The University of Tennessee Gardens located in Knoxville and Jackson are part of the UT Institute of Agriculture. Inspiring 100,000 families, children, youth, green industry professionals and students about plants to enrich their lives with beauty, better health and a closer connection to nature.

UT GARDENS STAFF

DIRECTOR
Dr. Sue Hamilton

ASSISTANT DIRECTOR
James Newburn

JACKSON RESEARCH HORTICULTURIST
Jason Reeves

JACKSON GREENHOUSE ASSISTANT
Judy Duck

TRIAL AND VOLUNTEER COORDINATOR
Beth Willis

GARDEN EDUCATOR
Derrick Stowell

HORTICULTURIST
Ben Cordes

HORTICULTURIST
Bobby Cook

KNOXVILLE KITCHEN GARDEN MANAGER
Holly Jones

UT EXTENSION WESTERN REGION ORNAMENTAL HORTICULTURE SPECIALIST
Carol Reese

PLANT SCIENCES FACULTY INSTRUCTOR
Andy Pulte

UT GARDENS STUDENT INTERNS
Ben Ford-HGTV Graduate Student
Frances Worley-Greenhouse
Mary Wortham-Greenhouse
Eric Stohl-Beall Family Rose Garden
Alex Thayer-Beall Family Rose Garden
Laura Wigger-Steve and Ann Bailey Public Horticulture

http://utgardens.tennessee.edu
http://west.tennessee.edu/ornamentals
R12-0122-000-008-13 6M 13-0181

CONTENTS

3 FROM THE DIRECTOR
4 TRAVEL: TRAVEL INSPIRATION
6 YELLOW-BELLIED SAPSUCKER
8 IN THE GARDENS
9 GROWING PROFESSIONALS
10 BOOK REVIEW
11 EVENT & EDUCATION CALENDAR
15 2013 BEST IN SHOW
18 YOU CAN TELL A MAPLE BY ITS BARK
20 VOLUNTEER AND MEMBERSHIP TIDBITS
21 UT GARDENS CREATES EDUCATION COMMITTEE
21 MUST-HAVE GARDEN TOOLS
22 TENNESSEE GARDENING LEGENDS
24 OFTEN OVERSHADOWED FOLIAGE
25 DEVELOPMENT: NEW CHILDREN’S GARDEN PLANNED

STORIES

ON THE COVER

Rosa - Elle. [Rosa sp. (Rose) 0879], The Botanical Photography of Alan S. Heilman, Copyright Alan S. Heilman, Copyright The University of Tennessee Libraries, 2011.
From the Director

What an exciting year it is for the UT Gardens — we are celebrating our 30th anniversary! It’s hard to believe that it was three decades ago that professor Doug Crater initiated the planting of the first annual flower trials in Knoxville that would ultimately bloom into the public gardens we know today. I was professor Crater’s assistant at the time and was honored to be the horticulturist who planted those first flower trials.

Thirty years later, we can boast that the UT Gardens are composed of significant collections of all types of plants, and that through affiliations with plant associations and societies and as a state-certified arboretum, they play a role in global plant conservation. The Gardens attract more than 100,000 visitors each year and help them develop a closer connection with nature and a greater appreciation for plants and the vital role they play in the world.

We have a bright and prosperous future ahead of us. Because of the strong support from the UT Institute of Agriculture — along with our growth in grants and contracts, friends memberships and gifts, and special event fundraisers — we have steadily expanded our staff, educational and outreach programs, work-study student internship program, and the physical development of the Gardens.

A few examples of how our supporters have enriched the Gardens:

• We will expand the Shade Garden and its plant collection this year thanks to the generosity of the Knoxville Green Association in memory of Maria Compere.
• Sam and Mary Anne Beall have provided funding to install a patio to not only enhance the aesthetics of the Rose Garden but to better tolerate the heavy foot traffic that has compacted our turfgrass.
• A new HGTV Home Demonstration Garden will showcase the new HGTV Home Plant Collection in a scale relevant to most homeowners.
• Late this year, we will start construction for a new children’s garden that will support our family and children’s environmental educational programs.

We now are able to support a full-time garden educator, a graduate student, a part-time kitchen garden manager, and a full-time landscape contractor who is able to teach and mentor our student interns in landscape equipment operation, irrigation installation and hardscape construction.

Let me say in closing, I’m proud to be the director of the UT Gardens and I look forward to leading the Gardens into an exciting future. My vision is that we build the capacity of the Gardens to provide renowned accessible and educational facilities that serve to attract visitors, but perhaps more importantly, serve as guides to the kind of sustainable, rich and beautiful world that we would like to build together for the future. I hope you will join me in cultivating that bright future by continuing your membership with the Gardens and, if possible, supporting the Gardens at a higher financial level, attending our special events and educational programs, volunteering, and visiting us frequently. Together we will make the UT Gardens an even better and stronger botanical resource.

I’ll see you in the Gardens,

Dr. Sue Hamilton
Director, UT Gardens
Looking for landscape and garden ideas? Searching for the newest plants to hit the market? Tennessee is blessed with many wonderful garden centers, nurseries and gardens. Following are three Tennessee green industry businesses that are just waiting for you to explore them.
TRAVEL INSPIRATION

MEADOW VIEW GREENHOUSE & GARDEN CENTER
9885 HIGHWAY 11E
LENOIR CITY, TN 37772
865-986-7229
HTTP://WWW.MEADOWVIEWGREENHOUSE.COM

Tucked back off the road on Highway 11E in Lenoir City is Meadow View Greenhouse & Garden Center, a destination garden center that I highly recommend. They have worked over the last 16 years to provide the best selection of annuals, perennials, shrubs, garden accessories and home décor possible. I’m particularly fond of the mixed container plantings put together for sale each spring; they definitely have an eye for design! If you bring your personal decorative container to them they will custom plant a fantastic combination of plants for you that will look wonderful all season long. You will also find a great assortment of garden tools, including those ergonomically designed to put less stress on your body as you work. I know you’ll be impressed with the variety and quality of botanical gifts and garden accent pieces in their garden shop; I always start my visit here to see what new, different accent pieces they have. In addition, Meadow View has a professional landscape designer on staff and a variety of landscape design services.

— Sue Hamilton

THE DABNEY NURSERY
5576 HACKS CROSS ROAD
MEMPHIS, TN 38125
901-755-4037
HTTP://WWW.THEDABNEYNURSERY.COM

The Dabney Nursery is a jewel in a simple setting. It’s not the high traffic shop that attracts impulse sales. No, it is the nursery sought out by serious plant lovers and knowledgeable landscapers. Shoppers will find no reason to take issue with the claim that Dabney’s has the largest plant selection in the Midsouth. Shoppers will also be pleased with the prices on plants, even those that can usually be considered rarities in retail gardens centers. Another plus is the “one-stop shop” range of selections, from trees and shrubs, to perennials and annuals, many that are grown on site. Dabney Turley is primarily the woody expert, while brother Hubert masterminds the herbaceous selections. Be prepared to leave with that weeping, variegated or golden plant that you thought would be only available in specialty catalogs, and with a smile on your face about the price and quality. Maybe you should bring a truck! — Carol Reese

MARTIN’S GREENHOUSE AND LANDSCAPING
301 DODGE DRIVE (OFF HIGHWAY 11W)
ROGERSVILLE, TN 37857
423-272-6300

Martin’s has been my go-to place for annual spring and fall bedding and perennial plants for the past 26 years. Owners Paul and Teri Martin produce a full A through Z line of annuals for sale to their retail and wholesale customers. The Martins also sell vegetable plants to gardeners and local farmers. Plants are sold to commercial landscape contractors in Knoxville to Southwest Virginia, including the Tri-Cities area.

I’ve always been impressed with the high quality of the plants that Martin’s grows. Their large mixed containers of foliage and flowering plants beautify home patios, porches and decks all summer. Many of the beautiful summer annuals planted along the scenic parkway between Gatlinburg and Pigeon Forge come from Martin’s. You’ll also find their colorful annuals planted throughout the Dollywood theme park in Pigeon Forge. The pansies and violas I purchase each fall always seem to jump out of the ground after being planted and bloom heavily all winter into spring. Seasonal pot crops such as poinsettias, Easter lilies and hydrangeas are some seasonal specialty items you’ll find at Martin’s as well. Paul also raises and sells greenhouse-grown tomatoes and cucumbers in the fall and winter months. Two sons, Dawson Fields and Glenn Martin, operate Martin’s Landscape Division. — Hugh Conlon
Its name sounds like a cartoon character, but the yellow-bellied sapsucker is actually quite the engineer. You have probably heard its mewing call, or its tapping on trees in your neighborhood, though this winter resident is shy. I’ve played childlike games of hide and seek as it creeps around the trunk of a tree, doing its best to stay on the side furthest from me.

The tapping is distinctive. While most woodpeckers rattle off a drumming volley that varies in speed by species, the sapsucker’s pattern is irregular. The first few taps may be a rhythmic volley, but then it breaks down into bunched, unpredictable patterns, spaced with pauses, that cause some people to think of Morse code. It is a quieter tapping, with a casual conversational tone.

Even if you don’t hear them, you are likely to see their calling cards in the distinctive patterns of holes left in tree bark. While many woodpeckers tap holes in trees, for the most part, they are doing so to capture insects, especially beetles and their larvae. The sapsucker also relies on insects for the larger percentage of its diet, but feeds extensively on tree sap, as its name suggests. Here is where the engineering skills come into play, as drilling for sap takes a particular expertise.
The bird drills two different types of holes, depending on the season of the year. Winter calls for round holes that reach deeper into the tree to tap the xylem, the tree vessels that carry nutrients from the roots to the branches. This sap is usually lower in sugars than that found in the shallow phloem, which carries the sugars manufactured in warm-season foliage back down to the roots. The xylem sap tends to have more pressure behind it and flows more freely, so a simple hole is sufficient. The phloem holes require a bit more work as this much richer sap tends to flow slowly and will gum up. The sapsucker will drill the phloem holes in vertical rows, making a narrow slit that it will continue to widen until the holes become a small, shallow rectangle. These holes slow the flow of sap, which is thought to increase pressure, creating a better flow of sap on the upper holes.

Of course, the sapsucker must continue to work at them, since the tree is continuously attempting to heal and reseal the holes. The holes usually do not cause long-term damage to the tree’s overall health, while the wildlife benefits are many. At least two dozen other species of birds feed on the sap, and on insects drawn to the sap, all made available by the yellow-bellied sapsucker’s labor, though it will try to defend its food source from them. Notably, favorites such as the Eastern bluebird and early migrating hummingbirds make use of the sweet sap, as do butterflies, bees, squirrels and bats.

I can imagine some readers shaking their heads over the generalization that the holes drilled in trees by sapsuckers do little harm. It’s true that I am prejudiced toward the birds and quick to forgive the situations where they do inflict real damage on trees or shrubs, and I will admit that I have seen astounding examples.

Just a few years ago, colleague Jason Reeves brought in a large limb from a viburnum that had more sapsucker holes than it had bark. It was actually rather beautiful, since the shallow rectangular holes were oddly geometric, arranged along the limbs’ angles, resulting in something that looked like a piece of modern sculpture. Viburnums are targeted particularly by sapsuckers as are maples and birches, all being species with sweet sap, and often thin barked.

Technically, the holes should be called wells, since the sap collects there, providing sustenance for the sapsucker and other birds, insects and mammals that may find them. This is why I so easily forgive the sapsucker. Though I am an ornamental horticulturist by profession, if you were to force me, I will choose wild creatures over a pretty shrub.

It is also possible to protect the desirable plant from the damage by wrapping the trunk with burlap or window screen. Sapsuckers are winter residents in our area and will leave for northern climes once spring arrives, so it’s not like you have a permanent installation of ugly burlap on your prized maple.

Male sapsuckers carry their load in parenting. The males arrive at the breeding territory well before the females and begin preparing a cavity, which may take up to a month. They prefer to make their cavities in diseased trees that may be softened by fungus, making the excavation easier. The bird parents take turns with the incubation and once eggs are hatched, both busy themselves with feeding the young, which usually number from four to six. The parents eventually lure their young from the cavity with insects dipped in sap, and then demonstrate to the fledglings how to utilize the sap wells. The family will remain in a social group near the sap wells for months, before leaving for the migration to warmer regions. Migration is commonly done during the night, and often in flocks.

Research has shown that individual birds will sometimes return to the same territory and may even make use of the same nest cavity. Though the parenting couple do not overwinter together, they will often reunite at the nesting site and pair up again. Male birds usually stay further north through winter than the females, which prefer warmer temperatures. Males may stay as far north as Kansas or Long Island, while the females may continue on to Mexico or Central America.

The sapsucker is sometimes described as the scruffiest and least attractive of the woodpeckers. Maybe so, but its nourishing habits and strong family ties surely nominate it for the MVP of this interesting group of birds.
Here at the UT Gardens, Knoxville, we continue to make improvements and renovations in several key areas. Upgrades in the Shade Garden, the Beall Family Rose Garden and the proposed Children’s Garden are all in various stages of planning or implementation. Another project is renovation of our turf, especially in the Garden Rooms area and the Rose Garden access ramps.

Turf maintenance is always problematic in the UT Gardens. As with many homeowners in our Midsouth “transition” zone, these issues include inconsistent high and low winter temperatures, summer heat stress, and variable rainfall amounts with limited irrigation.

After consultation with our UT turf faculty and the professionals at Palmer’s Turf Nursery in Dunlap, Tenn. — a regional sod farm — we have decided to try ‘El Toro’ zoysia grass as our turf of choice in these selected areas. Thanks to the generous donation provided by our official turf supplier, we have installed 15 pallets of high-quality sod.

Zoysia is a warm-season grass. Therefore, during its cool-season dormancy it is an attractive golden color. ‘El Toro’ is more durable than other zoysias in that it also is adaptable to a wide range of soils and pH levels, requires less water and fertilizer, and is more shade tolerant.

Once ‘El Toro’ breaks dormancy in spring, the appealing characteristics of this grass become evident. Zoysia varieties are known as the “barefoot” grasses because of their lush, dense growth habit with fine texture that make you want to take your shoes off. Tom Samples, UT Extension turf specialist, says “‘El Toro’ has a sod-forming habit, and moves laterally by way of both above- and below-ground shoots. It is capable of filling in bare spots.” This habit makes for a nice, thick lawn that helps suppress weeds and better tolerates heavy foot traffic.

Perhaps the most appealing aspects of ‘El Toro’ are its drought and shade tolerance. According to Palmer’s, it will shut itself down in drought situations but quickly recover once irrigation resumes. It also requires less water once established and less fertilizer, making it a more environmentally friendly and an economical choice for the Gardens. Having more shade tolerance than Bermuda grass is important for many areas in the Gardens because they are surrounded by mature trees casting shade in early morning and late afternoon.

We certainly appreciate father and son Ed and Trey Palmer of Palmer’s Turf Nursery for supplying us with an excellent Tennessee product that we know is acclimated to our environmental conditions and professionally grown. You can visit their website for more information at http://palmersturf.com. You’ll be pleased to know that this turf nursery sells direct to residential customers.
The UT Gardens supports the educational mission of UT by serving as an important resource for many academic programs and classes. In one semester, it is not unusual to have classes in art, communications, forestry, entomology and plant pathology, horticulture, and landscape architecture utilize the Gardens. Individual student projects and internships are other educational endeavors that the Gardens support as well. In each issue of our Gardens magazine we highlight two of our UT Gardens student interns — one present and one past. UT Gardens internships are highly sought after and are regarded as an honor and an award. Internships are an invaluable educational experience for students to further their professional development by working and practicing what they are learning in their major. Student Internships are our biggest expenditure for the Gardens. If you would like to help financially support our internship program, please contact Dr. Sue Hamilton at either 865-974-7972 or sueham@utk.edu.

Laura Wigger is the first recipient of the Steve and Ann Bailey Internship in Public Horticulture. Wigger, a Nashville native, graduated from Father Ryan High School in 2009. She credits trips to the Great Smoky Mountains National Park and Radnor Lake State Natural Area in Nashville as her source of inspiration for choosing horticulture as her major. Wigger is currently a senior majoring in plant sciences with a concentration in public horticulture and has a 3.67 GPA. She has received cum laude, magna cum laude, and summa cum laude recognitions and also has been selected as the American Society of Horticultural Science's Collegiate Scholar, a national award! In the UT Gardens, Wigger assists with tours, children's programs, Friends membership and donor records, plant sales, and maintenance of our displays and trials. She sells plants at our weekly Farmers Market where she answers questions for market customers. She also oversees the care of the interior plants at UT's Howard H. Baker Center for Public Policy, including Howard Baker's office and the office of UT President Joe DiPietro. Wigger hopes to work at a public garden out West and “help raise plant conservation awareness and inspire appreciation of nature in others.” She exhibits great professional promise, and we are thrilled to have her play a key role in the work we do in the Gardens.

“My experience at the UT Gardens was a self-defining period of time where I discovered my passion for public gardening. The UT Gardens holds a special place in my heart. I am thrilled every time I return and see how it’s grown over the years.”

Katie McCarver, a UT alumna, worked in the UT Gardens from 2006 to 2008. If anyone had the perfect training at the UT Gardens for a future job, it was McCarver, who after graduation and an additional internship was hired at Michigan State University as their trial garden manager. Similar to UT, the MSU displays and evaluates herbaceous annuals, perennials and tropicals in an impressive campus trial garden. McCarver oversees all aspects of growing, planting, maintaining and evaluating these plants and trains and oversees student interns in the MSU horticulture program who work in the gardens. She has indeed gone from student to teacher! “My experience at the UT Gardens was a self-defining period of time where I discovered my passion for public gardening. The UT Gardens holds a special place in my heart. I am thrilled every time I return and see how it’s grown over the years,” says McCarver.
Education is wasted on the young” is a truism, surely felt by anyone past youth who thinks for a nanosecond of all he doesn’t know and wishes he did. We can all supply examples: for instance, I wish I knew the names of all the gadgets and devices, down to every last nail, in a handyman’s toolbox. Ditto for nautical jargon. That would be fun to know. And I wish I’d studied subjects that once were mine for the taking, spread like a feast in the college catalog. Especially I wish I’d taken courses in the history of gardens and gardening. One would not be enough, because I’d want to start at the beginning.

In lieu of proper study when I might have had a few brain cells available for storage, I’ve been reading hit or miss a smattering here, a remaindered book there, on garden history, and I didn’t begin at the beginning. I began with a book that is often referred to as “White’s Selborne” (White, Gilbert, “The Natural History and Antiquities of Selborne,” published in 1789, continuously in print since that date), because I often saw it mentioned in books. White (1720-1793) was a naturalist, not a gardener per se but a close observer of everything in his immediate world. In his correspondence with other naturalists and friends abroad, he commented on bloom time of the crocuses, the migration dates of numerous species of birds, the development of “good wheaten bread,” earthworms, the study of botany, and agricultural practices. No matter the subject — and they ranged far and wide — he had a lovely way with words as well as a keen eye. In passages on the house cricket or the cultivation of gardens, White will whet your appetite for old words and constructions.

“Our Saxon ancesters certainly had some sort of cabbage, because they call the month of February sproutcale: but long after their days, the cultivation of gardens was little attended to. The religious, being men of leisure, and keeping up a constant correspondence with Italy, were the first people among us that had gardens and fruit-trees in any perfection, within the walls of their abbies and priories. The barons neglected every pursuit that did not lead to war or tend to the pleasure of the chase.” (Letter XXXVII, Jan. 8, 1788)

In the same letter he says, “… the turbulent barons supported in idleness their riotous swarms of retainers ready for any disorder or mischief. But agriculture is now arrived at such a pitch of perfection, that our best and fattest meats are killed in the winter; and no man need eat salted flesh, unless he prefers it, that has money to buy fresh.”

Of course there are comprehensive books on the history of gardens, written in modern English. One rather grand one is Penelope Hobhouse’s “The Story of Gardens” (London: Dorling Kindersley, Ltd., 2002), which is 468 large-format pages, with lavish color photographs. Hobhouse is a noted garden writer, designer, lecturer and DVD star, the grande dame of British and perhaps global gardening. Her book covers gardens and gardening the wide world over, and it begins in Genesis.

Still, for an evening’s read by the fire or an afternoon in the garden, I like the books with the old words and the old ways. Two I found by chance are Horace Walpole’s “The History of the Modern Taste in Gardening” (New York: Ursus Press, 1995), and John Evelyn’s “Directions for the Gardiner and Other Horticultural Advice,” edited by Maggie Campbell-Culver (Oxford: Oxford University Press, 2009). The former, considered very influential in its time, is an essay on what was termed “natural” landscape design. Evelyn’s book is practical, horticultural and more academic, thanks to the editor’s notes and appendices. His language is a joy: in a recipe for carrot pudding he directs “mash & mingle” where we would say stir. And amazingly, he remarks on an issue still alive today: “But there now starts up a Question, Whether it were better or more proper, to Begin with Sallets, or End or Conclude with them?” and cites, “The Sallet, which of old came in at last/Why not with it begin we our Repast?”

Like Hobhouse, Walpole (1717-1797), Evelyn (1620-1706) and White are English, too. Their books are readily available in libraries and for purchase, online if not locally, and there are book-length biographies about the three men.
ABOUT OUR PROGRAMS

The Gardens hosts several series of programs for varying age ranges and interests.

GARDEN SPROUTS

Get the youngest members of your family excited about gardening. These activities are for children ages 3 to 5 and one adult.

GARDEN BUDS

Designed for the older children in your family. These activities are for children ages 6 to 9 and one adult.

GRANDKIDS GROWING

Designed for grandparents and grandchildren to explore the Gardens together.

ADULT WORKSHOPS

Learn about gardening basics and other fun topics, such as how to capture your garden in photos.

MEMBERSHIP

Members of the Friends of the UT Gardens receive discounts on programming. If you attend a program and want to join as a member the day of the program, you can receive a $5 discount on your membership. For more information, call 865-974-7151 or email utgardens@utk.edu.

JUNE

Adult Workshop: Just Grow Up
Saturday, June 15, 1-3 p.m.
Don’t have 10 acres to plant your garden at home? Then grow vertically. Come and learn how to build and maintain a vertical garden. This class will provide you with some basic construction ideas and tips on what to plant in a vertical garden. We also will take a tour of the UT Gardens and explore our vertical garden elements.
Cost: $10/member, $15/nonmember

Grandkids Growing: Pollination Station
Saturday, June 29, 10 a.m.-noon
Without pollinators most of the food we eat would not be possible. Get the buzz about these bugs and what plants they love to pollinate. Enjoy a honey-made snack and make a craft to take home.
Cost: $10/member, $15/nonmember

Garden Sprouts: ABCs — Flowers, Plants and Trees
Friday, May 17, 10-11:30 a.m.
Get to know the plants of the UT Gardens as you practice your ABCs. Participants will make an alphabet craft out of garden materials to take home.
Cost: $8/member, $12/nonmember

JULY

Adult Workshop: Rainwater Harvesting
Saturday, July 27, 1-3 p.m.
Don’t let that rain go to waste. Collecting rain from your roof is an excellent way to help conserve water while keeping your plants alive during the dry, hot summers. Get tips on setting up your own rain barrels and collecting rainwater, then make your own.
Cost $35/member, $45/nonmember

AUGUST

Garden Sprouts: You’re Bugging Me
Friday, Aug. 16, 10-11:30 a.m.
Learn about the good, the bad and the ugly of the insect world. Play a fun bug game and see why it’s important not to squish all bugs you find.
Cost: $8/member, $12/nonmember

Grandkids Growing: Roots, Shoots n’ Fruits
Saturday, Aug. 10, 10 a.m.–noon
Did you know that a tomato is actually a fruit and potatoes are roots? Tour the Kitchen Garden and taste what is growing. Participants will plant a seed to grow and eat.
Cost: $10/member, $15/nonmember

Annual Garden Symposium: Gardening with Children
Saturday, Aug. 24, 9 a.m.–3 p.m.
Getting children active and involved with nature has many benefits. Parents, grandparents and teachers will explore how gardening with children can provide them a closer connection to nature. Teachers will acquire techniques to enhance their curriculum using garden-based learning. Parents and grandparents will learn how to garden at home with children. Children’s activities will be available while adults are in educational sessions. Check our website for speaker and workshop details as they become available.
SEPTMBER

Adult Workshop: Divide & Conquer
Saturday, Sept. 21, 2:30-4:30 p.m.
When perennials overstep their bounds, it’s time to divide and conquer. Dividing is a free and easy way to rejuvenate your plants, get more blooms, and generate extra plants. Gain hands-on experience dividing plants in the Gardens and take home the fruits of your labor. Space is limited. Cost: $25/member, $35/nonmember

Garden Sprouts: Backyard Farmer
Friday, Sept. 13, 10-11:30 a.m.
Studies show that children are more likely to eat what they grow, so let your child become a backyard farmer. Have fun learning about vegetables and what they need to grow. Participants will plant a living salad bowl to take home. Cost: $15/member, $20/nonmember

Grandkids Growing: Fun in the Sun
Saturday, Sept. 14, 10 a.m.-noon
Explore how the sun can power plants, homes and more. Tour the UT Solar House and our Bio-Energy Garden. Make a sun-themed craft to take home. Cost: $10/member, $15/nonmember

Fall Plant Sale
Saturday, Sept. 21
9 a.m.--2 p.m.
Don’t miss this fabulous plant sale. Friends of the Gardens receive a 10 percent discount on purchases.

OCTOBER

Adult Workshop: Fall Harvest Decorating
Saturday Oct. 12, 1-3 p.m.
Pumpkins, gourds, hay bales, corn stalks and mums are all common decorations for fall. Get design tips and ideas on decorating your home and garden for the season and make an autumn wreath out of corn husks. Cost: $25/member, $35/nonmember

Garden Sprouts: This Is for the Birds
Friday, Oct. 11, 10-11:30 a.m.
As cooler weather approaches, birds adapt in different ways. Learn why some fly south for the winter and others don’t. Explore ways birds survive harsher conditions. Make a pinecone bird feeder for the birds in your backyard. Cost: $8/member, $12/nonmember

Grandkids Growing: Bug Box
Saturday, Oct. 12, 10 a.m.–noon
From pollination to natural pest control, insects are amazing creatures. Discover insect anatomy and how to identify the bugs in your garden, then build a bug house to take home. Cost: $10/member, $15/nonmember

Trick or Trees
Saturday, Oct. 26, noon-4 p.m.
Boo in the Gardens! Wear your costume and join us for our third annual Trick or Trees. Scare yourself silly as you take part in five different activity stations throughout the UT Gardens. Learn about bats, jack-o’-lanterns and creepy crawly creatures. Make a ghostly craft to take home. Cost: $6 per child (12 and under)

SPECIAL PROGRAMS

UT GARDENS, JACKSON

Tours
Take a walk through the UT Gardens and learn what’s growing on. Events are rain or shine and will only be canceled in the event of lightning. All tours will depart from the Friendship Plaza at the entrance to the Gardens. (Preregistration is appreciated but not required for these free events. Call 865-974-7151 or email dstowell@utk.edu to preregister.)

• Noon and Twilight Tours:
  Tours are offered May 21, June 18, July 16, and Aug. 20. The first tour will begin at noon, and the twilight tour will begin at 6 p.m.

• Family Nature Nights
  Bring the whole family for a walk in the Gardens. These tours will take place May 20, June 24, July 22, and Aug. 26. Tours start at 6 p.m.

Books and Blooms (Free)
Bring your kids for some free summer fun at the UT Gardens. We will explore reading, music, coloring and sprinkler time (in warmer weather). For more information and to sign up for weekly email notices, contact Derrick Stowell at dstowell@utk.edu. Books and Blooms is held every Thursday from 10:30 a.m. to noon starting May 16 and ending Sept. 26 (excluding July 4).

Fruit of the Backyard
June 18, 8:30 a.m.
Middle Tennessee AgResearch and Education Center Spring Hill, Tenn.

Fall Gardener's Festival
Aug. 27, 9 a.m.
Plateau AgResearch and Education Center Crossville, Tenn.

EVENTS ACROSS THE STATE

For more information, visit http://west.tennessee.edu/oramentals.

Summer Celebration
July 11, 10 a.m.
Admission: $5

Landscape Review – Commercial Ornamental Horticulture
Sept. 17, 9 a.m.–4 p.m.
Admission: $10

Pumpkin Field Day
Sept. 26, 11 a.m.

Pumpkin Harvest Display
Sept. 26-Dec. 1

Fifth Annual UT Gardens Autumn Fest
Friends of the Gardens Preview Party, Oct. 2, 5-7 p.m.
Fall Plant Sale and Lecture Series, Oct. 3, 2-6:30 p.m.
Plant Sale begins at 3 p.m. on Oct. 3

EVENTS ACROSS THE STATE

Fruits of the Backyard
June 18, 8:30 a.m.
Middle Tennessee AgResearch and Education Center Spring Hill, Tenn.

Fall Gardener’s Festival
Aug. 27, 9 a.m.
Plateau AgResearch and Education Center Crossville, Tenn.
This year we are continuing to expand our summer camp options. With the introduction of weeklong camps, we hope to offer more fun and more garden education for your children. We also will be continuing our single-day camps in case you are not able to attend an entire week.

GRANDS & ME
Grandparent and Grandchild (ages 5-9-year-olds)
These fun single-day camps give you and your grandchild a chance to make fun memories while learning about nature. Participants will need to bring a sack lunch.

Garden Music
Monday, June 10, 9:30 a.m.-3:30 p.m.
Enjoy the music of the UT Gardens. See how birds, wind chimes and other objects found in a garden make music. Learn about natural materials that make great musical instruments and make and take an instrument home for you to play in your garden.
Cost: $20/member family, $25/nonmember family

Tea With the Ladybugs
Monday, July 8, 9:30 a.m.-3:30 p.m.
Ladybugs are our friends. Come and learn why ladybugs are so important for your garden. Get to know these great insects and attract them to your garden. We’ll dress as ladybugs at our tea party in the Gardens.
Cost: $20/member family, $25/nonmember family

Plant Art
Monday, July 29, 9:30 a.m.-3:30 p.m.
Plant stems, flowers and leaves all can be great paintbrushes. Take found objects from the Gardens and use them to create art. Make your own artwork to take home.
Cost: $20/member family, $25/nonmember family

LIL’ GARDENERS
4- to 5-year-olds
These half-day camps are designed to be shorter in duration for your little gardeners. A snack will be provided each day.

It’s Easy Being Green
June 3-7, 9:30 a.m.-noon
Being green is easy. This weeklong camp will give you simple tips to help you be more Earth-friendly. Learn how to compost, conserve water and eat healthier.
Cost: $60/member, $85/nonmember

Garden Explorers
June 18-21, 9 a.m.-3 p.m.
Explore the water cycle and run through the sprinklers at the UT Gardens. They also will learn about soils, composting, harvesting, photosynthesis and much more. Garden camp will be a feast for the senses as youth have fun exploring sights, sounds and tastes of the garden as they learn in a hands-on environment.
Cost: $35/member child, $45/nonmember child

The Gardens in Flight
Friday, Aug. 2, 9:30 a.m.-noon
Learn about birds and flying creatures you can find in a garden. Make your own flying machine. Listen and enjoy the musical tunes of birds in the Gardens.
Cost: $13/member, $18/nonmember

GARDEN EXPLORERS
6- to 12-year-olds
These full-day camps are longer in duration for your older children. We also are offering a partner camp with UT Extension’s Knox County office and a new partner camp with the Knoxville Botanical Gardens. A snack will be provided, but campers will need to bring a sack lunch each day.

What Goes Up, Must Come Down
Friday, June 14, 9:30 a.m.-noon
How does water get to our tap? Why does it rain? Take a look at the water cycle and run through the sprinklers at the UT Gardens. Children will make their own mini water cycle to take home.
Cost: $13/member, $18/nonmember

Candy-making From the Kitchen Garden
Tuesday, July 2, 9:30 a.m.-noon
Learn how to take herbs growing in your garden and turn them into tasty candy. Get a few growing tips as well. Make your own candy to take home and share.
Cost: $13/member, $18/nonmember

Where We Live (Knoxville Botanical Gardens partner camp)
July 15-19, 9 a.m.-3:30 p.m.
Explore the Appalachian region and learn what makes it amazing. Get to know the different ecosystems of the area. Listen to the birds and learn about native wildlife found in East Tennessee. Take a walk through the Knoxville Botanical Gardens vegetable garden, butterfly meadow and much more. Learn why native plants are great additions to your home garden and take a native plant home.
Cost: $90/member, $115/nonmember

Plant Power
Aug. 5-9, 9 a.m.-3:30 p.m.
Plants are powerful. We depend on plants for food, fiber, medicine and energy. Learn how plants take the sun’s energy and change it into food for us to eat. Visit the Living Light, UT’s solar-powered house, and learn how humans harness the power of the sun.
Cost: $90/member, $115/nonmember

Licorice and Root Beer
Monday, June 24, 9 a.m.-3:30 p.m.
Candy from seeds? Soda from roots? This class will teach you how plants are used to make tasty treats. Learn what parts of the plants we can eat and make a treat to enjoy from the Gardens.
Cost: $18 member, $23 nonmember

Water Wonderland
Monday, July 1, 9 a.m.-3:30 p.m.
Two-thirds of the Earth’s surface is covered with it, yet only a small portion is actually drinkable. Learn how crucial water is to keep us and plants alive and well. Explore the water cycle and simple ways to conserve water.
Cost: $18/member, $23/nonmember
The University of Tennessee Gardens Presents
Angelonia Serenita Lavender Pink
Top Annuals of 2012

**Best in Show** — *Angelonia* Serenita
Lavender Pink. This seed-grown variety bloomed profusely all season. Bright pink blooms were a knockout on tidy, compact plants. (PanAmerican Seed)

**Best New Variety** — *Evolvulus* Blue My Mind. The vibrant true-blue blooms on this cultivar were a standout against the silvery foliage all summer long. A trailing growth habit makes it well suited for borders or containers. (Proven Winners)

**Best Repeat Variety** — *Capsicum* ‘Chilly Chili.’ This ornamental pepper never fails to delight with its long and showy orange and yellow fruits held on top of the plant. Compact growth makes it perfect as a border or container plant. (PanAmerican Seed)

Top 20 Annuals

- *Begonia* Havana Rose
- *Calibrachoa* Superbells Dreamsicle
- *Capsicum* ‘Black Olive’
- *Celosia* ‘Arrabona’
- *Cyperus* Graceful Grasses King Tut
- *Euphorbia* Diamond Frost
- *Helichrysum* ‘Silver Leaf Yellow’
- *Ipomoea* ‘Sweet Caroline Bewitched’
- *Lantana* Luscious Tropical Fruit
- *Lobularia* ‘Blushing Princess’
- *Petunia* Supertunia Vista Bubblegum
- *Salvia* ‘Fairy Queen’
- *Scaevola* Surdiva White
- *Scoparia* Illumina Lemon Mist Improved
- *Solenostemon* ‘Vino’
- *Tagetes* ‘Moonsong Deep Orange’
- *Torenia* Summer Wave Large Violet
- *Verbena* Temari Cherry Red
- *Zinnia* ‘UpTown Whitewall’
- *Zinnia* ‘Zahara Double Fire’
Top Perennials

Agastache ‘Blue Boa’
Echinacea ‘Cheyenne Spirit’
Gaillardia ‘Mesa Yellow’
Geranium ‘Blushing Turtle’
Hibiscus ‘Peppermint Schnapps’
Hypericum Hypearls Renu
Nassella tenuissima ‘Angel’s Hair’
Pennisetum ‘Karley Rose’
Sedum ‘Lemon Ball’
Tradescantia Lucky Charm

Top Edibles

Capsicum ‘Cayennetta’ F1 (Pepper)
Fragaria ‘Toscana’ F1 (Strawberry)
Ocimum ‘Langkuri’ (Basil)
Pisum Mammoth Melting Sugar Snow
(Snow Pea)
Solanum ‘Kurume Long’ (Eggplant)

Top Trees and Shrubs

Albizia julibrissin ‘Summer Chocolate’
Callicarpa americana ‘Welch’s Pink’
Cercis canadensis ‘Appalachian Red’
Cryptomeria japonica ‘Gyokuryu’
Cupressus glabra ‘Sulphurea’
Euscaphis japonica — Korean sweethearts tree
Hydrangea macrophylla Twist-n-Shout
Hydrangea paniculata ‘Little Lamb’
Hydrangea quercifolia ‘Munchkin’
Hydrangea quercifolia ‘Ruby Slippers’
Lagerstromia indica Strawberry Razzle
Dazzle
Loropetalum chinense ‘Daruma’
Pistacia chinensis
Taxodium distichum ‘Cascade Falls’
Thuja occidentalis ‘Degroot’s Spire’
Xanthocyparis nootkatensis (formerly Chamaecyparis nootkatensis)
‘Van den Akker’

Top Roses

‘Scentimental’ Floribunda Rose
‘Tournament of Roses’ Grandiflora Rose
‘Yellow Sunblaze’ Miniature Rose
‘Frederic Mistral’ Hybrid Tea Rose
Maple trees (Acer spp.) are treasured for their form, their handsome seasonal foliage color, their cooling summer shade, and their graceful branching habits. Some species and cultivars exhibit exquisite seasonal bark features. Before purchasing one of the following colorful bark selections, sort through their traits for the one that best befits your garden space. They include mature tree height and width; seasonal foliage color; form; foliage texture; and the unique bark characteristics such as color, pattern and exfoliation (peeling and shedding bark).

When planting any of the choice maples listed, be sure to plant in a location where you and others can view and enjoy the tree. Sunlight exposure, temperatures and soil moisture are all indices that change over the seasons and from one year to the next. Most tolerate heat and drought issues across Tennessee and some do not. Many of the selections highlighted are happier in the cooler temperatures of upper East Tennessee than in the warmer West Tennessee region. In recent years in our Midsouth region, spring freezes and atypical summer droughts have devastated some cultivars of Asian maples.

These maples should be planted in well-drained soil rich with organic matter. The ideal soil pH ranges from 5.8 to 6.5. They benefit from mulching to sustain moderate soil moisture and temperatures year-round. A slow, deep watering twice monthly in the hot summer helps ease heat and drought stress. Feed a slow release six- to seven-month rated fertilizer in late winter.

Small maples ask for some minimal pruning annually. Creating an artistic form simply requires selective removal of unwanted growth. Be aware that many cultivars are grafted, so be prepared to remove all sucker growth.

**CORAL BARK MAPLES**
Japanese maple (A. palmatum) offers a vast array of shrub and tree forms including three cultivars valued for their coral bark color. Bark color is always best in full sun and sometimes can show up as a softer hue or color on the north or shady side, which gives the plant a totally different look depending on the angle from which it is viewed. It’s a wonderful maple to brighten the winter landscape. Fantastic when lit up at night, especially in the winter nighttime landscape!

‘Sango Kaku’ is regarded as one of the best “coral bark maples” with crimson red twig and trunk bark from late fall through winter. Grows 20- to 30-feet tall with an upright habit.
‘Beni Kawa’ is a smaller version of ‘Sango Kaku,’ growing to just 12-15 feet in height. Dark green summer leaves transition to yellow, orange or reddish tones in the fall.

‘Fjellheim’ is a witch’s broom from ‘Sango Kaku,’ so it has the wonderful characteristics of ‘Sango Kaku’ but smaller. It forms a compact bushlike tree growing only 4- to 5-feet tall and wide. It is great for the small garden or containers.

**GOLDEN BARK MAPLES**

‘Bihou’ Japanese maple (A. palmatum) grows into a small 12- to 15-foot-tall, upright branched tree with small yellow-green summer foliage. The summer foliage gives way to orange fall leaf color and a yellow-orange bark during the winter.

‘Winter Gold’ (A. rufinerve) grows into a small 12- to 15-foot tree or large multibranched shrub with scalloped deep green summer foliage that turns gold in the fall. The bark of ‘Winter Gold’ is brighter ‘Bihou.’

‘Japanese Sunrise’ is a fast-growing upright selection that has wonderful variations in its bark color. As soon as temperatures begin to drop in the fall, the bark changes color to yellow at the trunk. The colder it gets, the farther up through the branching the color moves, changing from pale yellow or orange to intense red at the tips. Bark color can show up yellow on the north or shady side of the tree. Foliage emerges lime green then darkens as summer takes hold, then in fall changes to a quite remarkable shade of yellow. Grows up to 15 feet tall with an upright, open form.

**SNAKEBARK MAPLES**

Snakebark maples have stripes in their bark that can be quite unique and beautiful. They typically are found as shrubby understory trees that are native to moist, rocky forests from Wisconsin to Quebec and south in the Appalachians to Georgia. They grow as large shrubs or small trees to 15- to 25-feet tall (less frequently to 40 feet tall) with a rounded but uneven crown that is sometimes flat-topped. Fall foliage color and striped bark (particularly in winter) are attractive. Best used for woodland gardens or shaded naturalized areas.

Moosewood maple (A. pensylvanicum) is the only species of snakebark maple that is native to North America. Greenish bark on young branches and young trunks is vertically marked with distinctive white stripes. Stripes may vanish over time as older bark turns reddish brown. Moose and white-tailed deer often browse the leaves and young twigs, hence the common name of moosewood.

Coral snakebark (A. pensylvanicum ‘Erythrocladium’) takes this maple species to a whole new level because once the weather turns cold, the branches turn a glowing salmon red — much like A. palmatum ‘Sango Kaku.’ This fine snakebark was given the Royal Horticulture Society Award of Merit in 1976. This small tree, which sports buttery-yellow fall foliage, merits a place in every garden, but it is rare in cultivation and not easily found in the nursery industry.

Manchurian striped maple (A. tegmentosum) is the Asian equivalent of moosewood. The variety ‘White Tigress’ is a hybrid of two Asian species (A. tegmentosum x A. davidii). It exhibits exceptional white- and green-striped bark and is more heat-tolerant than moosewood.

Red-striped snakebark (A. conspicuum ‘Phoenix’) features brilliant red- and white-striped bark in the winter garden, brighter than A. pensylvanicum ‘Erythrocladium.’ Its glossy green foliage turns bright yellow to pale gold in the fall.

**EXFOLIATING BARK MAPLES**

Paperbark maple (A. griseum) is one of three trifoliate leaf maples listed here. The soft blue-green spring foliage turns dark red in the autumn. Most paperbark maples are seedling produced, so expect wide variability in growth rate, mature tree height and form, and bark color. In the landscape, the tree should be visually sited to capture its awesome exfoliating cinnamon-brown bark and polished inner wood year-round. This tree is not crazy about heat, and it should be located away from direct afternoon sunlight.

Three-flower maple (A. triflorum) is another of the 20- to 25-foot tall trifoliate maples. As the tree ages, the main trunk and scaffold branches reveal its wonderful exfoliating ashen brown to golden amber bark. Some sun protection against the harsh afternoon sunlight is advised in USDA zone 7 and warmer.

Nikko maple (A. maximowiczianum), the last of the trifoliate maples, is indigenous to China and Japan. Nikko has been crossed with three-flowered and paperbark maple species for stronger, faster tree growth. Although it has a nonexfoliating bark like the other trifoliate maples mentioned, the dark gray to black bark will develop a beautiful pattern with age. Mature height is 20-30 feet.
KUDOS TO OUR GARDENS VOLUNTEERS!

I am thrilled to report that 151 volunteers contributed more than 1,740 hours of service to the UT Gardens in 2012! That translates to an incredible value to the Gardens of $37,925 (according to Independent Sector’s valuation of volunteer time to nonprofits). The enthusiasm and generosity of our UT Gardens volunteers never ceases to amaze and inspire me. What a fantastic group to work with! From help with our plant sales and special events, to assistance with children’s programming, to installation of a new labyrinth garden and cleanup of the Third Creek streambank, and finally to those who came each week to help in the greenhouses and gardens — our volunteers do so much to advance the Gardens and help us make them beautiful as well as educational.

The UT Gardens, Knoxville, could use your help! We offer a variety of volunteer opportunities throughout the year: from working in the garden or greenhouse, to helping out with special events or educational programming, or even helping out with office duties. Regardless of the task involved, our volunteers play a vital role in the Gardens.

We invite you to join this dedicated team. You’ll meet people with common interests and learn more about gardening. Contribute to your community, form new friendships, and learn new skills — all while having a lot of fun! Volunteer opportunities also exist for students and teens. The UT Gardens values its volunteers and aims to offer every volunteer a satisfying, productive and rewarding experience.

To learn more about volunteer opportunities at the UT Gardens, Knoxville, contact Beth Willis, volunteer coordinator, at 865-974-2712 or ewillis2@utk.edu.

MONTHLY E-NEWS

We email a monthly e-newsletter highlighting upcoming programs, our plant of the month, regional gardening tips, and information relevant to our members and area gardeners.

If you are not receiving the monthly e-news, you can sign up for it on our website home page: http://utgardens.tennessee.edu. We do not share, rent or sell member email addresses. You may unsubscribe at any time.

MEMBERSHIP CARDS

Shortly after joining or renewing your UT Gardens membership, you will receive a membership card in the mail. This card will have your renewal date on it. You can use this card throughout the year to receive your member discount at our plant sales, to access the member pricing for educational programming, or to provide proof of membership at other gardens participating in the American Horticultural Society’s Reciprocal Admission Program. Please allow four to six weeks to receive your card. If you have any questions about membership or would like further information, please contact Beth Willis at 865-974-2712 or ewillis2@utk.edu.

THE VOLUNTEER APPRECIATION AND KICKOFF LUNCHEON

The Volunteer Appreciation and Kickoff Luncheon was held on Monday, Feb. 25, at the UT Visitors Center. Sixty-six people, including a mix of veteran and new volunteers, were in attendance as we celebrated the 1,740 hours that were contributed by Gardens volunteers in 2012. We are looking forward to another successful volunteer season in 2013.

The Gardens also announced a new award, the Distinguished Volunteer Service Award. It is designed to honor an individual or couple who, through volunteer service, have contributed greatly to the UT Gardens over the course of many years. We were thrilled to honor longtime volunteer Lucy Scanlon as the first recipient. Scanlon is currently the longest-serving volunteer at the UT Gardens, having started in 1998 — prior to the official start of the volunteer program itself! Her garden knowledge, work ethic and enthusiasm have made her an inspiration for the staff, student interns and fellow volunteers who have worked with her over the years.
UT GARDENS CREATES EDUCATION COMMITTEE

By Derrick Stowell, garden educator

In an effort to reach a broader audience and create greater enthusiasm for gardening, the UT Gardens has formed its first education committee. The group, led by UT Gardens educator Derrick Stowell, has six members who will each serve a one-year term. The committee is charged with creating educational programs for gardeners of all ages and experience levels. The UT Gardens thanks the inaugural committee members for their time and contributions to this important endeavor.

Laura Wigger is currently a senior at UT pursuing a degree in plant sciences with a concentration in public horticulture. She began working at the UT Gardens in April 2012 when she was awarded the Steve and Ann Bailey Public Horticulture Internship. Wigger has helped run the Books and Blooms summer reading program and has assisted with various garden camps.

Beth Watson Drinnen is a freelance garden writer who also works and writes for Oakes Daylilies here in Knoxville. A Tennessee Master Gardener and mother of two, she volunteers with the Knoxville Botanical Garden and Arboretum and with the Habitat Urban Garden Program. Watson Drinnen enjoys sharing her love of gardening with children and adults through her affiliation with UT Gardens.

Kathleen Smith has a passion for education. She enjoys many area attractions with her children and was initially drawn to the UT Gardens through the Books and Blooms program. Smith is thrilled for the opportunity to contribute to what she feels is one of Knoxville’s greatest community assets.

Faye Beck began her association with the UT Gardens in 1994 and has been a member of the Gardens ever since. A Tennessee Master Gardener, she has volunteered at the Gardens in a variety of capacities including past president of our Friends of the Gardens, chair of educational programs, and our Blooms Days committee.

Karen Schwarz Ferency is a water resources/environmental engineer with a focus on habitat restoration turned stay-at-home mom. She enjoys gardening, pottery and the outdoors, and she is excited about the opportunity to help plan and work on educational programming at the Gardens.

The 2013-2014 committee will convene in August 2013. If you are interested in participating, contact Derrick Stowell at 865-974-7151 or dstowell@utk.edu.

MUST-HAVE GARDEN TOOLS

By Ben Ford, HGTV graduate student

Good garden tools are often the difference between a pleasant morning of garden maintenance and a frustrating day spent grappling with dull shears and broken handles and ending in blistered hands. In all of my horticultural work experiences, there are three essential tools that I recommend every gardener have:

Corona Convertible Pruner + Lopper 1 ¼ inch diameter
This multipurpose tool is one of the handiest tools a gardener could own. These versatile shears comfortably cut large woody branches and perennials with ease. Unlike cheaper shears, Corona shears offer powerful and precise cuts on the first try, which minimizes damage to the plant as well as your time and effort. The only thing that could make them better would be a tracking device for locating them when you misplace them in the garden! http://coronatoolsusa.com/catalog/pruning-tools/convertible-pruner-lopper-1-1-4-in-cut.html

Bionic ReliefGrip Gardening Glove
Can you pick up thorny rose clippings with your current gardening gloves? The clever padding in Bionic Glove prevents the prickliest of garden adversaries from penetrating to the hand. These stylish gloves allow gardeners to work in both comfort and confidence. The pliable material at both the knuckles and between fingers allows for a more natural, unconfined movement. Available in both men’s and women’s sizes. http://bionicglovesdirect.painreliever.com/bionicglove-men-s-reliefgrip-gardening-glove-gm2.html

The Clarington Forged Dutch Stirrup Scuffle Hoe
While it does require some force, this unique hoe makes quick and easy work of weeding young tender weeds before they mature and get out of control. The push-pull action you use with a scuffle hoe unearths the shallow, tender roots of young weeds. I like the exercise I get when I use this type of hoe, as well as not having to use chemicals to get rid of the weeds. The weeds can either be raked and tossed into the compost pile or left in the bed to bake and die in the sun. Scuffle hoes also come in handy to mix compost into the soil, fluff mulch or mix in fertilizer before planting. http://www.claringtonforge.com/dutch-hoe
The clear blue colors of Miah Jane, named for a charming young neighbor. (credit Terry Aitken)

Grace Another Cup of Coffee  Heaven’s
A walk in Tom Parkhill’s garden in the Island Home neighborhood of Knoxville finds iris, lots of them. The long beds that stretch across his backyard contain some 400 named varieties of tall bearded iris. Growing among them are varieties that Parkhill himself has introduced during 63 years of hybridizing iris.

Parkhill pursued his passion for iris across a career in bricklaying, a tradition in his family and one that saw him help construct some of the most significant buildings at UT and downtown Knoxville. Since his retirement in 1990, he’s focused in earnest on iris. Through his hybridizing work, Parkhill has released 19 carefully chosen iris to the market. Critics praise them for their clear colors and significantly better substance than most in their class. And those qualities have won awards.

Parkhill’s varieties have received eight top honors in American Iris Society judging. The most recent is the 2012 Wister Medal for Chief John Jolly, signifying that this iris is considered to be the third best tall bearded growing in the world. The AIS awards are particularly impressive because they indicate Parkhill’s homegrown varieties outcompeted ones from the industry’s foremost commercial breeders.

Parkhill says the skills he learned to judge livestock as a UT animal science major have helped him measure iris traits and decide on which lines to advance. You may be surprised to know that flower beauty and form are the last points he considers.

“The first thing I always look at is the strength and hardiness of the stalk. If it’s a shy grower, no matter how beautiful, you don’t want it. Then I look at branching. I want a strong stalk with at least three perfectly spaced branches. Next is bud count. My lower limit is pretty much eight, and the more the better. Only then do I look at the bloom.”

The best AIS judges look for these factors, Parkhill says, and they’re good points for home gardeners to assess, as well. He also has personal preferences. “I like to be able to look down between the standards and see the beard and style arms. That means slightly domed standards, not the closed ones that are generally found.”

The holy grail of the iris world is a pure red bloom. After 50 years of hybridizers trying to achieve that color, Parkhill believes a red gene is just not there. Instead, as iris lovers well know, all the other tints and shades of the rainbow are found in these beautiful, majestic flowers.

At age 88, Parkhill continues to cross iris. “I want the perfect iris, and it’s never there but it’s always beckoning me to continue.”

To talk iris with Parkhill or see his garden, contact him at his home, 865-573-8794. You can also find him at Blooms Days, where he and other members of the East Tennessee Iris Society share information about their favorite flower and offer superior iris for sale to event participants.

The UT Gardens will be adding this summer the Tom Parkhill iris collection, which is composed of all 19 of his introductions.
The newness of spring is here. Walking around your garden you may begin to notice how the fresh foliage of spring is truly one of the most spectacular sights in gardening. The color and texture of a newly emerged leaf from a stem is a promise to the gardener that spring has arrived.

**A LEAF WITH A PURPOSE**

Flower power is not all there is to spring blooming plants. Leaves that unfurl in spring can be one of the most beautiful sights in the garden. However, it is easy to take these beauties for granted. Take a second to ponder not what is seen but what is unseen. There a myriad of processes going on with each leaf. A leaf’s job is to be a factory for the plant. It gathers light energy to power food production. The leaf and its methods are the very core of life. Each leaf is accountable for upholding our atmosphere by restocking the oxygen animals and humans use up. Additionally, they support our food system as the foundation of everything we eat. Yes, leaves are pretty important.

The aforementioned factorylike processes of each leaf is simply amazing. Water, carbon dioxide and energy from the sun are combined brilliantly to produce food for the plant in the form of sugars (during photosynthesis). Dispersed within the cells of the leaf are tiny structures called chloroplasts, and inside of these are green pigments called chlorophyll. Chlorophyll has the wonderful ability to capture light energy from the sun. This energy is used to split water molecules into hydrogen, oxygen and energy-rich electrons. The hydrogen combines with carbon dioxide in the air to produce sugars. Some of the oxygen is released back into the atmosphere, which makes us all literally breathe a little bit easier. The rest of the oxygen is eventually reunited with electrons and hydrogen to form new water molecules in the last step of plant respiration. The entire process is an efficient reaction and results in the growth of plants all around us.

**FORM AND FUNCTION**

The leaf is truly a functional structure — but enough of this scientific stuff. Luckily for the gardener, foliage can be used to great ornamental effect. Great gardeners use the verdure of spring to enrich their garden with texture, color and pattern. From big, bold and bodacious leaves to fine-textured beauties, foliage is integral in making your garden look its best. Think of everything in your landscape from your turfgrass to spring annuals. The leaves that make up each individual plant stitch your garden together in a beautiful way. Plants that are valued for their foliage are easy to work with for the beginning gardener, and tend to be the go-to plants for the seasoned professional. Mixing plants with a variety of foliage sizes, textures and colors is a surefire way to make a garden pop.

A shady spot in your garden is a great place to experiment with foliage combinations. Tried-and-true plants like hosta, hardy ferns and aucuba can be good places for the beginner to start. If it suits you, use plants with yellow or gold variegation in their leaves to artificially bring light into a dark garden understory. However, foliage plants are not just for low-light gardening situations. Branch out and find plants that are valued for their foliage for the sunnier locations in your garden.

**LET THERE BE LIFE**

As the spring gardening season is in full swing, take some time to appreciate everything that leaves do to sustain life. Take a moment to think about what they can do to make your space even more beautiful. Plan some new combinations in your garden where foliage power, not flower power, is the focus. Transitioning from a single-minded approach, where flowers are all that matters, to creating effective foliage combinations is the mark of a gardener who is “ripening” into maturity.
Did you know that children who grow their own food are more likely to eat fruits and vegetables, show higher levels of knowledge about nutrition, and more likely to continue healthy eating habits? Promoting children’s gardening can positively impact health in children, and plans are under way to build a new children’s garden in the UT Gardens this year, Sue Hamilton, director of the UT Gardens, said.

More than $30,000 will be raised privately and will be leveraged with university resources to build a children’s garden space. Currently, more than $10,000 has already been raised. The effort was jump-started after receiving a gift of $5,000 from Elin Johnson of Sweetwater late last year.

Hamilton said she and the staff are grateful for support from folks like Johnson and pointed out that gifts of $250 or more will be recognized in the new garden space at the entrance. Donor names will be listed on a new sign as a way to say thank you.

Another recent gift of $1,000 was made by Jim Bob and Ann Durall of Knoxville to honor their grandchildren. “My husband Jim Bob and I wanted to do something to honor our grandchildren, but we also were motivated by the fact that our three daughters graduated from UT Knoxville and our two sons attended UT Chattanooga,” Durall said. “It was a river of great things for our family and this was a great opportunity.”

The new children’s garden will be located in the old herb garden. A grand treehouse will serve as the focal point of the new space. “These new features will be a great place to play for children of all ages,” Hamilton said, “while teaching them the importance of gardening.” Hamilton also said that the features of the new children’s garden will blend nicely into other garden spaces. Construction is scheduled for late 2013. Gifts to support the children’s garden may be made to the UT Foundation and sent to Tom Looney, 107 Morgan Hall, Knoxville, TN 37996.
FRIENDS OF THE GARDENS
NEW AND RENEWING DONORS

Benefactor Friends ($1,000)
Larry & Candace Arrington
Sam & Mary Anne Beall
James & Ann Durall
East Tennessee Hosta Society
Elin E. Johnson
Pellissippi Beautification Committee (In honor of Maria Compere)
Anonymous (In memory of Dr. Jesse H. Poore)

Patron Friends ($500-$999)
Dr. Alan S. Heilman
Dr. Joseph & Patricia Johnson

Sponsoring Friends ($250-$499)
Ben Alford III & Sarah Sheppeard
Faye H. Beck
William & Vicki Christensen
Joseph & Posey Congleton
Dr. Norma Cox & Joseph G. Cook
Michael & Sallie Ehrhardt
Mark W. Fuhrman
Dr. Ralph & Connie Gonzalez
Melissa & Thomas McAdams
Judy & Brent Moore
Dr. Joseph & Sharon Miller Pryse
Dr. Alan Solomon & Andrea Cartwright
Darlene & Michael Thompson
Dr. James & Elizabeth Wall
Dr. Sidney & Linda Wallace

Contributing Friends ($100-$249)
Cherie H. Adcock
Elmer & June Asbury
Dianne Blane
Betty & Bobby Braden
Tom Boyd & Sandra Burdick
Joshua K. Currier
Catherine & Thomas Daly
Dr. David & Elizabeth Etner
Ann K. Farrar
Catherine & Emerson Fly
Ed & Preston Gentry
James Glover
Alice L. Greene
Brenda & Bill Griffith
Sally & Douglas Gross
Dr. Rosalind I. Hackett
Clarke & Joe James Harrison
Dr. James & Harriette Hilty
Kandi & Steven Hodges
Jodie & John T. Johnson
Karen & John Kalec
Heather Thomas Longo
Mary L. Luper
Lynn Austin Photography
Mary Mishu
Marta Seiber Murrell
Harold E. Myers
Charlie & Dana Outlaw
William & Julianne Outlaw
Anthony B. Pettis
David Piper & Mary Ann Loveday
Thomas & Pamela Reddoch
Shain Rievley Bloom Photography
Susan & Lee Sheppard
Lisa A. Lemza & Michael Shillinger
Dr. Harriette LaVarre Spiegel
Dr. James C. Sternberg
Dr. Jennifer E. Stokes
Ann Pond Stowers
Tennessee Rose Society
Theodore Vallejos
George E. Wilson III

Family Friends ($50-$99)
Sally & Kenneth Abbas
Dr. James & Anne Barker
Summer E. Brown
Martha & Ben Burnette
Dr. Dan & Ellyn Cauble
Thomas A. Cervone & Susan Creswell
Kathy & Charles Clark
Dr. Stephen & Jan Cobble
Maria L. Compere
Alice & George Condo
Dr. David G. Craig
Dr. Sterling & Virginia Craig
Charlotte & Kent Crawford
Paul & Paulette Crews
Kim M. Davis
Dr. Richard & Barbara Dyer
Alisa & Bruce Firehock
Diane & Gary Forry
Owen & Sue Gwathmey
Dr. Barton & Wilma Haggard
Mary Kay & John Havranek
Cynthia A. Hassil (In memory of Lorna Norwood)
Linda & John Haynes
Dr. Lawrence & Donna Husch
Mary L. Koella
Peter & Judy Kopp
Dr. Kenneth Lister & Georgia Lewis
May Eileen Loest
Ellen & Grant Morar
Dr. Emerson & Joanne Mounger
A. Elaine & Gary E. Mount
Carl & Camille Mussenden
Martha Olson
Dr. John & Susan Owen
Dr. James & Jane Phillips
Sandra Long & Frederick Pinkerton
Harry K. Pope
Joanna Priester
Janice & Richard Rawe

Individual Friends ($35-$49)
Sandra Acuff
Katie Aguire
Peggy Eskew Allen
Anita Kay Archer
Dr. Richard Austin
Janie Ayres
LaVerne Bawcum
Maureen Benavides
Terrell & Karen Blanchard
Sallie M. Blazer
Patricia & Paul Brawley
Cyndi Bryant
Mary Jean Bryant
Tammy L. Buchanan
Sabra Buchheit
Chuck Burnett
Billy J. Byerley
Holly & Jon R. Cameron
Stanley Walker Carnell
Dr. Kenneth & Beverly Carr
Joan Carrol
Sara Clem
Bettie J. Corey
Susan E. Cowan
Betsey Beeler Creekmore

THANK YOU FOR YOUR SUPPORT
Dr. Kim Davis  
D.J. Day  
Patricia & Henry Dent  
Linda Denton  
Carol Dix  
Judith A. Duck  
Sarah Dunn  
Terrell & Nancy Estes  
Ann Evans  
Laura Evans  
Bette Fields  
Margaret Haggard Fisher  
Debbie Fox  
Ernest Freeburg III & Lauren Bray  
Elizabeth L. Gardner  
Wayne & Lynette Gerler  
Emily Anne Gonzalez  
Virginia Grace  
Alice L. Greene  
Christine Griffin  
Terri Lee Gulick  
Dr. Sally Ann Guthrie  
Nancy & Robert Hansard  
Suzanne & Jim Harrison  
Kathleen & Nick House  
Kathleen Huneycutt  
Lucinda Hunley  
James W. Hutchison  
Cynthia Jayne  
Kim Jeskie  
Dr. Larry & Rebecca Johnson  
Barbara Keathley  
Cynthia Klassen  
Dr. India Lane  
Jean Lantrip  
Terry Leese  
Magdalene Liles  
Susan Luckey  
James & Sharon Matthews  
Kat McGrey  
Shirley Meagher  
Michelle Michaud  
Georgia Morehead  
Linda B. Murphy  
Frances M. Neal  
Tricia Nelson  

Bonnie & Steven Ogden  
Cynthia R. Ogle  
Sandra Ourth  
Dr. John D. & Tammy Overby  
Hella & Carl Peterson  
Sue Piller  
Annie Pomerov  
Michael & Linda Poole  
Betty F. Powell  
Rebecca Rathjen  
Leah Rawlins  
Andie Ray  
Karen M. Reed  
Linda Reeves  
Willa & David Reister  
Judy C. Renshaw  
Doris Rich  
Dr. Gary & Jeanne Rollins  
Cheryl Rowland  
Wayne Russell  
Margaret Fuller Sadler (in memory of Louise Fuller)  
Betty Anne Schmid  
Elizabeth Schumaker  
Carmella R. Senatore  
Betty & Richard Smith  
PJ Snodgrass  
Katherine & Randall Stewart  
Sunrise Garden Club of Maryville  
Nancy Sue Tabor  
Mary Tebo  
Sheila & Arnold Tew  
Carol S. Troyer  
Lois & Nelson Van Wie  
Thelma Walker  
Zan Walker  
Geraldine V. Webster  
Michael Weir  
Jamie Wheeler  
Jessyca E. Williams  
Dr. James Wilson  
Mary Lou Witherspoon  
Anne L. Wright  
Suzanne & William Wyatt  
June H. Young  

**Student Friends ($15-$34)**  
Jeran Guffey

New and Renewing Donors  
Donations were received from July 1, 2012 to Dec. 31, 2012. Please let us know of any corrections or additions by calling 865-974-8265 or emailing utgardens@utk.edu. You may join Friends of the Gardens or contribute online at http://utgardens.tennessee.edu/membership.html.
The University of Tennessee Gardens
UT Institute of Agriculture
252 Ellington Plant Sciences Building
2431 Joe Johnson Drive
Knoxville, TN 37996

The University of Tennessee is an EEO/AA/Title VI/Title IX/Section 504/ADA/ADEA institution in the provision of its education and employment programs and services. All qualified applicants will receive equal consideration for employment without regard to race, color, national origin, religion, sex, pregnancy, marital status, sexual orientation, gender identity, age, physical or mental disability, or covered veteran status.

BECOME A Friend TODAY!
utgardens.tennessee.edu