the routing of the main (usually ½" but up to .710") water lines and selection of drip-emitter locations and sizing. Keep in mind that, as plants grow, their supplemental water needs will change. Drip irrigation lines can be unattractive if left on the surface. They are also easily damaged on the surface, due to sun exposure and animal activity, so, at a minimum, they should be buried beneath the mulch layer. Make sure you know where the lines are located so you don't accidentally damage them in the future. In areas where temperatures drop below freezing in winter, you will want to bury the ½" lines in the ground. Typically, they should be buried 4"-5" deep.

Consider your maintenance plan before finalizing the xeriscape design. You don't want to design a feature that will result in a maintenance problem in the future. Now create a detailed enough sketch of the xeri-



Xeric Garden at the San Pedro House. Completed planting uses locally native xeric plants.



Same xeriscape seen four months later. The signed plant in the foreground is Gooding's verbena.

scape so you know where you will place $\frac{1}{2}$ " lines, cisterns or rainwater barrels, swales, plants, and accent features like rocks, tree limbs, or an artificial wash, as well as other features (e.g., bench, bird bath, hummingbird feeder). Now you are ready to establish your xeriscape. A well-thought-out design that considers maintenance and imagines what the xeriscape will look like over time will make the rest of your effort much easier.

Putting in your xeriscape is not much different from putting in any landscape. It begins by removing weeds and unwanted plants and objects, such as rocks. It may also include a bit of sculpting of the land. Stakes or flags can be employed to mark the locations of features, drip lines, and plants. If you are going to create swales, now is the time to do this. And if you intend to bury your $\frac{1}{2}$ " drip line, this would be the next step.

The next step is usually completing the

rainwater capture system, including features such as gutters and downspouts, if capturing water from a roof, and rainwater barrels or cisterns to hold the water. Now it's time to put in the hardscape. Hardscape includes everything from weed-block, if you intend to use it, mulch (gravel or organic), and accent features, such as large rocks or boulders, river rock, and tree limbs. Flags to mark the $\frac{1}{2}$ " lines and locations for plants are then re-installed.

Finally, it's time to plant. I don't need to explain how to plant to the National Garden Clubs! Once plants are in the ground, $\frac{1}{4}$ " drip-lines with the appropriate-sized emitters can be connected to the $\frac{1}{2}$ " lines. Note: in some instances you may want the $\frac{1}{4}$ " drip-lines to run under the weed block rather than on top of it and, if you are confident of where you are going to plant your plants, you may want to install the $\frac{1}{4}$ " lines before you install

the hardscape. All the steps associated with putting in the xeriscape can be modified to suit your needs. You may want to wait to plant turf until the dew point is at least 50 degrees and there is a probability of rain in the near future.

A critical, but often overlooked, element is maintenance, which needs to begin immediately after putting in the landscape. A xeriscape tends to be a low-maintenance landscape, but that doesn't mean "no maintenance." All plants, even drought-tolerant plants, need supplemental watering until they become established. To facilitate this, once the plants are in it's time to initiate a watering schedule to ensure the plants survive. The watering schedule will change over time. Once plants are established, you may be able to rely on rainwater for your xeriscape plants in all but the driest and hottest periods.

Part of the maintenance plan includes replacing plants that die, relocating plants that may not be thriving, and pruning those that outgrow their desired sites. The rainwater capture and drip irrigation systems need regular inspection to ensure they are still working properly. Particular attention should be paid to emitters. Since a xeriscape is a living project, its care and maintenance requirements will change over time.

With a little bit of effort, your xeriscape can become a pleasing and simple-to-maintain landscape that relies primarily on natural rainwater, blending into and enhancing the natural environment and prove inviting to human and non-human inhabitants alike.

—**Ted Mouras** is a retired Army officer and former engineer for SAIC. He has lived in Cochise County, Arizona, since 1996 and has a great interest in the natural history of the region. He is a master naturalist, past president of the Friends of the San Pedro River, a docent at the Ramsey Canyon Preserve, and a volunteer at Coronado National Memorial.

**To see the Summer Sky
Is Poetry, though never in a Book it lie -
True Poems flee.
~Emily Dickinson**

References: Brad Lancaster, "Rainwater Harvesting for Drylands and Beyond," Volumes 1-3

Robin Stinnett, "Xeriscape: Landscaping with Style in the Arizona Desert"

Ted Mouras, "The Community Xeriscape"

There are several factors in selecting plants for a xeriscape, including temperature range and annual rainfall. Here are just a few plants that have done well in our area. Some are low water and some are no water—once established.

Velvet Ash (*Frazinus velutina*)
Chaste Tree (*Vitex species*)
Crape Myrtle (*Lagerstronia indica*)
Chinese Pistachio (*Pistachia chinensis*)
Desert Willow (*Chilopsis linearis*)
Pomegranate (*Punica granatum*)
Mexican Bird of Paradise (*Caesalpinia gilliesii*)
Texas Ranger (*Leucophyllum species*)
Palmer's Agave (*Agave palmeri*)
Hesperaloe (*Hesperaloe parviflora*)
Desert Honeysuckle (*Anisacanthus thurberi*)
Fairy Duster (*Calliandra eriophylla*)
Penstemon (*Penstemon species*)
Salvia (*Salvia species*)
Gregg's Mist Flower (*Eupatorium greggii*)
Gooding's Verbena (*Glandularia goodingii*)
Milkweed (*Asclepias species*)
Lavender (*Lavandula species*)
Sundrop (*Calylophus hartwegii*)
Blanket Flower (*Gaillardia species*)



Mexican Bird of Paradise

Genuine - 370 Nitrile

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