



Trumpet Vine

Knowledge for the Community from Loudoun County Master Gardeners

Summer 2015

Volume XI, Issue 3

www.loudouncountymastergardeners.org

LOUDOUN COUNTY MASTER GARDENER LECTURE SERIES

FREE AND OPEN TO THE PUBLIC, 7PM
UNLESS OTHERWISE NOTED ALL
LECTURES ARE AT THE VIRGINIA
COOPERATIVE EXTENSION OFFICE,
30B CATOCTIN CIRCLE SE, LEESBURG

July 9. "Goodbye Grass, Hello
Suburban Meadow" with Tom
Mannion, Landscape designer.

August 6, "Part 1 - Who Invited
You? An Update on Stinkbugs
and other Invasive Pests" with
Amanda Newton, entomologist,
Virginia Dept. of Agriculture.

September 3, 2015 "Part 2 -
Who Invited You? Weeds and
other Invasive Plants" with Ron
Circe', Manager Banshee Reeks
Nature Preserve. Location:
Banshee Reeks, 21085 The
Woods Road Leesburg, VA
20175

October 1, 2015 "Plants,
People & Place: An Amazing
Dance Across time and
Terrain" with Hayden
Matthews, environmental
historian and storyteller.

For more information and
updates, please visit our web
site at
loudouncountymastergardeners.org

Visit us on Facebook:
Master Gardeners of Loudoun
County, Virginia.

Summer Gardening

In our dreams summer is the time we sit back and enjoy the fruits of our spring labor. We relax with our feet up, a cold beverage in hand and enjoy the beauty of the flowers and the bountiful garden harvest.



Photo by Normalee Martin

Summer Flowers



Photo by Normalee Martin

Vegetables

But in reality we know we have to prune, weed, water, deadhead, monitor for ripeness, deter the deer, watch for bad bugs, harvest vegetables, banish the bunnies and maintain a steady vigilance over our gardens.

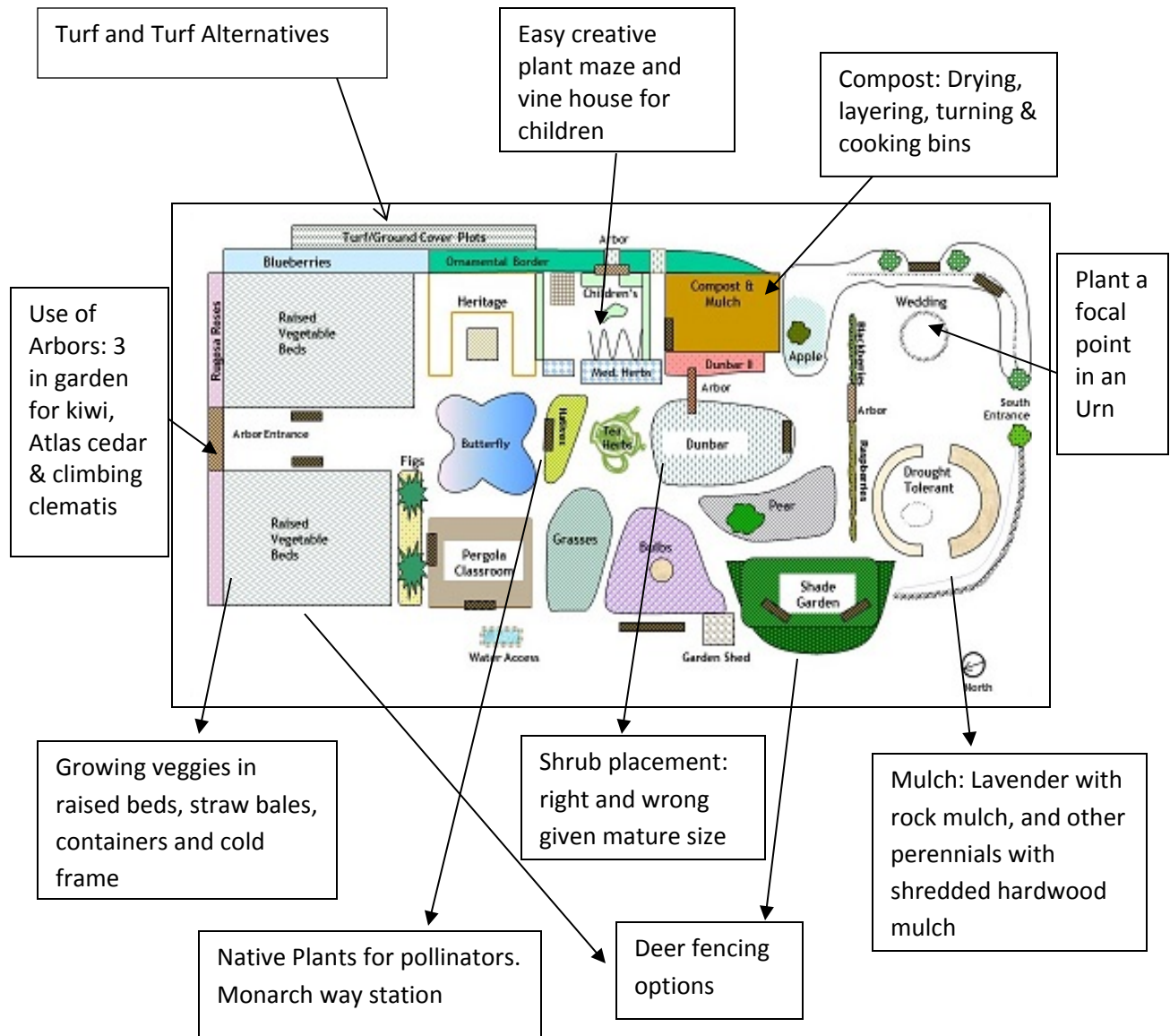
In this issue of the *Trumpet Vine* we offer articles on many topics that will help gardeners get through the summer months. *Is That Ready Yet?* describes when to predict and how to discern the ripeness of 30 common garden crops. *Asparagus: On-Going Care* details summer and fall care for a new asparagus bed. Learn about the Mexican bean beetle, a real pest in Loudoun County, as well as rose rosette and stilt grass. Then just for fun there are articles about making herb tea with your garden plants, Mexican sunflowers, Madagascar Jasmine, a tree tour of Lovettsville, bee lawns and more. Then lastly, there's a book recommendation for when you do have time to relax.

If you are having a problem with any of your plants, the Master Gardeners can provide advice. Visit the Extension Office, 30B Catoctin Circle SE, Leesburg, 9-noon, Monday - Friday, call us at 703/771-5150 or send us an email Loudounmg@vt.edu.

For the Love of Demonstration: Our Garden

Since 1992 we have been toiling in our Demo Garden at Ida Lee Park in Leesburg. Originally started to demonstrate the ease of gardening organically with vegetables, it has transformed over the years with perennial demonstrations to incorporate our mission: Sustainable Landscape Management.

Here in our award winning Demonstration Garden, we put our practices to work educating the public as well as our own. We learn something new every day!



Visit virtually at <http://loudouncountymastergardeners.org/demonstration-garden/> or come on out to see it for real! We are there Tuesdays and Thursdays 9 to noon, weather permitting.

Barb Bailey, VCE Master Gardener

Is That Ready Yet?



The first thing I ask when someone wants to know when a vegetable is ready to pick is, "when did you plant it?" Then I want to know if they read the seed packet, or looked up the vegetable to see how long it takes to grow to maturity. Those two easy tasks should be one of the first things a gardener does when they plant a seed or a transplant. It will give you a guideline on when to begin to expect the vegetable to be ready. After that, an important thing is to keep a record in a journal or jot it down where you can refer to it.

Here is a list of typical vegetables local gardeners' plant, and what to look for in readiness:

Greens: Leaf lettuce, spinach, beet greens, collards, and kale are a sampling when it comes to crops that are collectively termed greens. There are cool weather greens and warm weather greens. It is best to know the difference before you plant. Some cool weather crops (lettuces, mesclun, mizuna, and Swiss chard) can be grown in warm weather.

Most leafy green vegetables can be picked when they reach a useful size, usually within 6 weeks of planting. Seed packets will usually give 2 dates-1 to edible size and 1 to maturity.

Beans, bush and pole: Today there are more than 600 bean cultivars available, and several times that number stored in USDA seed banks. Beans are a warm weather crop with air and soil temperatures of 70° for best growth. Growing days range from about 50 to 75 for a wide range of cultivars.

Snap beans - also called *string or green*. These are picked when they are still young and eaten pod and all. There are both bush and pole cultivars, and types known as half-runners, green, yellow, wax and purple. *Filets or haricot verts* are snap beans that are bred to be picked when they are about 1/8" thick, before the seeds swell. *Romano* types have broader flat pods. Bush types average 50 days to maturity while pole types take about 65 days.

Shell beans - best harvested at the half mature stage, around 65-75 days. They are known as *flageolets*.

Dry beans - also known as *field beans*. These are left in the garden until their seeds become hard and the pods withered, which takes 85 to 100 days depending on the cultivar.

Beets: They are a double treat vegetable because both greens and roots are edible. Both parts of the plant can be harvested whenever you want, although both are best when they are still small and tender. For greens, harvest the entire plant when leaves are about 6" long, and pull or dig roots when they are 1 or 2" across at the soil surface. Maturity is about 55 days.

Broccoli: Sometimes started indoors 6 to 8 weeks before the last expected spring frost, or direct seeded in late spring or early summer for a fall crop. Broccoli needs to be picked as soon as they are large enough to use. Be sure to harvest the florets if they show any sign of yellow, which indicates the tiny flowers are opening. Harvesting side shoots every few days stimulates growth of more shoots. From date of transplant is approximately 50 to 70 days, depending on the cultivar.

Brussels sprouts: Ripen slowly over 90 to 110 days and can be picked over several weeks' time. Pick when the sprouts are ¾ to 1½" diameter.



Cabbage: Begin harvesting when heads are firm, usually about 50 to 95 days, even if they are small. Cut heads off with a knife, leaving lower leaves and stem to encourage small heads or sprouts to grow.

Carrots: Plant 2 or 3 weeks before the last expected frost. Planting 2 or 3 successive crops will extend your harvest. Begin harvesting as soon as they are large enough to be used. Early types grow to readiness in 50 to 60 days, and the main crop in about 65 to 75 days. Brush the soil away from the roots 'shoulders' to check its size. 1½ to 2" is a good size.

Sweet corn: Days to maturity vary with weather conditions and planting dates. Harvest time is generally indicated by a drying and browning of the ear silk. The kernels will be full and milky. Approximately 65 to 90 days.

Cucumbers: Once the plants start bearing fruit, pick daily as they mature very quickly. Pick slicers at about 6 to 8" and picklers at 3 to 4". Cucumbers left too long on the vine become bitter and seedy. Yellow or orange tinges on the blossom end show you've waited too long to pick.

Eggplant: Pick when large enough to use, and the skin is still glossy, approximately 60 to 70 days. If the seeds inside are brown or hard, the fruit was picked too late.

Garlic: In Northern Virginia, garlic is planted in late September until as late as November if the temperature stays moderate. It takes about 8 or 9 months in the ground. The time in late fall is used for rooting and establishing itself, then is ready to start growing when the soil starts warming in the spring. Bulbs are ready to begin harvesting when ¾ of the tops have yellowed. Dig one or two and if they aren't segmented and easy to separate, they need more time. Garlic needs to be cured before storing.

Globe artichokes: Anywhere from 80 to 100 days, depending on the cultivar. Harvest buds while the bracts are still green and tight.

Kohlrabi: Young kohlrabi leaves can be cut for greens. Harvest stems when young and tender, about 1½" in diameter.

Melons: There are many types of melons, honeydew and cantaloupe being the most familiar. Most true melons - cantaloupe, honeydew, casabas and Crenshaw, must be cut from the vine. Softness at the blossom end is a sign of ripeness, although for most types of melons, skin color is the best indicator. It will turn either white or creamy gold. Muskmelons 'slip' or separate from the vine when fully ripe. To avoid over ripening, harvest at the '½ slip' stage -about 2 days before 'full slip'. An indicator is when just a little pressure on the stem separates it from the fruit.

Okra: Large pods are fibrous and inedible but great compost material. Pick daily or every other day, when pods are still soft and small, about 3" long. You should be able to snap the pod off, although some cultivars are tough and need to be cut off.



Onions: For onion bulbs, remember to stop watering when tops turn yellow or fall over. For scallions, harvest when tops are 6" tall. To harvest bulbs, begin pulling when they are large enough to use. Use onions that have bolted, or gone to seed, immediately. Fully mature bulb tops will yellow and fall over. Unused onions must be cured before storing. Lay in a single layer off the ground for 1 to 2 weeks to dry-indoors or outdoors. Outer skins will be dry and tops withered.

Peas: There are many different cultivars. English or green pea - left on the vine to mature fully can be dried or used as soup peas. Snow peas - also known as *Chinese or sugar peas*, are edible pods and harvested when pods are full sized but before seeds are enlarged. Snap or sugar peas - harvested when pods and seeds are

mature. Peas, in general, are ready about 3 weeks after they flower. The pods on the lower part of the plant mature first. Do not yank the pods off. Hold the stem with one hand and pinch off the pod or cut the pod off.

Peppers: Peppers are divided into types by the shape of their fruit, and there are many different cultivars. Bell type - harvest anywhere from 60-95 days. Ancho poblano type - 90 to 135 days. Habanero type - 100 to 140 days. Jalapeno type - 70 to 125 days. New Mexico type - 80 to 100 days. With peppers, the more you pick, the more you get. They can be picked at their green stage or when they are fully mature. Harvest mature peppers when they are 2/3 colored. Hot peppers can be picked green, but their full heat and flavor increase if allowed to color. Pepper stems are brittle, so use snips to cut fruit from plant.

Potatoes: There are 3 types of potatoes - *early season, mid-season and late season*. They all have different growing lengths. If you don't know which kind you've planted, you harvest about 2 weeks after the tops have died back. Also, 'new' potatoes can be harvested 7 to 8 weeks after planting. In order to store, potatoes need to be cured by allowing to dry in a single layer, in the dark, for 2 weeks.

Pumpkins: Can be left until vines turn yellow and die, except for white ones, which should be cut when their skins are still streaked with green.

Radishes: Salad radishes can be picked as soon as they are large enough to be used, about 25 days. *Winter storage* and *daikon* radishes grow to around 65 days. A mild frost improves winter radish flavor.

Summer squash: Mature in about 50 days. Begin picking them when they are large enough to be used, about 6" long. *Scalloped*, about 4" in diameter. Skins should be glossy.

Winter squash: Is ready in about 85 days or more. The standard advice is to look at the stem, which should have begun to shrivel and is hard enough that it can't be scratched.

Sweet potatoes: Need 100 warm days and nights. They can be harvested as soon as they are big enough to use. For the best flavor, allow plants to grow until they are killed by a light frost or daytime temperature is in the 50's. They should be cured before storing.

Swiss chard: 55+ days. Begin harvesting individual leaves when they reach 5 or 6", or whole plants when they are small to use in salads. Break off outer leaves *at the base*.

Tomatillo and ground cherries: Start bearing fruit from 60 to 80 days. When the fruits fill out the husks, and the husks begin to open, they are ready to harvest. Feel the fruit for firmness. Ripe tomatillos ripen from green to pale yellow or dark purple, depending on the cultivar. Ground cherries ripen from pale green to golden yellow. Leave husks on until they are ready to eat.

Tomatoes: Left to grow until its color is even and glossy, between firm and soft is considered to be a perfect tomato. Watch the fruits carefully, especially the bottom where ripening begins. About a month before the first frost date, pinch off all the new flower clusters. Those blossoms will not have time to mature into an edible fruit. By removing the blossoms, the plant will put out its energy to ripening existing fruits.

Turnips: Begin pulling roots when they are 1 to 2" in diameter. Greens can be cut as soon as they are large enough to use. If you want to use both leaves and roots, leave 5 or 6 leaves so that the roots will continue to develop. Light frosts make turnips sweeter.



Watermelon: 65 to 100 days. Experts recommend marking the time of full bloom, and the first fruits should be ready 35 days later. Also, the tendrils near the stem turn yellow and die back. The portion of the melon sitting on the soil turns from white to cream or yellow. The melon takes on a dull cast and feels rough and it will have a hollow sound when thumped with your knuckle. Mark Twain described it this way "*A ripe melon*

says 'punk' when thumped, a green one says 'pink or pank.' Cut, don't pull melons from the vine, leaving a 1 to 2" stem.

While you want to pick every crop at the peak of freshness, it is important to hurry some crops from garden to table more quickly than others. Some that fall into that category are snap peas, sweet corn, cucumbers and summer squash. Crops that are a little more patient are cabbage, lettuce and other greens, peppers, melons and tomatoes.

Harvesting in the morning after the dew has dried is the best time because the leaves and fruit have the highest water content, and they are also coolest. On cloudy days you can pick anytime.

Remember to handle with care. Whether you are using your hands, clippers or a knife, it's a good idea to hold onto the plant with one hand while you pull or cut with the other. This helps prevent damage to the plant, and you want to keep your veggies happy!!

Normalee Martin, VCE Master Gardener

Bees on Buttonbush Flowers

Native buttonbush, *Cephalanthus occidentalis*, a shrub that grows 6 to 12 feet in sun to shade and prefers moist soil is a magnet for bees and butterflies.



Photos by Carol Ivory, VCE Master Gardener

Asparagus: On-Going Care

Once the asparagus bed has been prepared and planted, the wait is on for the first spears. Be patient! The reward is in sight! Meanwhile, you must take care of the bed both before it starts to produce and on into the future, for as many years as you have the bed. It will take a little time, but the work isn't nearly as hard as the work required to put in the bed in the first place.

Watering: The first two years, asparagus needs to be watered during dry spells or whenever there is less than one inch of rainfall per week. Since it is a perennial crop, it is well adapted to trickle irrigation, which makes the job as easy as turning the water on and off. Because the roots are 5-6 inches below the surface of the soil, be sure to water deeply, but don't drown the plants.



A weed-free asparagus bed. Photo courtesy of Elaine Hilburn Walizer at <http://elaineinarkansas.blogspot.com>

Once asparagus has become established its roots can grow four feet or considerably more below the surface of the soil; with such a deep root system, it is fairly drought tolerant. However to keep the ferns healthy and vigorously growing during a severe drought, some supplemental watering may be necessary. Generally speaking, water is not required during the harvest season since (1) at that time of year rainfall is usually sufficient and (2) you are cutting off the spears and, the water requirement of the plant is reduced. Once ferning out begins watering is useful if the weather is unusually dry. The need for supplemental water in dry years continues through August when the crowns are actively growing and setting buds for the next year's harvest. In the fall, starting the first week of September, withhold water to encourage asparagus to begin dormancy.

Fertilizing: It's almost impossible to make fertilizer decisions without a soil test. Follow the test's recommendations for fertilizer and lime application. Surprisingly enough, although asparagus crowns require extremely fertile soil when they are planted, they are not heavy feeders once they are established. Although you should take a soil test each year to be sure, generally only moderate amounts of fertilizer are needed on a yearly basis. If you apply well-rotted cow or horse manure to the bed each year, even this may not be necessary.

Most authorities recommend fertilizing either once, in early spring, before the spears begin to emerge, or splitting the fertilizer application between early spring and either right after harvest or in the fall, after the ferns have died back. Nitrogen (N), lime, and potassium (K) can be broadcast; they will eventually move through the soil to the root zone. Phosphorous (P), however, needs to be dug in since it doesn't migrate through the soil.

Weeding: Weeds and grass love asparagus beds! It can be a battle to keep ahead of the game and prevent weeds from competing with the emerging spears creating an unsightly mess in the garden and making it difficult to find and harvest the spears. You'll have to attack early, before the spears emerge from the ground. At this point you can use a hoe. As the spears emerge you'll have to hand weed; otherwise you could break off the spears. Some large growers till the soil very lightly between the rows in early spring (before the spears start to emerge), in early summer immediately after the harvest, and in late fall after the ferns have



Asparagus bed in early spring with spears emerging, mulched with shredded paper in the rows and cardboard under the straw in the paths. Photo courtesy of Lynda Heines, at <http://www.bloombakecreate.com/>

been cut down. (This practice, previously common, is now being questioned. Research is on-going). If you try this, be sure your tiller doesn't cut deeply into the earth; keep it shallow (1-2 inches, maximum), just enough to nip off the weeds. Asparagus roots spread horizontally, creating an underground mat, and you don't want to damage them. The drawing at right shows how large these roots can grow. This is a 6-year old plant with roots extending to 9.5 feet vertically, 3.5 feet on the left side and 4.5 feet on the right side of the crown.

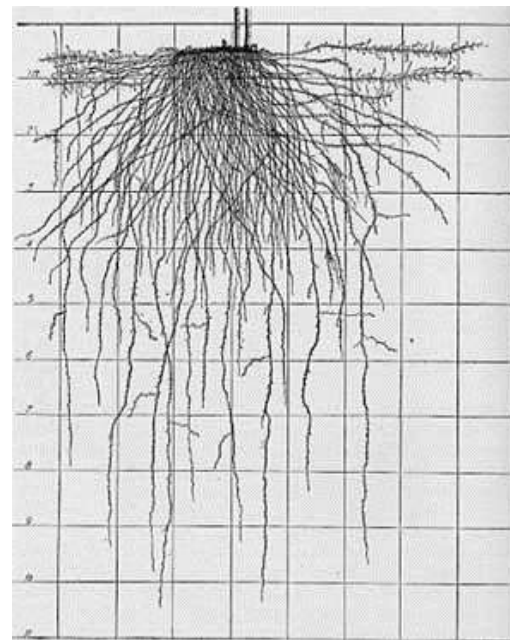
Following the harvest, mulching with weed-seed free hay, wheat straw or oat straw, chopped leaves, or dried grass clippings is extremely helpful both for weed prevention and for conserving soil moisture. If you use herbicides, consult with your Extension office for up-to-date recommendations and follow the recommendations and product labels. There is one non-chemical herbicide which could be used: corn gluten meal, a pre-emergent herbicide that must be applied at specific times in the spring and fall to control weed seedlings. For more information about corn gluten meal, see *The Trumpet Vine*, Fall 2013, page 10, at

<http://loudouncountymastergardeners.org/wp-content/uploads/2013/10/2013-Fall-TV.pdf>

Because asparagus is salt tolerant and many weeds aren't, in the past, dousing the soil in asparagus beds with salt was common practice. This is no longer recommended! First, the salt can form a surface crust and prevent water from penetrating into the soil. Second, the salt can migrate from the asparagus bed into nearby soil, ruining that soil for other, less tolerant crops.

Fall care: In late fall after the foliage has yellowed, you can do one of two things:

- If the foliage is disease and pest free, you may leave it standing through the winter and cut it down in late winter or very early spring. Foliage left in place will trap snow, which will act as a blanket and shield crowns from severe temperatures. After you cut back the dead foliage and stems you may dig them into the soil or leave them on top of the soil as mulch.
- If diseases or insects have been a problem, you should cut the stalks down to the ground and mulch with four to six inches of compost, chopped up leaves, or thoroughly rotted manure to add organic matter to the soil and control weeds. If you have female plants, you'll have to cut the stalks by hand, being careful not to shake the red berries loose as you cut the plants down; you'll end up with unwanted seedlings if you're not careful. If you have male plants, you can cut them down with a string weed trimmer.



Drawing from *Root Development of Vegetable Crops*, John E. Weaver and William E. Bruner, McGraw-Hill Book Company, 1927, from *The Soil and Health Library*, Tasmania, <http://www.soilandhealth.org/index.html>



Fall foliage. Photo from "Vegetables for Wisconsin Gardens", University of Wisconsin Extension, <http://fyi.uwex.edu/sewmg/files/2011/02/Veg4WI1.pdf>

Diseases: The most common diseases attacking asparagus are asparagus rust (*Puccinia asparagi*), crown rot, (*Fusarium* spp. and *Phytophthora* spp.), and Cercospora leaf spot/blight (*Cercospora asparagi*). The best defenses against these diseases are:

- Selecting a well-drained site for the bed where asparagus has not been planted previously;
- Preparing the soil properly before planting;
- Planting resistant varieties, such as Jersey Knight, Jersey Giant, or Jersey King;
- Obtaining your crowns (or seeds) from a reputable source;
- Maintaining soil fertility but not overdoing it with nitrogen, which can worsen diseases if they are present;
- Maintaining soil pH of 6.5 to 7.0;
- Encouraging strong plants by not overharvesting;
- Controlling insects and weeds, which can weaken the plants, leaving them susceptible to disease;
- Watering deeply, but not waterlogging the soil, during extreme droughts;
- Learning more about these diseases; see <http://www.extension.umn.edu/garden/yard-garden/vegetables/asparagus-rust/> and <http://ag.umass.edu/fact-sheets/asparagus-fusarium-crown-root-rot/>;
- Finally, spraying with approved fungicides if plants are attacked in spite of your precautions.



Asparagus rust. Photograph courtesy of Dr. Mary Hausbeck, Michigan State University Extension



Common asparagus beetle. Photo courtesy of Jeffrey Hahn, University of Minnesota Extension

Pests: Asparagus beetles are the most serious insect pest of asparagus and appear in April, feeding first on the spears where they lay their eggs, and then on the ferns once they develop, causing them to brown and lose their leaves. While there are insecticides which will keep them in check, unless you are overwhelmed with an invasion, handpicking and dropping them in a bucket of soapy water is the best way to deal with them, along with cutting asparagus stalks down and removing the debris from the garden in the fall. Other pests, such as cutworms, aphids, leafhoppers, and Japanese beetles may turn up occasionally but are usually a minor problem. For more information on asparagus beetles, see <https://pubs.ext.vt.edu/2906/2906-1352/2906-1352.html> and <http://www.extension.umn.edu/garden/insects/find/asparagus-beetles/>



Spotted asparagus beetle.
Photo courtesy Jeffrey Hahn, University of Minnesota Extension

As for deer: They will reportedly eat the young spears (another reason to pick them quickly, before Bambi has a chance at them) but they apparently won't eat the ferns.

Lina B. Burton, VCE Master Gardener

Tea (Tisane) from Your Garden

Gardening is an idyllic activity. When you first got hooked into gardening, you were easily a fair-weather gardener. Your interest was in all the beautiful and wonderful things about gardening, including the physical work that goes into it because that was invigorating exercise. You may have even basked in the psyche of how you could be helping the environment and wildlife/pollinators by your plant choices, and also ensuring the healthful benefits of organic edibles for your family.

But as you went along, the many less idyllic challenges of maintaining your inspirational garden hit you. Critters! Pests and diseases! Weeds and even more weeds! Yet did those spoil it all for you? Not when you can still kick back on lazy summer days and enjoy a tisane ... hmmm, herbal teas, from around your garden.

When the summer garden throws you into a tizzy, make tea.

No major work required such as cooking or preserving the abundant summer harvest, waiting to go from garden to table. Just pick and gather, perhaps dry, add nearly boiling water, and enjoy. Here is how:



Pineapple sage

Know what natural sources can be turned into refreshing tisane, the precise term for herbal teas that are not true teas but as the French word's translation says, are an aromatic herbal brew or herbal infusion. Unless you insist on processing the *Camellia sinensis* growing in your yard to make true tea – not a reasonable option, if at all – we are referring to tisane treats. Or why not call them herbal tea?

They may already be in your no-chemical-spray garden waiting to be discovered. Or they can be in your garden



Lime basil



Lemon verbena



Kentucky Colonel Mint



Lemon balm

if you suddenly decide to have your own tea harvest; grab what are still in the summer displays of edibles at garden centers for an instant tisane collection.

What can be made into tisane? Leaves, flowers, buds, fruits, and even stems and young shoots of edible (non-chemical-sprayed) plants. A quick rundown of what they could be would scream “herbs”!



Rosemary



Oregano



Culinary sage



Thyme



Anise hyssop

Herbs: Anise hyssop, basil, bee balm, catmint, chamomile, chives, coriander, dill, fennel, lemon balm, lemon grass, lemon verbena, marjoram, mint, oregano, parsley, rosemary, sage, stevia, tarragon, and thyme. Really, almost all herbs you are familiar with and already use in your cooking.

But also be surprised by what you normally would not consider for an herbal tea infusion.

Surprises: Apple blossoms, blackberry and raspberry leaves, calendula, citrus blossoms, crimson clover (dried flowers), hibiscus flowers, lavender, nasturtium, rose hips and petals, and violet flowers and leaves.



Raspberry leaves



Crimson clover buds



Rose petals



Nasturtium

Decide if you want to try the taste of single naturals first, or experiment with mixing up the tisane sources. Double check that you know the source is safe and double check that you have the correct plant (enjoyment is best and instant with culinary herbs you are very familiar with).

Choose how you want your presentation or serving style. In a mug or nice china? In a glass or ceramic pitcher? (Never brew herbs in aluminum). In a formal tea service?

Bring water to nearly boiling. Best if water is only very hot, not boiling, to preserve the delicate taste of fresh naturals.

Pour hot water on prepared single or mixed tisane source. Let steep more than 2 minutes, depending on how strong you want the infusion. Experiment with how you prefer the tisane. Strong or subtle? Hot or cold?

Do any finishing touches as you wish for the occasion. Enjoy!



Keep in mind that as comforting it is to indulge in this simple pleasure, care in what you choose to brew is very important. It is always easy to start with those you already know are edible and focus more on the mix and matching to find what tastes you like. As you get more knowledgeable about consuming these naturals, go for it!

About the real tea plant, *Camellia sinensis*:

<http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?kempercode=d521>

(All photos by Maria Daniels.)

Maria Daniels, VCE Master Gardener

A Tour of Remarkable Trees in Lovettsville

A team of VCE Master Gardener Tree Stewards has been researching the trees in Lovettsville and the surrounding vicinity. They found trees that are uncommon — a cucumber magnolia, a Kentucky coffeetree, a stand of bald cypress, and trees of uncommon beauty and size. All of the trees are easily viewed from the road. The following is an easy driving tour that details our discoveries:

From Leesburg, take Route 7 west and then Route 9 west for 4 miles. Turn right on Route 287 and go 3.9 miles to 13620 Berlin Pike. Park on the right side of the road and walk toward the stone wall in front of the frame house. To the left just over the wall is a **cucumber magnolia**, *Magnolia acuminata*. This is one of the most cold-hardy magnolias, with a range extending into southern Ontario. It can reach a height of 80'. It produces greenish yellow flowers about 3" long in late spring. It gets its name from the young seed pods which resemble cucumbers. In the fall the seeds ripen and turn red, and the leaves drop.



Cucumber Magnolia Flower
[VT Dendrology Factsheets](#)

Continue on Route 287, 2.5 miles into Lovettsville and park at Andy's Restaurant (with the blue roof). Directly across from the front door of Andy's is an **American linden**, *Tilia americana*. This is a large shade tree about 80' tall, with heart-shaped leaves. Also called basswood, its wood is soft and used for carving. The wood rots easily, making hollow cavities which are used by many birds for nesting. It is native to the Northeast, Midwest, and southern Canada. The flowers produce a mild-flavored honey. The leaves are often eaten by Japanese beetles.



Kentucky Coffeetree
 Photo by Betty Hedges

Leaving Andy's Restaurant, proceed towards the 7-11 and turn right onto Broad Way. Just after the community center take the left-hand fork in the road. Before the road curves to the right, park in a gravel area on the left. Walk back along the shoulder to 39580 Lovettsville Road to see a **Kentucky coffeetree**, *Gymnocladus dioica*. Native to the Midwest, this tree is about 60' tall. It is related to the locust and redbud, which also produce seeds in pods. This tree is noted for its large leathery seedpods, found on the female trees, which were probably food for mastodons and mammoths. The seeds can be roasted and ground as a coffee substitute, but are poisonous if eaten raw. The active ingredient in the seeds, cytisine, is used in Eastern Europe as a treatment to help with cessation from



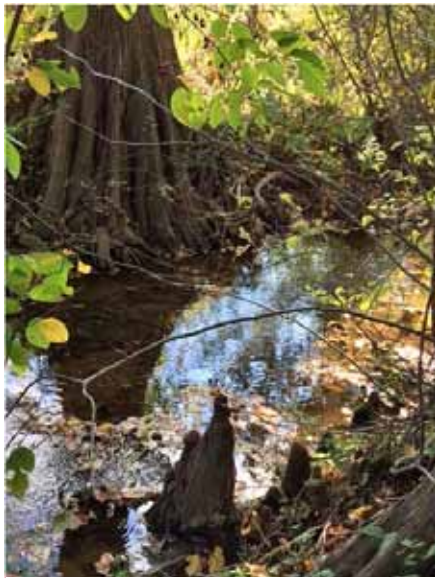
smoking. The leaves are bipinnately (doubly) compound, meaning that the leaflets are arranged along a petiole which is then attached to the main petiole of the leaf.

Bipinnately compound leaf of the Kentucky coffeetree Plate from Keeler, Harriet L. (1900). *Our Native Trees and How to Identify Them*. New York: Charles Scribner's Sons. Public Domain via Wikimedia commons.

Now make a U-turn and return to Lovettsville. Go past the 7-11 and continue on West Broad Way 1.5 miles to the second entrance of George Farm Drive on the left. Turn left and go .2 miles, and park near the fire department connection. To the right is a magnificent stand of **white oaks**, *Quercus alba*. These trees are about 100' tall, and are probably a remnant of old-growth forest that was too rocky to convert to farmland. White oaks have a light gray bark and leaves with 7 to 9 rounded lobes. They range from Canada to Georgia and west to Missouri, Iowa and Wisconsin. White oak leaves are food for many butterfly and moth larvae, and the acorns are food for deer, turkeys, woodpeckers, quail, rodents and rabbits. It is a slow-growing tree producing a dense lumber valued for furniture, cabinetry, boat building and barrels.



White Oak leaves Photo by Carol Ivory



Bald cypress trees and knees

Photo by Pat Hatfield

Return to Irish Corner Road and turn left. Drive .7 miles to the Elvan Road intersection and park on the shoulder. Across the road is a stand of **bald cypress**, *Taxodium distichum*. One of these trees (on the north side of the road) measures 116' tall. These trees range from Delaware Bay to Florida and west to Texas along the coast. So this group is at the northern limit of its range. They are deciduous conifers with feathery needles, and a seed cone shaped like a ball about 1" in diameter. Slow growing, they can live over 1000 years in the right conditions. These cypress trees (over 20 of them) grow on the banks of a stream, but they can also tolerate some dryness. This was the site of a plant nursery in the late 1800's, and they were probably planted by the nursery owner. Bald cypresses are known for the "knees" which are projections growing from the roots, but these do not show any knees. The purpose of the knees is thought to be to help support the tree or to provide extra oxygenation to the roots. Since the wood is resistant to rot, it has been used for fence posts, shingles, and wooden boats. Due to their height they are often the sites of nests for bald eagles and ospreys.

I want to thank the Tree Stewards who located these trees and the landowners who allowed us to examine them.

Betty Hedges, VCE Master Gardener Tree Steward

Foster Botanical Gardens: the Tree Museum

In April, we had the wonderful opportunity to vacation in Hawaii. While there, of course being a Master Gardener, we had to visit and check out the local arboretums and botanical gardens. On Oahu, we visited the Foster Botanical Gardens. This is an arboretum located in downtown Honolulu on 14 acres. The gardens are home to a collection of trees that are rare or endangered in their native habitat all over the world.

The *Ficus religiosa*, or the Bo tree, is a descendent of the very tree that Buddha, while sitting under it, was enlightened. The tree is from Nepal, and is believed to be over 1,800 years old, but was planted here in 1870.

The *Cavanillesia platanifolia*, (below) or the Quipo tree is one of the fastest growing trees, has soft wood, and is used to make canoes and rafts in Panama. This Quipo, was planted in 1930, and is over 138 feet tall.



Cavanillesia platanifolia,
photo by Diane Hayes



Ficus religiosa, photo by Diane Hayes



Tabebuia donnell-smithii,
photo by Diane Hayes

This beautiful tree is the *Tabebuia donnell-smithii* or the Gold tree. It is absolutely magnificent. This tree came from Honduras, and was over 110 ft. tall. It is a tree with hibiscus-like flowers, shown below. The carpet of flowers below the tree was as wonderful as the view above.



Flower of *Tabebuia*,
photo by Diane Hayes

The oldest tree in the entire garden is the *Ceiba pentrandra*, or the Kapok tree. It comes from the Neotropics, and is listed as an 'Exceptional Tree'. It is over 169 feet tall and the tree trunk diameter is over 62 ft. It towered over every tree in the collection, and was truly magnificent to see. This tree can produce over 4,000 fruits at one time, and each fruit contains 200 seeds. This tree is now thriving in nature, but at one time this tree was endangered due to harvesting the wood for coffins, canoes and furniture.



Ceiba pentrandra, photo by Diane Hayes

While visiting the gardens, we discovered that the song 'Big Yellow Taxi', sung by Joni Mitchell, was inspired by Honolulu and this particular garden. There were very few arboretums in the U.S. in 1970 and as the song goes:

"that they took all the trees and put them in a tree museum, and they charged the people a dollar and a half just to see 'em."

...was shocking to Mitchell.

But because of this notoriety and publicity, the gardens began a movement in Hawaii. They have city ordinances for 'Exceptional Trees' throughout Oahu. These trees are nominated by citizens, protected by the island, and can only be pruned by a certain group of arborists. They are protected and guaranteed survival by Oahu. Interesting that one song could start a movement of tree preservation which continues today on the island. I think the foresight to begin this 'tree museum' was an inspirational movement that allows all of us to see these giants- trees that

would not be here.

Oh, by the way, it now costs five dollars to see them....

Diane Hayes, VCE Master Gardener

Bee Lawns – Bring Back the Old Fashioned Lawns

Bee populations are crashing around the country and with it we are losing one of the most important pollinators for our food supply. The roadside flowers and heterocultural yards of yesteryear have been replaced by a monoculture that never blooms, and that's starving our bees.

"We associate a lush green lawn with vitality, but in many ways a grass lawn is the most sterile part of a garden," writes Ferris Jabr in [Scientific American](#) "Outgrowing the Traditional Grass Lawn".

As Beatriz Moisset points out in "Pollinator Friendly Lawns" at [Native Plants and Wildlife gardens.com](#), the United States has 40,000 to 75,000 square miles of total surface dedicated to lawns, which is about the size of New York State. That puts a very personal face on this ecological disaster. We see it every day when we walk past our own little plots of Mother Earth.

The good news is that we have options. We can replace our personal commitment to a nectar-free monoculture to varying degrees and with an array of plants. The point is to change our mind-set about what is pleasing in a lawn and how to get it. Step one, says Moisset, is to drop the pesticides and fertilizers. Step two is to rethink what we consider a weed. In fact, she suggests "that we drop the term 'weed' entirely and replace it with 'grass companion' as capturing the spirit of the diversity of plants our lawns should contain."

According to Mary H. Meyer, professor and Extension horticulturist at the University of Minnesota, pollinator gardens must be highly diverse, blending native and non-native plants with weeds and native bunch grasses. They should afford open soil nesting sites and sunny locations, because they need to act as an environment in which the bees, not only eat, but live. Moreover, your bee lawn should have eight species overall, three of which bloom at any one time, according to Meyer. This combination of factors will give you blooms from early March through late October.

But if this ideal looks overwhelming and like a culture shock for your neighborhood, you can start by focusing on the lawn itself. You will be glad to hear that your options include species that are low-growing and mimic turf.



Selfheal *Prunella vulgaris*
photo by [Phil Sellens](#)



Trifolium repens
Photo by [Karl Pihlaviita](#)

White clover tops the list. Yes, indeed. It's one of the easiest ways to send bees a 'come hither' look and help them prosper. All the little flowers on this legume (*Trifolium repens*) make it the bees' best buddy and then some: It's a nitrogen fixer, so it's great for soil; it doesn't need mowing and watering as often as turf; it smells great; and it's happy to grow where turf won't, preferring clay.

"Dutch" white clover used to be included in grass-seed mixes, which may be why it seemed so ubiquitous, but, according to Moisset, "Newly developed herbicides killed clover, along with the undesirable broad-leaved weeds, so it was declared a weed by the gardening industry and removed from grass-seed mixes." Another

reason to cut out herbicides.

If you leave your lawn untreated with herbicides, the low-growing varieties of white clover may invite themselves in, but you can buy clover seeds and sow them yourself without too much trouble. Just be sure not to buy the taller varieties that are meant for fodder.



Blue-eyed grass
[The Vineyard Gazette](#)

And because you don't want to replace one monoculture with a new one, consider including low-growing, flowering herbs like thyme, mint and chamomile.

The University of Minnesota is aggressively researching new kinds of turf that will mimic the groomed lawn look but flower at 6 inches or less, so it won't need mowing before the bees have feasted. Its researchers' are aiming for something that will beat turf grass out in the competition for water and nutrients, stabilize soil, but not need the intensive fertilizers and pesticides that a regular lawn requires. That's a tall order.

You don't have to kowtow to the god of the green, velvet blanket of Kentucky bluegrass, even if your neighborhood is averse to all but turf.

- Consider setting a section of your yard aside for a bed of flowers that bees find yummy.
- Flower bulbs provide nectar and pollen for bees, in late winter and spring, so how about putting in crocuses in your beds or lawn?
- Or try snake's head fritillary and snowdrops, daffodils or bluebells under your trees? They will all give you something nice to look at when your regular lawn is probably dormant. (Big hint: Avoid the double-petaled varieties.)

Bees thrive on the nectar of wildflowers, but your homeowners association may preclude you from letting the wildflower meadow spirit fly free in your yard. Instead, you could start some meadow flowers in pots. That will give you more control of how and where they grow and cut the waiting time for your plants to establish. These can include: lesser celandine, field scabious, teasel, meadow cranesbill, cowslip, selfheal, greater & lesser knapweed, red campion, betony, meadow buttercup, ox eye daisy, musk mallow, vetches and trefoil.

Choosing natives will increase your bee visits and making sure that you have something blooming all three seasons ensures a steady food supply for bees, according to [Fairfax County's](#) newsletter. The newsletter echoes Meyer's advice, recommending that you provide "other habitat resources" such as patches of bare soil where ground bees can nest.

But how do all these factors come together in a lawn that will pass the 5-foot-away test leveled by your neighbors and the homeowners association?

An answer to that question has been studied in England for several decades by horticulturalist Lionel Smith, according to Ferris Jabr. "What began as a few experimental gardens with just four species—red clover, self-heal, daisies and yarrow—grew into many tightly woven swards with more than 65 native and non-native species each, and none of them grass.," he writes. Smith chose soft-stemmed

Native Grass Companions for the Mid-Atlantic

- Blue eyed grasses (*Sisyrinchium*, several species)
- Cinquefoils, (*Potentilla*)
- Wild strawberries (*Fragaria*, several species)
- Yellow violets (*Viola pennsylvanica*)
- Spring beauties (*Claytonia* spp.)
- Wild geraniums, crane's-bills (*Geranium* spp.)
- Azure bluets (*Houstonia caerulea*)
- Speedwells (*Veronica*)
- Wood sorrel (*Oxalis acetosella*)
- Smartweeds, knotweeds, species in the genus *Polygonum*
- Asters (*Symphyotrichum* spp.)
- Field chickweed (*Cerastium arvense*) and star chickweed (*Stellaria pubera*)

Non-Native Grass Companions for the Mid-Atlantic:

- Clover, (white clover, *Trifolium repens*)
- Creeping thyme (*Thymus serpyllum*)
- Dandelion (*Taraxacum officinale*)



Star chickweed *Stellaria pubera*

Photo by Carol Ivory

plants that spread laterally so they could withstand mowing and foot traffic. The plants he chose (including violets, English daisies, small-leaved clovers, chamomile, thyme, yarrow, selfheal, lawn lobelias and cotula) require 30 percent less mowing than turf.

Smith “thinks that the diversity and proximity of the plants mimics some kind of synergy present in wild habitat but lacking in conventional lawns,” causing even hard-to-grow species to thrive in his swards. And 25 percent more pollinating insects visit his polyfloral lawns.

“Turf grass is essentially green concrete,” writes Debbie Roberts in “Bee Lawns” at [Native Plants and Wildlife Gardens](#). Compared to the rich tapestry provided by Lionel Smith’s swards and the delicate drama of a wildflower garden or landscape, our green lawns can look boring and the work to maintain them seem futile. Perhaps in the next few years we will

be able to switch mental mindsets enough to help bring back the joyous sound of bees buzzing in our yards.

Additional references:

Clover comeback? 'Bee lawns' gaining favor <http://news.yahoo.com/clover-comeback-bee-lawns-gaining-favor-180250760.html>

Bee Lawns and Pollinator Gardens,

<http://www.arboretum.umn.edu/UserFiles/File/Pollinator3/MaryMeyerPollinators311.6.2014.pdf>

Kristina Goodrich, VCE Master Gardener Intern

Japanese Stilt Grass

Just as we thought we had suffered every indignity possible from Oriental invasive plants (Kudzu, Japanese honeysuckle, etc. etc.) along comes Japanese stilt grass (*Microstegium vimineum*), possibly the most annoying weed ever. It is an annual, as if that matters when each plant can produce 100 to 1000 seeds that can easily lie there for 5 or more years and then germinate.

One could hope that at least this plant would be something that our local deer population might enjoy thereby leaving our own native plants alone, but no.

“When Japanese stilt grass invades a site, it can quickly crowd out native plant species. Invasions can also change soil nutrient cycling processes, inhibit tree survival and growth, and reduce light availability. After it dies back in late fall, it forms a thick layer of smothering thatch that is slow to decompose. Because stilt grass is relatively unpalatable, it may encourage heavier deer browsing on native plant species.” (Pennsylvania Department of Conservation and Natural Resources <http://www.dcnr.state.pa.us/>).

There are two (relatively) bright spots. 1) Stilt grass has very shallow roots so it is easy to pull up. 2) Stilt grass doesn't flower until late summer so you if you can't get rid of it now you still have time to mow it closely BEFORE IT GOES TO SEED.

“The best strategy for controlling Japanese stilt grass is removal of the plant by hand or mechanical means late in the growing season before seed production. This practice must be carried out for seven consecutive years due to the long seed bank viability. Mowing or burning early in the season does not control the plant; new seeds germinate following such measures and can still set seed by the end of the season. Glyphosate herbicide is effective against Japanese stilt grass, but its use in a natural area may also affect desirable species. (Virginia Department of Conservation and Recreation http://www.dcr.virginia.gov/natural_heritage/documents/fsmivi.pdf).



Japanese stilt grass foliage - Chuck Barger University of Georgia
Invasive.org.<http://www.invasivespeciesinfo.gov/plants/stiltgrass.shtml>

Alice Bagwill, VCE Master Gardener

Pest Spotlight: Mexican Bean Beetle



Photo by Stephen Ausmus, USDA ARS

The past few weeks of 90 degree weather have really cemented the fact that summer came in with a vengeance here in Loudoun County, Virginia. This season, for many, brings in the best the produce world has to offer. It also brings in some of the most notorious and difficult to get rid of pests of the year as well.

We continue our up close and personal profiles of some of Loudoun's worst enemies with the Mexican bean beetle (*Epilachna varivestis* Mulsant). If you have ever planted beans then you already know this beetle more intimately than you would want. For those of you who have lucked out and missed

that opportunity, here is some back story:

Basics: The Mexican bean beetle is in the family Coccinellidae, which is also home to the gardener's best friends the ladybug and mealybug destroyer. In fact, most members of the species eat aphids, adelgids, scales, and mealybugs. Mexican bean beetles are one of the very few who are not beneficial and actually consume plant material. We are still not 100% sure where in Mexico the beetle originates, though it is highly likely it's somewhere in the plateaus of southern Mexico where a large amount of shipping to Florida occurs.

Distribution: The beetle was first reported in Florida in 1933 and the USDA was able to eradicate in the following years. However, they popped back up again in 1938 and in the 1940s they were considered to be well established here in the states. Currently, they can be found in pretty much all of the states east of the Rocky Mountains, wherever beans are grown.

Description: Like their ladybug cousins, they are fairly personable beetles with a rounded body and a bright orange color. They also feature spotting throughout the elytra (forewing), usually around 8 spots in total. They are a little larger than ladybugs, roughly 7 mm in length with the males being a little smaller. The males can easily be picked out by their small notch on the last abdominal segment. This is a trait that is seen fairly consistently with other members of the family and can be spotted with practice.

Life Cycle: Like all beetles, the Mexican bean beetle undergoes complete metamorphosis. The eggs are similar to ladybug eggs as they are yellow, small (1.3 mm) and found in clusters on the underside of leaves. The larva are quite interesting in appearance, with spines all over their bright yellow body, mainly for attaching to feeding surfaces. They will molt 4 times before pupating.

Adults overwinter under brush and leaves like ladybugs do once the warm weather hits. May and June are the big months here in Virginia. Within two weeks, they will have fed on their favorite bean species and deposited their eggs in the process. Usually, 500-600 eggs are left on the plants which will likely hatch in a week's time. The larvae are the champion feeders of this family, and such is the case with the bean beetles. They eat nonstop for 6 weeks and then fasten the tip of their abdomen to the plant to remove their larval skin and create their pupa. This final stage before adulthood lasts roughly 5-11 days. The adults then go into dormancy until the warmer spring weather.

Damage: Beans are obviously their plant of choice with a strong preference shown to snap beans and lima beans, *Phaseolus lunatus* L. and *vulgaris* L. The larva tends to thrive on these as well and are the true host

plant for the species. However, in recent years they have been found on cowpeas, soy, mung, adzuki, velvet, and black-eyed peas. Total defoliation is not uncommon, especially given the way the beetles like to congregate on the plants. The soybean industry has particularly suffered directly due to this pest. They feed on the leaves, flowers, and pods of the plant with special concentration on the new growth.

Management:

Cultural- Removal of overwintering habitat such as brush piles and leaf litter. The cold temperatures without that protection can often reduce the population of next year's bean beetles. Trap cropping by creating areas with other desirable crop to lure them from your prized beans as also been a successful tactic, especially if your crop goes in later than trap crop. Early planting is also an advantage as it can catch those early beetles who are not yet ready to lay eggs.

Biological- Tachinid flies (*Paradexodes epilachnae*) and Eulophid wasps (*Pediobius foveolatus*) have been successful predators of the bean beetle with released in small gardens and greenhouses. The flies are not native, so special permits are required when requesting them from beneficial insect companies. Both these insects parasite the bean beetles and are able to reduce their numbers that way.

Chemical- Systemic pesticides are recommended and used commonly in areas of heavy infestation. Timing is important with these, so please consult the labels for best use. There are also several insect growth regulators on the market now that may come with a higher cost but may be worth it given the track record in sustainable reduction of numbers of beetles season to season. Please consult the Extension Office for up to date chemical recommendations.

References:

<http://pubs.ext.vt.edu/ENTO/ENTO-51/ENTO-51.html>

Amanda Rose Newton, Entomologist, VCE Master Gardener

Sweet Pepperbush: Virginia Wildflower of the Year

Every year the Virginia Native Plant Society (VNPS) selects a native species as Virginia Wildflower of the Year. Members of the VNPS nominate species for consideration. To be considered for Wildflower of the Year, a plant must be: native, noninvasive, should stimulate interest in the general public, and be interesting because of habitat or role in history or ecology. The nominated species may be either abundant or rare in Virginia, it need not be of horticultural interest, but it should tie in with the VNPS emphasis on habitat.

Each nominated species becomes a candidate to be voted upon by the Virginia Native Plant Society Board of Directors. The species receiving the greatest number of votes is selected and a brochure is prepared by the VNPS Botany Chair.



***Clethra* in bloom**

Photo by W. John Hayden

The 2015 Virginia Wildflower of the Year is *Clethra alnifolia*, Sweet Pepperbush. This beautiful Virginia native shrub is found in the swamps and wooded areas of Virginia's coastal plains and piedmont region. *Clethra alnifolia* is deciduous, growing 3 to 9 feet tall and spreading by rhizomes. Its summer blooming upright and spear-like flowers (racemes) are sweetly fragrant and the seed capsules look like peppercorns, thus the common names of Summer Sweet and Sweet Pepperbush.

There are many *Clethra* cultivars with varying heights and petal shades from white to deep pink. Flowers bloom until late summer and the dark green foliage turns a brilliant yellow in fall. Brown capsules form later to feed the birds and other wildlife. It has a tidy winter appearance. It's a good shrub for wet areas like rain gardens, or the water's edge. Although the sweet pepperbush grows best in moist soil and light shade, it will tolerate a wide range of conditions and has the best color in full sun.

Propagation is best by division in the fall

or early spring but soft cuttings can be rooted without the use of rooting hormones, and seed can be successfully started indoors.

The sweet pepperbush has no culinary or medical uses, but is a valuable nectar plant for hummingbirds, butterflies and bees. Its pollen makes a delicious bee honey. This attractiveness to pollinators makes *Clethra alnifolia* a perfect Virginia native plant replacement for *Buddleia*. The absence of disease and insect problems makes it a trouble-free addition to any home garden.

Complete information on sweet pepperbush, the Virginia Wildflower of 2015, and previous years can be found at <http://vnps.org/wildflowers-of-the-year/wildflower-of-the-year-2015-clethra-alnifolia-sweet-pepperbush/>.



***Clethra alnifolia* flower bud**

Photo by Carol Ivory

Vycke Horback, VCE Master Gardener

***Stephanotis floribunda* (Madagascar jasmine): Make it Bloom!**

The popularity of *Stephanotis floribunda* (otherwise known as Madagascar Jasmine, bridal wreath, or Hawaiian wedding flower) has been on a steady rise for 3 to 4 years in Virginia nurseries. The plant is an elegant semi-woody evergreen tropical vine (10-12 feet) that is amazingly easy to grow. This well-behaved vine sports thick leathery leaves and highly fragrant clusters of tubular flowers throughout the summer which last until mid-October, the time for the plant to “rest” indoors. However, inducing the plant to set buds can be problematic in our region. This article provides tips that could lead to clusters of 4” pure-white waxy blooms next spring.

Interesting tidbits

Did you know *Stephanotis floribunda* is not a jasmine at all? It’s a totally different species from a different genus than true jasmine. The nickname - Madagascar jasmine - merely refers to its jasmine-like flowers and fragrances. Furthermore, did you know that Madagascar jasmine, mandevilla (the popular patio/deck flowering vine) and milkweed (the host plant of Monarch butterfly larvae) have a lot in common? They all belong to the Apocynaceae family, and all three plants have glossy and smooth, yet leathery, oval leaves. All have milky sap, and two of the three have similar seedpods -- the seedpods of *Stephanotis* (rarely observed in areas other than the warmer zones in the U.S.) resemble the seedpods of milkweed, with both having silky seeds that take flight on the wind.



Photo Courtesy Missouri Botanical Garden

Optimum outdoor growing conditions

Stephanotis enjoys warm and humid days (80°F-90°F) and cool nights (50°F-68°F). The moderately vigorous, but not obnoxious, vine can cover an average trellis easily in one season. Periods of rain throughout the active growing season are most beneficial, but not unrelenting rain, as this vine does not like wet feet.

Favorable conditions for bud setting in the spring

Spring in Virginia swings widely from rainy and cold to summer-like within a few days, which is perfect for adventurous gardeners who want to try to induce *Stephanotis* to set buds. Best success is achieved by moving the plant outside to a protected area (preferably one where rain can get to it) as soon as the night temperature is consistently above 50°F. A cool period, followed by warm and humid days, during the spring is one of the prime conditions for buds to form. Temperatures a few degrees below 50°F at night for a day or two are tolerable; if longer, move the plant indoors for temporary relief.

Light requirement

Lack of sunlight is the other main reason why *Stephanotis* blooms poorly or shows no blooms at all. During the active growing season, the vine prefers morning sun and bright but shady afternoons. Keep the soil dry and ensure plenty of sun exposure during the winter months. Both are absolutely necessary for successful budding the following spring. Ideally, the plant should be set as close as possible to a filtered south-facing window while wintering indoors.

Growing medium

Stephanotis enjoys being root-bound in a clay pot. The soil should have good drainage; avoid moisture-retaining potting mixtures, as overwatering is the number one cause of leaf and bud drop-off. In severe cases, this drop-off can lead to the plant's demise. Peat-based potting mix with a generous amount of coarse organic material is preferred to improve drainage.

Water

During the summer growing season, water thoroughly as needed and always allow soil to dry out between each watering. A signal that it is time to water is when leaves lose their gloss and start to wilt. Watering in winter should be minimal. Do it when leaves appear wilted or when the top inch or two of the soil completely dries out. A humidifier could be beneficial, but is not necessary. Again, a "dry rest" in the winter is good insurance for plentiful buds the following spring.

Fertilization

Stephanotis is not a heavy feeder. A weak solution of organic liquid fertilizer once a month during the active growing season should suffice. Fertilization is not necessary during the winter.

Propagation

The best time to propagate is mid-summer, second best is early fall. Success rate is high from both new and old stem cuttings. Each cutting should be about 4' long, with one node and one small leaf. Dip cutting ends in rooting hormone powder, stand them in a light potting mixture, and keep them moist until new growth appears. Cut back on water once the cuttings show signs of new growth. Even young plants benefit from soil being on the dry-side. Buds should appear the following spring on vines that are less than a year old.

Problems

Stephanotis has no serious insect or disease problems. Mealy bugs and scales may occur while indoors. Some people claim an application of horticulture oil as per the direction of the manufacturer seems to correct the problems.



Cuttings from fall 2014

Photo by Ling Lay

Ling Lay, VCE Master Gardener

If You Love Roses, You Should Know About Rose Rosette

Roses add undeniable beauty and interest to even the duller landscape. And with the newer varieties that promise disease resistance and season-long blooms, they've become more popular than ever.

Sadly, disease resistance does not mean disease free. Even the resilient Knock-Out rose is susceptible to a deadly virus known as rose rosette disease, or RRD. Spread by tiny wind-born mites, RRD has made its way across the region and is popping up with increasing frequency in our communities and home landscapes.



<http://ipm.missouri.edu/meg/2011/7/Rose-Rosette-Disease/rose-rosette-disease.jpg>

So how do you know if your roses have the disease? You may notice thicker canes that have larger, more numerous thorns. There may be dark red foliage at the tips and discolored, multi-branched leaves, known as witch's broom. Flowers and buds may be discolored, or disfigured.

Unfortunately, once a plant is infected it can't be cured. It will usually die within a few years; however, if left in the landscape a diseased rose can continue to infect other healthy roses nearby. While some gardening experts believe that pruning out the diseased canes can possibly save the plant if caught early, this method hasn't been proven. Virginia Tech and the Virginia Cooperative Extension recommend removing it completely, including all root material. The diseased plant should not be recycled or composted, since the virus will survive and could end

up as mulch in someone else's garden. Instead, dispose of it in the regular trash or burn it (if allowed in your community).

It sounds serious, and it is. While RRD can't be cured, it may be possible to prevent your roses from becoming infected. Horticultural oil or insecticidal soap can be applied to plants once a week until July when mites are most active. Watch your plants carefully, and if you see signs of the disease act quickly to remove it from the garden and dispose of it properly. Then be sure to disinfect your pruning equipment with bleach or isopropyl alcohol. By being vigilant now, you can save yourself, your neighbors, and even your community much heartache down the road!



<http://hyg.ipm.illinois.edu/article.php?id=313>

It is possible to replace the diseased rose with a healthy one, but you must take care to first remove any remaining roots or plant material from the area, since the virus can still spread through contact with infected roots and leaves. A safer bet is to find a different plant to take its place. The good news? Rose rosette only affects roses, and will not harm other plants in your garden.

To learn more about Rose rosette, see the VCE publication 450-620, online at http://www.pubs.ext.vt.edu/450/450-620/450-620_pdf.pdf or call the Loudoun County Extension Master Gardener Help Desk at 703-771-5150. Our Master Gardener volunteers can help you make a diagnosis if you suspect your roses have the disease.

Nancy Caldwell, VCE Master Gardener Intern

Planting and Dividing Tall Bearded Irises

Midsummer is coming and it's time to think about planting new irises and dividing those which have become crowded in your garden. Ideally, this should be done at least six weeks *after* they have bloomed but at least six weeks *before* the first hard frost. That puts the window of opportunity for planting and dividing irises squarely in the mid-July through September timeframe.

Buying Iris Rhizomes

Iris rhizomes are widely available at discount or "big box" stores and garden centers. Plants purchased from these sources may or may not be correctly labeled and may or may not have been dug and handled properly prior to your purchasing them. You may be lucky and buy a great plant; or maybe not. It's better to buy plants from a local grower — they will be raising plants suitable for our climate — or from the catalog of a breeder in a USDA zone similar to our own. If you're ordering rhizomes from catalogs, now is the time to do it. Irises ordered now will be delivered at the correct planting time.

Once you have your new rhizomes, remove them at once from the box or shipping container. If you can't plant them immediately, place the unpacked rhizomes in a dry, airy but shady spot. They can be held for about a week.

Planting New Iris Rhizomes

If you're planting a new iris bed or incorporating irises into beds of existing perennials, the most important thing to remember is drainage: bearded irises simply *must* have excellent drainage, such as what is available on a slope or in a raised bed. Planting irises in soil which is poorly drained invites diseases. Other than this one imperative, irises will grow well in average garden soil to which some compost has been added, i.e., any soil suitable for growing vegetables. The ideal pH for irises is 6.8-7.0, but they are tolerant of soils which are either more acidic or more alkaline than this ideal.

In addition to excellent drainage and good garden soil, bearded irises need at least six hours of direct sun a day and good air circulation. Given these prerequisites, irises should do well in your garden.

You can plant your irises in one of two patterns:

- If you have only one rhizome of a cultivar, you can plant that rhizome 12-24 inches away from its closest neighbor in the garden. The closer you plant it to its neighbor, the sooner it will need to be divided. (I plant mine 24 inches apart so I don't have to divide as often.)
- If you have several rhizomes of a specific cultivar available, you can plant them as shown or in a grid pattern, about eight inches apart, with the "toes" of each rhizome pointing toward the center of the grid as shown in the photograph. You'll have to divide much sooner if you use this planting pattern.



Planting in a grid. Note "toes" of plants facing inward. Photo by William Shear, courtesy of Dr. Shear and The American Iris Society, www.irises.org.

Actually planting and caring for iris is easy.

- Dig a hole 8-to-10 inches deep and wide in the garden bed.
- Mound up soil in the center of the hole.

- Place the rhizome on top of the mound and drape the roots down the sides of the mound.
- Fill in the hole with soil, leaving the top of the rhizome exposed — do *not* cover with soil unless you have extremely light, sandy soil, in which case cover with no more than 1 inch of soil. Planting too deeply is a common mistake. The plants won't die, but they may not bloom.
- Firm the soil around the rhizome and its roots.
- Water to settle the soil.
- For the first summer and fall, water whenever there is less than one inch of rainfall a week, but *don't* over-water. Because irises are drought tolerant, after the first year they usually don't need watering.
- For the first winter, lightly mulch after the ground is frozen. Clean wheat or oat straw or branches cut in January from your old Christmas tree are best, but if necessary you can use pine bark, compost, or chopped leaves. Just be sure to remove the mulch in early spring as the plants begin to show new leaves.
- Don't be surprised if a particular iris doesn't bloom the first year after planting. About 60-75% will bloom, but the rest require a second year to settle in.
- After blooming has finished, break or cut the bloom stalks off at the base of the plant and remove any diseased leaves which appear throughout the summer. Don't cut the leaves back into the traditional "fan", which once was a common practice. They need those leaves for photosynthesis to take place! Instead, wait and cut them off after the first hard frost.
- After the first year you can lightly fertilize your irises with superphosphate, bone meal, or any other high phosphate fertilizer, such as 6-10-10, depending on the results of a soil test. Avoid high nitrogen fertilizers — they encourage root rot and discourage blooming! Apply fertilizer in early spring (February/March) and again about a month after bloom. Sprinkle the fertilizer on the ground around the clump, not on top of the rhizomes. (Some years I fertilize; other years I don't. Bloom may be a little smaller the next year, but disaster won't ensue)!
- Watch for diseases and pests. The American Iris Society has information about these problems at http://www.irises.org/About_Irises/Cultural%20Information/Pests_Diseases.html. Suffice it to say here that proper drainage, good air circulation, good soil with the proper pH, timely dividing, and good garden sanitation will go a long way to preventing these diseases and pest issues, and they are not insurmountable, especially if caught early.



Plant the rhizome on a mound.

Photo by William Shear, courtesy of Dr. Shear and The American Iris Society, www.irises.org

Dividing Old Clumps

Bearded irises need to be divided every three to five years. For some cultivars it will be sooner — perhaps every other year. For others, you may be able to wait four or even five years. And, of course, if you originally planted them 12 inches instead of 24 inches apart, they will require dividing sooner. Nevertheless, for your irises to continue to prosper, eventually you *must* divide them. If not divided, bloom eventually will decline, any disease and insect problems present can worsen, more vigorously growing irises can crowd out less robust neighbors, and two or more cultivars can become intermingled so you won't know what you have when you finally *do* divide them.



Iris clump in need of dividing.

Photo courtesy of Dana Brown, American Iris Society, Region 17, www.aisregion17.org

Any time from mid-July through mid-September (but definitely *at least* six weeks before the first hard frost) you can either dig and divide the entire clump or thin out the center of the old clump, leaving the daughter rhizomes in place.

If you decide to dig and divide the clump, proceed as follows:

- Trim the foliage back to about 12 inches. The plants will be easier to handle if you don't have lots of long foliage flopping about as you work.
- Dig each clump, one at a time. Don't try to work with more than one clump at a time — it's too easy to mix the cultivars up.
- Clean the clump, brushing or washing off excess dirt and removing dead leaves and debris.
- Break off the individual rhizomes at the joints — they should snap off — or cut them off with a sharp knife. Carefully tease out the roots that belong to each rhizome. Discard withered, or old, spent rhizomes and any which are soft or rotten. You'll probably have a lot of rhizomes from each clump. Replant the largest ones; as to the others? Your friends and neighbors may be delighted to have them!
- To keep cultivars straight, write the name of each cultivar on the leaves of the rhizomes as you divide them, using a permanent marker. When you're finished, each division will be clearly marked with its cultivar name.
- Trim off about 2/3 of the roots emerging from each rhizome so they're easier to handle.
- Trim the leaves again, this time at an angle, leaving six-to-eight inches of foliage above the rhizome.
- Wash the rhizome with water and place in a dry, airy shady spot for a few days to allow the broken or cut ends to callus over. (I elevate mine on old window screens on a shady porch.)
- After processing, rhizomes can be stored for a few days or weeks before replanting by placing in a dry, shaded but airy spot, such as a sheltered porch.
- While the rhizomes are curing, renew the soil in the bed by adding compost and any amendments which a soil test suggests are required.
- Replant the rhizomes as you would a newly purchased iris.
- And you're finished!



The previously shown clump after digging and washing, ready to be divided. Photo courtesy of Dana Brown, American Iris Society, Region 17, www.aisregion17.org

If you decide to thin instead of divide the clump, proceed as follows:

- Cut out the withered, soft, rotten, or old spent rhizomes at the center of the clump.
- Leave the new, healthy rhizomes around the edge of the clump undisturbed. It's as simple as that! But be aware that eventually you *will* have to dig and divide those clumps — they'll just keep expanding outward and eventually encroach on their neighbors.

If you're *really* captivated by irises, the American Iris Society (www.irises.org) and its local affiliate, the Chesapeake & Potomac Iris Society (<http://www.irisregion4.com/CPIS.htm>), headquartered in Winchester, would be happy to have you join them.

Lina Burton, VCE Master Gardener

Nothing Holds a Candle to 'Torch' Mexican Sunflower

Let's admit it. When it comes to ornamental plants in our garden, we want it all. A flowering showstopper that can stand up to the heat and drought of our summers, a magnet for hummingbirds and pollinators and, if it's not too much to ask, isn't on the buffet menu for every deer in the neighborhood. Say hello to *Tithonia*, or Mexican sunflower!

Native to Central America and the West Indies, it's not uncommon to see this eye-catching member of the daisy family growing along the roadsides in the mountains of Central Mexico. But here, the *Tithonia rotundifolia* 'Torch' variety is grown as an annual. A heavy bloomer with large (3-4") brilliant orange-red flowers and fuzzy green foliage, 'Torch' Mexican sunflower will put on a show from mid-summer to first frost.



Tithonia rotundifolia 'red torch'

The Mexican sunflower makes a great addition to the pollinator garden - a beacon to hummingbirds, butterflies and bees alike. Plant a row of these beauties and you may find half a dozen butterfly and skipper species at once, including the monarch and the elegant swallowtail. In late fall, goldfinches feast on its seed-heads. A bonus - Mexican sunflowers make a wonderful addition to cut flower arrangements. When handled with care, cut blooms can last up to two weeks in water.



Photo by Eva Jo Wu

Tithonia are grown from seed. They can be sown after the last frost, and after the soil has warmed to 60 degrees, but you may want to start them indoors. The seeds will take 10-21 days to sprout, so plan accordingly. They should be covered lightly with soil, and spaced 6-8 inches apart. Final spacing should be two feet apart. Plants are compact, but need lots of space in the back of the border, as they can grow up to six feet tall and three feet wide. *Tithonia* need full sun and well-drained soil. In addition to 'Torch,' a 'Yellow Torch' cultivar is available that's just as attractive to pollinators.

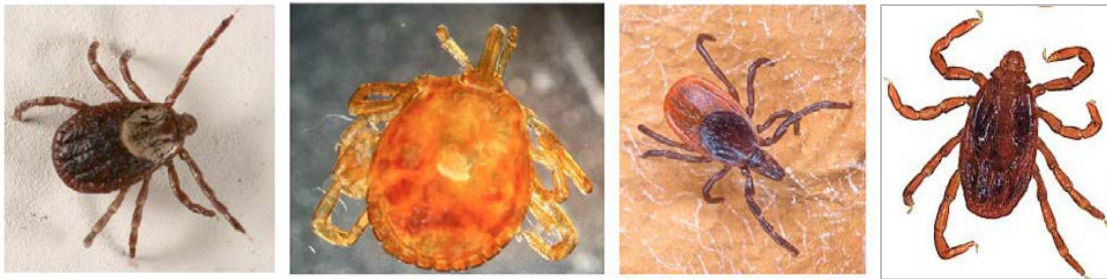
Yes, the Mexican sunflower seems to have it all. It blooms in the heat of summer as other ornamentals begin to fade; it has few insect and disease problems and tolerates poor soil, drought and neglect. Oh, and did I mention deer won't eat its hairy leaves!

Nancy Caldwell, VCE Master Gardener

Notes from the Help Desk:

Q: I have been gardening in spots where I mulched up my leaf litter and found several ticks on me when coming inside. I do not have deer in my suburban landscape. Please help with identifying ticks and ways to prevent them in my landscape.

A: There are many different types of ticks here in Virginia, all have eight legs when reaching adulthood but only six when in the larvae stage. Deer do not have to be the infested host either, it can be birds, squirrels or other rodents. The four most common ticks in our area are pictured below from left to right: the American dog tick, lone star tick, blacklegged or deer tick and brown dog tick. (Photos by Gary Albert, Eric Day, Scott Bauer and James Newman).



Reduce the tick habitat in your yard:

- Reduce immigration, increase mortality and reduce reproduction by altering the food source of their infested hosts (deer, birds, rodents).
- Target infested areas with pesticides IF IT CAN REACH the tick body. Leaf litter can provide a barrier.
- More information: http://entnemdept.ufl.edu/creatures/urban/medical/deer_tick.htm

Great advice from our Extension Publication on controls while gardening:

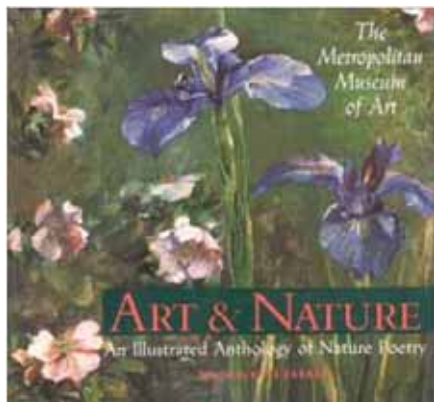
- Avoid tick infested areas such as tall grass and dense vegetation
- Keep grass and underbrush cut and thinned
- Wear light colored clothing so ticks can be found easily
- Tuck pant legs into socks so ticks stay on the outside of pants.
- Use tick repellents that contain at least 30% DEET
- Treat your lawn with an approved pesticide for tick control
- Treat clothes with permethrin (be sure to follow all label precautions)

More tips/information at http://pubs.ext.vt.edu/2906/2906-1396/2906-1396_pdf.pdf

Barb Bailey, VCE Master Gardener

Book Review

Art & Nature: An Illustrated Anthology of Nature Poetry



Last winter I came across a book on our shelves, *Art & Nature: An Illustrated Anthology of Nature Poetry*, produced by The Metropolitan Museum of Art. I didn't recall ever seeing it before and neither of us remembered buying it, so when I sat down with it and a cup of tea on a dark, cold, dismal day I wasn't expecting anything special.

It turned out to be a delightful discovery—an excellent selection of old favorites (“Glory be to God for dappled things . . .”; “I will arise and go now, and go to Innisfree.”) as well as many that I had never read before, having a very slight acquaintance with, for example, 5th century Chinese, 14th century Egyptian or 17th century Japanese poetry. The book is illustrated with

pictures of 145 glorious paintings from the Museum's collection.

“Nature” is a broad subject, but many if not most of the poems included are concerned with where nature intersects with people, that is to say - gardens. As the dust-jacket says, “The poems celebrate not only the grandeur and magnificence of the world's wild places but also the more subtle, unexpected, and everyday wonders—the rhythm of crops growing beneath the soil and the feel of a cool breeze on a summer's evening.”

SPRING SONG

As my eyes search the prairie

I feel the summer in the spring.

Anonymous, Chippewa Indian

A real plus for me is that even with 186 poems, *Art & Nature* is a small book, only about 7 by 8 inches and a 1/2 inch thick. Perfect for hammock reading this summer. It isn't on the Museum's webpage, but there are many new and used copies available on-line.

Art & Nature: an illustrated anthology of nature poetry, Kate Farrell, comp. New York: Bulfinch Press, 1992. 175 p.

Alice Bagwill, VCE Master Gardener



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