January 2015 - Vol.1 No. 1

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The Garden Shed- Who We Are

By Cleve Campbell | January 2015 - Vol.1 No. 1

We — the writers of ***The Garden Shed*** — would like to introduce ourselves and our new, free online community newsletter. We are members of the Piedmont Master Gardeners, which simply means we have all been trained to share the scientific expertise of Virginia Tech and the Virginia Cooperative Extension Service. More important, we are your friends and neighbors with a passion for gardening – and learning more about it. Each month we will communicate the tasks that we are performing in our ornamental gardens, edible gardens and lawns. Each month's newsletter will also contain a featured topic, ranging from growing roses to preventing pests and diseases in your vegetable garden, plus a recipe for something fresh from the garden.

While you are visiting *The Garden Shed* we hope you will take a moment and tell us how we are doing. We would like to know if you find the articles helpful to you or do you need more detail? Are the articles too long or short or too technical? Did we make any blunders? Do you have a suggestion? Are there, topics that you would like see in the future? Please take time to share and email your comments (the good and the bad), your experiences, your photos and your recipes. You may email your comments to garden-shed@piedmonmastergardeners.org.

We are looking forward to seeing you next month in *The Garden Shed*. Please invite your friends and neighbors to *The Garden Shed* for a visit!

Seed Catalogs 101

By Cleve Campbell | January 2015 - Vol.1 No. 1

The seed catalogs started to arrive at my house in mid-November and will continue into the late spring and early summer. Some seed companies also publish a “special” fall catalog offering seeds and plant material for the fall and early winter growing season. In addition, if you provided your email address, on a previous seed order form or a line order, your email box will soon be flooded with weekly, monthly and/or seasonal opportunities and sales. But what better way to spend a cold, windy, snowy day in January than with a seed catalog, dreaming about the bounty of the harvest to come and the neat rows in the garden, with of course, no weeds. Can spring and planting season be far away?

The catalog descriptions are amazing: “…. the loveliest fruits and plants”, “attractive plants will produce an abundance of shiny bright fruit,”, “ high in antioxidants”, “All America Winner”, “Exclusive”, “Bursting with flavor”, “old fashion flavor”, “ One of the best tasting of all time”, “luscious, savory flavor”, “Vigorous plants produce enormous crops of large, firm, deep-red fruits with thick walls. Fragrant, juicy flesh has outstanding flavor”, and naturally “new and improved.”. **Wow**, all the descriptions sound wonderful, and one description described a tomato as: “…. will remind you of those visits to Grandpa’s garden when you were a kid. Huge meaty tomatoes are safer held in two hands than one. The 1-pound red and yellow streaked tomatoes look beautiful cradled in a long-tail shirt. One taste will transport you back in time with that great old-fashioned,

full bodied tomato flavor." **HOLY COW**!!! How can I possibly resist purchasing a couple of seed packets after reading that? After I finish paging through the first couple of seed catalogs, I notice that I've checked far more varieties than I'll ever be able to plant. Two realities hit: there isn't enough garden space to plant everything I have checked, and the descriptions aren't designed to provide the kind of information, to aid in making an informed purchasing decision. In short, a seed catalog is a marketing tool to motivate me to make a purchase. However; if you know how to interpret their technical shorthand, seed catalogs offer a wealth of useful information, including seed germination rates (the percent that will actually grow into seedlings), graphs depicting the soil temperatures that allow optimum germination rates, plant culture, planting times, dates to maturity, how close to plant the seeds or plants, harvesting and storage. Digging a little deeper, I discovered that many seed company web sites offer instructional how-to videos, often produced by reliable agriculture colleges, and covering a wide range of topics, such as "Grafting Tomato Plants" and "Identifying Late Blight" on tomato plants.

Seed companies not only want to sell you seeds; they want you to be successful but also repeat customer. However, in order for the gardener to make an informed decision, they need to figure out how to decipher some of the catalogs' technical code or shorthand.

One of the first things that I noticed when reading the seed description is one of the following: Hybrid (F1), Open-pollinated (OP) or Heirloom.

Hybrids are often denoted as F1 or Hy (first generation). On rare occasions, a seed variety is labeled as F2 (second generation). Hybrid seeds are derived from two or more different plants, with traits that improve on the best characteristics of both parents. The plant breeder attempts to improve various attributes such as yield, uniform crop production, quality of the fruit (appearance, taste, storage life), disease resistance, speed of maturity and overall vigor. Saving seeds from hybrids and replanting them will not guarantee the same plant in future years. It should be noted that hybrids are not necessarily genetically modified (GMO). Hybrids are simply seeds bred from different parents to exhibit certain traits.

Open Pollinated (OP)- The seeds produced from these plants will be genetically identical to the parent. The parent plants were pollinated by natural (bees and or wind) means rather than being self-pollinated or cloned. Seeds may be saved from open pollinated plants, as they will pass on the traits of the parents to future generations.

Heirloom- Seeds are Open Pollinated **(OP)** varieties that have been passed down generations through families or communities and may have distinctive colors, shapes, and flavor. Often heirloom varieties are accompanied by a fascinating story. The tomato variety Mortgage Lifter comes to mind. There is no hard rule as to how old a seed variety must be to be labeled an heirloom, but heirloom gardeners generally disqualify seed varieties induced after World War II. Since by definition Heirloom varieties are Open Pollinated, the seeds may be saved for future plantings. Heirloom plants may not always have the benefit of resistance to disease or fungus as their hybrid counterparts.

Organic Seeds, often denoted as **(O),** have been harvested from plants grown organically, without the use of synthetic fertilizers or pesticides.

Treated Seeds are seeds that have been coated with a fungicide or insecticide to increase the seeds' ability to sprout without rotting or being attacked by insects in the soil. Many seed companies add color to the treatment to make them distinguishable from untreated seeds. For example, yellow corn seeds may appear pink.

All American Selection (AAS) is often used in the description of a particular seed variety. AAS is an independent nonprofit gardening organization that tests new plant varieties. only the best performers are

recognized as AAS winners. Additional information, including a list of the 2015 winners, is available at the AAS web site, http://all-americaselections.org/index.cfm.

Tomato varieties include a description indicating whether they are **Determinate** or **Indeterminate**. Determinate tomato varieties have fruits that ripen at the same time and have a bush-like habit. Often they do not need to be supported by staking or caging. Many of the **determinate** varieties were developed by or for tomato processing companies, to facilitate the harvest by having all the fruits ripen at the same time. **Indeterminate** tomato plants ripen throughout the growing season, and the plants continue to grow up until frost. For healthier plants and increased performance, staking, caging or trellising may be required to support indeterminate tomato varieties.

Some tomato varieties have a series of letters after the variety name. An example I came across was "BIG BEEF **VFFNTA** HYBRID". These letters mean the variety is resistant to certain diseases and pests. Planting resistant varieties improves the odds of a successful tomato crop especially if you live in an area where disease is a problem.

The following is an abbreviation key for these resistant varieties:

V-Verticillium Wilt- Starting at the base of the plant, leaves develop yellow blotches in a v-shape that will later turn brown and die. Plants may not actually wilt until later in the season, but they will have stunted growth due to poor nutrient uptake through the stem.

F– Fusarium Wilt — The main plant stem becomes infected with fungus that blocks water and nutrients. Leaves may turn yellow and die, while fruit size and quality suffers. Plant may wilt during the day, even with moist soil. **FF** denotes resistance to two strains of Fusarium.

N– Nematodes –Nematodes are roundworms that prefer sandy warm soils. Some will feed on plant roots from the outside, and others actually colonize inside the root. Plant growth is stunted and leaves may become stunted or look wilted or discolored due to poor water and nutrient uptake.

T-Tobacco Mosaic Virus –ToMv is transmitted by people and tools that come into contact with infected plants. Leaves may have a light and dark mottling, and at colder temperatures may become spindly. Fruit may ripen unevenly and develop brown lesions.

A – Alternaria Leaf Spot –Plant stem becomes infected, especially on wounded areas, and develops dark colored lesions. The fungal infection may completely kill stems or produce toxins that can cause lesions on leaves as well as fruit.

Addition information on vegetable diseases and control is available in the Virginia Cooperative Extension Publication 426-563, "Selected Vegetable Diseases" http://pubs.ext.vt.edu/426/426-363/426-363.html

There are a few points to remember when placing seed orders. **Order early**. Not only will you avoid the disappointment of requesting a sold out item, you may be rewarded with a free bonus seed packet for ordering early. Also, **ask other gardeners** to share information on their favorite varieties and success stories. The Virginia Cooperative Extension folks have also complied a list of recommended vegetables in Virginia Publication 426-480, "Recommended Vegetables for Virginia" http://pubs.ext.vt.edu/426/426-480/426-480.html.

Another tool I have found helpful is The Virginia Cooperative Extension publication 426-331, Vegetable Planting Guide and Recommended Planting Dates, http://pubs.ext.vt.edu/426/426-331/426-331.html, which not only tells you when to plant a particular vegetable, but also provides the number of seeds or transplants

required for a 10 foot row. Also, if you want to have the first ripe tomato in the neighborhood, you'll need to look at the "days to maturity or days to harvest" of the individual varieties, selecting an "early" versus a "late" variety.

As you are turning the pages of your seed catalogs or visiting a seed company website, don't forget to check out the garden supply and gadget sections. New tools and supplies are often available from seed catalogs long before they make it to your local gardening center or big box store.

Additional References:

Virginia Cooperative Extension Publication No. 426-316, "Seed for the Garden"
http://pubs.ext.vt.edu/426/426-316/426-316.html

A number of web links for various seed companies has been compiled by the Carnegie Library of Pittsburgh and may be accessed at the following link:

http://www.carnegielibrary.org/research/homegarden/gardening/catalogs.html

http://www.mnn.com/your-home/organic-farming-gardening/stories/its-seed-catalog-season-explore-but-dont-buy-too-much#ixzz3Jzp1wJ9D

The Vegetable Garden in January

By Cleve Campbell | January 2015 - Vol.1 No. 1

Recently, a non-gardening friend, knowing of my gardening addiction and the ridiculous size of my wife's and my vegetable gardens, remarked, "Well, it's January, and there's nothing to do in the garden. It must be a boring time of the year for you gardeners." **WHAT? January's a boring month with nothing for a gardener to do??** Well, let me tell you, it's been a busy month for this particular gardener.

The seed catalogs began showing up in the mailbox in the middle of November and continued coming through the month of December, right in the midst of the busy holiday season. You guessed it — they were thrown in the desk drawer with more than a few older catalogs. Don't you hate it when you attempt to open a desk drawer, but it's so full that something catches at the top and you can't open it? And we already have two desk drawers filled to capacity with various vintage seeds and nursery catalogs. Clearly it's past time to throw out the old catalogs. My bride gently reminded me to look for copies of order forms or notes before throwing out the old. Of course, I reassured her that I had filed last year's order forms in the "2014 Seed Order Folder" to be used as a reference in connection with future seed orders. I was also gently reminded that I had a bunch of seeds in the basement left over from previous gardening seasons, and that I should do a seed inventory before "going hog wild" ordering seeds that we don't need.

As I headed to the basement to perform the seed inventory, I was reminded that the ashes needed to be removed from the wood stove and taken out. Ouch….Now hardwood ashes may be used in lieu of lime to make the soil less acidic – lower the acidity (raise the pH) of the soil, which can be helpful with our local soil, which tends to be more acidic than is desirable for vegetables. In addition to raising the pH level in soil, wood ashes also contain potassium, magnesium and other trace elements essential to plant growth. http://extension.oregonstate.edu/gardening/wood-ash-can-be-useful-yard-if-used-caution. Dumping the ashes in the vegetable garden might be just the thing. But I had forgotten last fall to test the soil in our vegetable garden. I am hesitant to add wood ashes to the garden without knowing the pH level because I could end up raising the pH level too much. The vegetable garden will be most productive in the pH range of 6.0–7.0, according to "Fertilizing the Vegetable Garden," Pub. No. 426-323, http://pubs.ext.vt.edu/426/426-323/426-323.html

I had actually stopped by the local Virginia Cooperative Extension office and picked-up a soil testing package; unfortunately, I had misplaced the instruction sheet, but not to worry; I paid a quick visit to the Virginia Tech Web site to print off the Soil Sample Information sheet, Pub. No 452-125, (http://pubs.ext.vt.edu/452/452-125/452-125_pdf.pdf). As for the ashes from my stove, they will be sprinkled around the apple trees. A soil test last spring had revealed a pH of 5.6, lower than the optimum range for apple trees, which is 6.00-6.50. Pub. No. 426-842, "Tree Fruit in the Home Garden," http://pubs.ext.vt.edu/426/426-841/426-841.html).

Now I needed to wait for a day when the vegetable garden was not frozen, so I could then collect the soil sample and mail it to the soil lab at Virginia Tech. Why waste money on fertilizer and lime when it's not needed?

After cleaning out the wood stove and depositing the ashes around the apple trees, I headed to the basement to perform the seed inventory. I was halfway down the stairs when I heard a familiar voice from upstairs reminding me to "look at the dates on the seed packets because some of those seeds are old and need to be tossed." What? Throw away seeds just because they are old!!!!

Telling a gardener to toss seeds is akin to asking a hunter to take his best hunting dog out behind the barn and shoot him. Once again my seed inventory journey was interrupted. Well, there must be a way to find out if a seed is truly too old to be viable. A little online research located numerous sites, including various seed companies, that offer information on home seed germination testing. One such site, Seedsavers.org, offered basic and simple instructions for "Home Germination Testing," http://www.seedsavers.org/site/pdf/HomeGermTests_LAFrevised.pdf. This publication not only offers information on how to test your questionable seeds, but also includes a list of common household items that can be used for germination testing. Now I had a plan: I would separate the seed inventory by two age groups: those less than 3 years old and those 3 years old and older. I will sacrifice a few seeds (ten from each packet) to determine their germination rates. So I head back to the basement to perform the seed inventory and to determine what seeds needed to be tested for germination before tossing them out.

As I waded through the piles of seed packets that had accumulated over the years, I found many that were labeled 2005 and earlier. Why hadn't they been used? I headed back upstairs to the old seed catalogs (good thing I hadn't thrown them out yet) to research the descriptions on these old seeds. But then the lightbulb went on in my head. In my many years of gardening, I had never, ever run across a negative seed description in any seed catalog. Quite the contrary — the descriptions are always glowing — and that's undoubtedly why I now have 417 various seed packets in inventory. Really, would I have spent money on a tomato variety described as "subject to early blight, often displays the attribute of cracking, poor production, small with acid flavor"? Heck, no!

So I grabbed my garden journal and headed back to the basement to resume the seed inventory. I have been maintaining this journal for many years, and was hoping I had been vigilant in my journal entries, noting not only the last frost dates, first frost dates, and harvest dates; but also enough information to determine if the variety was a "keeper" — worthy of planting again next season. My seed inventory task was again interrupted with a plea from above: "I need your help! The bathroom light quit working. I changed the light bulb and reset the breaker, and still nothing." Then I remembered that the light switch had begun to feel loose recently. Luckily I had a spare in the shed; this wouldn't take long.

As I opened the door to the shed, I came face-to-face with a disaster. There were tools, hoses, dirty seed trays, dirty seed tray inserts and buckets in piles everywhere. No wonder my wife complains about the time it takes for me to find anything. In addition to the piles of clutter, I noticed that the vegetable sprayer — which had been used for Bt (Bacillus Thuringiensis) to control potato beetle larvae and cabbage worms — was in need of cleaning and a hose replacement. Then it occurred to me that the tiller needs an oil change, new tines and a belt replacement to be ready for the 2015 gardening season. But all that would need to wait, as my mission was to locate a spare electric switch in a cabinet at the back of the shed. Fortunately, I was able to secure it without tripping, turning an ankle or other mishap. Wow, what a project. It's going to take several days to get the shed organized for this upcoming gardening season and several more days to perform the needed maintenance on the tiller and the lawn mowers, which need oil, filter changes and blades sharpened, not to mention the chain needing replacing on the chain saw.

After completing my critical task of replacing the electric switch in the bathroom, I headed back to the basement to get back to the seed inventory. I began by sorting the various seeds into stacks — tomatoes, peppers, corn, beans, peas, broccoli, cauliflower, brussel sprouts, carrots, and radishes, etc. Then examined each pile and divided the piles by the age of the seeds, two years old or less in one pile, and three years or older in another stack. The seed packets ending up in the three-year and older stack would be evaluated to determine if they were keepers, and if I wanted to do the wet towel germination test on a specific packet of seeds. Then I was reminded how well-organized my bride is — I was finding empty seed packets marked "empty" and "reorder" in a familiar hand. What a clever idea. Those went into a separate pile to be reordered.

While I was busily sorting seeds, I felt a sudden urge to plant something. What to plant in January? It's too early to start tomatoes, peppers or even broccoli or other cold weather crops, but EUREKA — there before me are "Candy" onion seeds and "Bandit" leek seeds. The inventory would be placed on hold. I was off to the shed to collect a couple seed trays and seed starter soil mix.

Once I had planted the onion and leek seeds and covered the trays with plastic wrap to maintain moisture, I placed the seed flats in a warm spot inside the house, and returned to my seed inventory task, choosing which seeds to keep, which seeds to test, which ones to toss and which to re-order. And it all needed to be done before the seed ordering process could begin. I needed to get moving. I knew from experience that seeds can sell out, especially if you wait to place your order in mid- to late February.

Good thing the gardening season is over. How did I get so behind? I am indeed thankful that the month of January is a boring month with nothing to do. Hopefully all my January tasks will be completed by April when the "real gardening season" begins — at which time I can start on my February tasks!

To sum it all up, there's plenty to do in January, and they're listed briefly below:

1. Before purchasing new seeds, **perform a seed inventory**. If you have old seeds, now is the time to test for germination, so you won't be disappointed in the spring.Consult your **garden journal** as to what varieties performed well or didn't performed well in past seasons. If you have not maintained a garden journal, make a New Years resolution to start keeping one; it will be very valuable in determining what seed varieties worked well or performed poorly. And remember, you can never enter too much information on an individual variety, planting dates, harvest dates and crop yield and quality. Also, it's a good idea t**o place your seed orders early**, as certain varieties tend to sell out quickly.
2. January is a good time to schedule **maintenance and repairs of your gardening equipment**: tillers, mowers, weed eaters, and chain saws. If you wait until the busy season, you may need to wait 4-6 weeks to get this work done.
3. **Seed Starting**: It is still too early to start cold weather crop plants indoors. However if you want to grow onions from seeds, you can start them indoors in late January. If you want to start bulb onion plants, remember that onion varieties have "day length" sensitivity. There are three types: (1) Long Day or northern types, (2) short day- sweet onions and (3) intermediate day onions. The best performing bulb onions for Central Virginia are intermediate onions, examples being "Candy F1" and "Cabernet F1" — both perform well in our area. Leeks can also be started inside in late January.
4. If you have any soiled **seed bottom trays** and **seed flats** that you plan to re-use this spring, now is the time to **wash and sterilize** (use 1 part bleach to 9 parts water) them, so they'll be ready for the seed-starting season.
5. January is a good time to **start planning your garden**. Virginia Tech has an online guide that can help. "Vegetable Planting Guide and Recommended Planting Dates," Pub 426-331, provides an excellent planning tool for scheduling seed starting and transplanting. It is based on the estimated last frost date — which in our area is April 10- April 15.
6. **Clean, organize and inspect tools in the garden shed**.

Amaryllis

By Patsy Chadwick | January 2015 - Vol.1 No. 1

When the ornamental garden lies silent and dormant in winter, we gardeners turn to our house plants for horticultural distraction. Few house plants inspire a jaw-dropping “OH WOW!!” reaction as much as an amaryllis in full bloom. That’s because the large, richly colored, trumpet-shaped blossoms provide some seriously needed eye candy on gloomy winter days when our psyches are badly in need of a color pick-me-up. If a giant red, in-your-face, no-prisoners-taken amaryllis in full bloom can’t lift one’s spirits, then nothing can.

If you have never seen an amaryllis bulb up close and personal, prepare to be amazed! They are HUGE – about the size of a baseball! In fact, the larger they are, the better. Larger bulbs produce more stalks and blossoms than smaller bulbs.

In the past, amaryllis came in a few basic colors – white, pink, and red. Nowadays, hybridizers have outdone themselves and created dozens of variations. In addition to several shades of red, color choices now include white, white with a green throat, orange, orangey-red, coral red, deep pink, pale pink, salmon pink, peach, red with white edging, white with red edging, and so on. In addition to solid colors or contrasting colors on the same bloom, your choices include stripes, stippling, or colors overlaid with streaks and splashes of other colors. Blossoms may be single, semi-double, or double. Moreover, the blossoms may have smooth or seersucker textures and ruffled or smooth edges. And it just keeps getting better. Many of the old-fashioned varieties developed one or possibly two stalks that had a tendency to flop over if they weren’t staked. At best, you might have gotten three or possibly four blooms from them. Newer varieties are built on sturdier stems. Others are bred to have shorter stalks. Meanwhile, most newer hybrids develop multiple stalks.

HOW TO PLANT AN AMARYLLIS BULB

Growing an amaryllis is EASY!

- First of all, select the largest bulb possible. The larger the bulb, the greater your chances of getting multiple flower stalks and blooms the first year.
- Make sure the bulb is firm, dry, and free of mold or signs of decay.
- Select a pot that is about three inches wider than the bulb and that has a hole for drainage. Amaryllis bulbs perform best when pot bound, so the size of the pot matters.
- Place the bulb in the pot and add potting soil to about ½ inch from the top of the pot. Amaryllis bulbs don’t like to be covered, so leave the top one third of the bulb exposed.
- Firm the soil around the bulb and then water thoroughly to settle the soil.
- You can, if you wish, place sheet moss or Spanish moss over the potting soil, but this isn’t necessary.
- Place the pot in a window where it will receive bright light. The bulb will generally begin to sprout foliage within two or three weeks.
- Keep the soil just barely moist. Don’t allow the soil to dry out but don’t let it get soggy either.
- As the foliage starts to emerge, turn the pot a quarter turn every few days so that the plant will be symmetrical. Otherwise, it will lean toward the light.
- As the flowers start to open, move the plant out of direct sunlight and keep it in a cooler location to prolong the flowering period.

HOW TO CARE FOR AN AMARYLLIS AFTER IT HAS FINISHED BLOOMING

Don’t lose interest in your amaryllis after it stops blooming. In fact, the trick to getting your amaryllis to re-bloom is to continue caring for it and nurture it as you would any other house plant. After the plant finishes blooming, snip off the spent blooms but don’t remove the flower stalk until it turns yellow. Place it in a bright, sunny spot indoors where it can get at least 6 hours of bright light daily. Water the plant when the top inch or two of soil feels dry. Make sure any excess water drains from the pot. Then, after all danger of frost is past in the spring, gradually acclimate your amaryllis to the outdoors by moving it into a shady or protected spot. Gradually give it more light until you can safely move it into full sun for at least six hours a day with a nighttime temperature above 60°F. Sink the pot into the soil and fertilize the plant over the summer months with a balanced fertilizer monthly.

HOW TO GET AN AMARYLLIS BULB TO RE-BLOOM

After spending the summer outdoors absorbing nutrients in the bulb, the potted plant should be moved indoors before the first frost. Here’s where you have to make a choice. Do you want the plant to produce flowers right away or do you want to postpone the blooming time? A well-cared for amaryllis bulb doesn’t require a resting time before it will re-bloom and will proceed to develop flower stalks as long as the foliage is kept evergreen. If you want to postpone the blossoming time, allow the bulb to go through a resting period. According to Virginia Tech Publication No. 426-101, Care of Specialty Potted Plants, http://www.pubs.ext.vt.edu, withhold water to allow old growth to die back and store the plant in a dark place. A closet, basement or a garage is fine as long as the temperatures are above freezing. Allow the foliage to shrivel and dry up before you remove it. Check the bulbs periodically. If they start to produce new foliage or flower stalks, move the plant into bright light and water the soil thoroughly. This generally occurs within about 8 to 12 weeks. Flowers normally develop within a month or so from dormant bulbs, which means you can time the plant to bloom at Christmas, New Year’s, Valentine’s Day or other special occasion.

If your amaryllis fails to bloom, the University of Florida Institute of Food and Agricultural Sciences Extension Publication #Cir-1243, http://edis.ifsa.ufl.edu/ep060, suggests that the reasons may include keeping the plant in too much shade, giving it too rich a soil, too much nitrogen fertilizer, or too much water.

Amaryllis bulbs generally perform best when pot bound. This means you only need to re-pot them about every 3 to 4 years, preferably after they have gone through a dormant period and are ready to re-flower.

HOW TO PROPAGATE AMARYLLIS

Amaryllis may be propagated using the following four techniques:

- Bulb offsets – A mature, healthy amaryllis bulb may produce an offset bulb, which can be gently separated from the “mother” bulb and replanted. Choose large bulblets to plant. The larger the bulblet, the greater your chances of success. Plant bulblets in pots that are a couple of inches larger than the bulb’s diameter. Use a potting mix that drains well and leave the top half of the bulb halfway out of the soil. Water lightly and give the bulb indirect light or light shade until it begins to show growth. Be patient. This will take several weeks or possibly more.
- Bulb Sectioning (Cuttage) – Select a good size (large) bulb and cut it vertically into several large pieces. Make sure each piece has at least two scales. Apply a fungicide to each piece. Plant each piece in potting soil that drains well. Water lightly and place in light shade or indirect light until it begins to show growth.
- Seeds – This method of propagation is for the patient gardener who is willing to invest several years of time coaxing a mature, blooming plant from seed. Also, be aware that amaryllis bulbs are generally hybridized, meaning that you are unlikely to get an exact duplicate of the parent plant. However, if you’re game to try this method just for the fun of it, a good tutorial on the subject can be found on the Galveston County (Texas) Master Gardeners website,

http://aggie-horticulture.tamu.edu/galveston/weedkly-q&a/f&b-15-amaryllis-propagation.

- Tissue Culture – This method is best left to commercial growers who are equipped and skilled in this method of propagation.

The Ornamental Garden in January

By Patsy Chadwick | January 2015 - Vol.1 No. 1

January is a time for new beginnings. It's the perfect time of year to take stock of your ornamental garden without the distraction of foliage. It's a good time to recall what worked or didn't work in last year's garden and to imagine all the possibilities for the new growing season to come. What better time to get started on the new year's garden than right now – in the dead of winter.

First, **assess your landscape**. While the garden is dormant, take a stroll through your property and really look at it with a critical eye. Are there projects you need to tackle, such as taming an erosion problem on a steep slope? Do you need to correct a poor drainage problem? Are you thinking about installing new plantings? Or do you want to improve the "bones" of your garden? Are there fences that need to be either mended or replaced? Think about any changes you would like to make over the coming growing season and use this time to devise a strategy and a schedule for each project. If you need the help of a contractor, now is a good time to contact one for a consultation before the spring gardening "rush."

Inspect all trees and shrubs for any that need attention in February or March. In addition to plantings that need to be shaped, pruned, or thinned to control size, look for suckers (shoots that grow from the roots of a tree), branches that rub together, watershoots (weak shoots that sprout from tree branches), and broken, dead or diseased branches.

Inspect perennials for frost heaving. This applies particularly to plants that were newly planted this past fall. Frost heaving (alternate freezing and thawing cycles) can push a plant out of the ground. Firmly re-position any heaved plants back into the soil and add a layer of mulch around the crown. This will help protect the roots from freezing temperatures and from drying out.

As you stroll through your yard, **avoid stepping into your ornamental garden beds**. Otherwise, you may inadvertently compact the soil.

There's very little outdoor work that you can do in January. So take advantage of your gardening "down time" to **perform all those chores that weren't completed during the growing season**. Now is a good time, for example, to inspect, clean, sharpen, and oil your gardening tools. This includes shovels, hoes, pruners, saws, loppers, and hedge trimmers. Don't forget to inspect your wheelbarrows, lawn mowers, and any other gardening equipment or tools you own. While you're at it, make a list of any tools you want to add to your inventory and any that need to be replaced.

Clean and sterilize flower pots that you are storing for future use. This will prevent the potential transfer of disease pathogens to new plantings. Use a stiff brush to remove dirt and debris from all pot surfaces. Then soak the pots in a solution of one part bleach to nine parts water for 15 minutes. Rinse, dry and store pots.

Inspect tender bulbs and tubers such as dahlias, canna lilies, elephant ears, or gladiolas that you are overwintering in your garage or other cool location. Check to make sure the temperature in the storage area is above freezing. Also inspect the bulbs or tubers periodically to make sure they are still plump and free of mold. If they appear shriveled, spray them with just enough water to barely moisten them.

Harden off a live evergreen tree that was bought for Christmas by moving it to a partially shady spot. After a week or two, move it into full sun. Keep the root ball moist and do not allow it to dry out, particularly

if there is a long stretch of dry weather.

Gently brush snow away from shrubs and trees after a snowfall to minimize breakage. If branches are coated with ice, don't attempt to remove it. Just let it melt.

Be careful when using de-icing products on walkways, steps, or other icy surfaces. They may damage nearby plants. Try using sand instead. If that's not a reasonable solution, calcium chloride does less damage to plants than sodium chloride.

Last but not least, gather up all those gardening catalogs that have appeared in the mail this winter, curl up with them in your favorite easy chair, and **indulge yourself in dreams of gardens to come**.

Alternative Lawns

By Cathy Caldwell | January 2015 - Vol.1 No. 1

by Cathy Caldwell

The term “grass-free lawns” came up at a recent Master Gardener presentation by Ben Kessler of C’ville Foodscapes. Hey, I thought, I’ve already got one of those! What really got my attention, though, was that Kessler seemed to be saying that a grass-free lawn could actually be a *desirable* thing — and trendy, too. Naturally, I had to look into this, and my research led me beyond grass-free lawns to “no-mow” yards, “freedom lawns” and “tapestry lawns.” Did someone say “no-mow” and “freedom” in the same sentence as YARDS?? Yes! So while you’re on your winter hiatus from grass-tending and mowing, you may want to take a look at these alternative lawn concepts.

One of the leaders in the “**grass-free**” lawn movement is Lionel Smith, Ph.D., of Reading University in England. For several years, he has developed a number of trial lawns using a wide variety of plant species, most of which are flowering ground covers, such as chamomile, thyme, yarrow and selfheal lawns. Most of his trial lawns contain a mixture of over 30 different plant species that can tolerate mowing. Smith calls these “**tapestry lawns.**” Dr. Smith’s research indicates that his grass-free lawns need no chemical additives and can reduce the need for mowing by up to two-thirds. Check out Lionel Smith’s work at “Rethinking the Traditional Grass Lawn,” http://blogs.reading.ac.uk/grass-free-lawns/rethinking-the-traditional-grass-lawn/ . The website **Grass-Free Lawns**, http://www.grassfreelawns.co.uk, has lots of information and photos, even videos showing the development of alternative lawns over the course of several years, plus links to many helpful resources. If you’re interested in reducing the amount of your turfgrass, you’ll find lots of inspiration at these sites.

The new floral lawn at Avondale Park near Notting Hill in London has been created by Lionel Smith of the University of Reading.

Here in America, you'll find leaders of the alternative lawn movement in the **Lawn Reform Coalition**, which has a website, http://lawnreform.org, which is loaded with helpful resources, links, and inspiring photos. Susan Harris, the founder of the Lawn Reform Coalition, has experimented with alternative lawns in the Mid-Atlantic region, and you'll find her photos at the website. Evelyn Hadden's book, ***Beautiful No-Mow Yards: 50 Amazing Lawn Alternatives*** is available through the Jefferson Madison Regional Library. Check it out if you're curious about how gardeners all over America are re-imagining lawns.

There is much to admire about these beautiful flowery lawns, but we all need areas in our yards that can handle foot traffic and children playing. Can we have that type of lawn without all the mowing, watering and fertilizing? The answer turns out to be "maybe" — though future developments are looking very promising.

Freedom Lawns

For years I've resented the clover and other broadleaf weeds in my yard. Ever since my husband and I stopped applying ANYTHING at all — not even water — our yard on this no-chemicals diet has become a hodgepodge of species, very few of which are grass. Even though some of these weeds — like the violets — were beautiful in spring, my yard was not pleasing to my eye — probably because it did not look at all like the manicured all-grass lawns on view in my neighborhood and in gardening magazines. That's the standard we all have parked away in our minds. But now that I've been looking into lawn alternatives, my perspective is changing. And guess what? It turns out that my yard actually has a name: it's a "freedom lawn."

A freedom lawn is defined as "residential land permitted to or designed to contain a variety of plants other than manicured grass, especially when containing plant life that occurs without cultivation, chemicals, or cutting." A "freedom lawn" sounds desirable in many ways, and you'd expect that if you stop fertilizing your lawn, you'd help to reduce pollution in our watersheds. BUT, that is not necessarily the case. I spoke to Dr. Mike Goatley, a turfgrass expert at Virginia Tech, and he explained that a "freedom lawn" could actually result in the leaching of **more** pollution-causing nutrients than a **properly**-fertilized turfgrass lawn. How could this be?

Well, as Dr. Goatley says, **covering the ground** is the key to preventing the runoff of sediment, and sediment contains nutrients like nitrogen and phosphorus that cause algae growth pollution in bodies of water like the Chesapeake Bay. So the goal for any lawn is to provide adequate coverage of the soil and

healthy plants that can trap runoff. If your "freedom lawn" has areas of bare soil or thin plant cover, you'll have more runoff, and that runoff may contain pollution-causing nitrogen and phosphorus. Read all about it in the article "Are Freedom Lawns Environmentally Responsible?" at http://chesapeakestormwater.net/wp-content/uploads/downloads/2012/06/R-5-Freedom-Lawns_published-VTJ_Mar-Apr2011_Dr-Erik-Ervin.pdf. The author of this article, Dr. Erik Ervin of Virginia Tech, urges homeowners to strive for a sustainable lawn that has minimal impact on water quality. To do that, follow the best management practices (BMP's) for turf, which are discussed in Dr. Ervin's article and in a podcast at http://www.ext.vt.edu/topics/lawn-garden/turfgrass/turfandgardentips/index.html

Research on this topic is continuing, but so far, it reveals that fertilizing your turf grass — assuming you do it at the proper time and in the proper amount — will not lead to the runoff of nitrogen and phosphorus, except if there's a heavy rain right after you apply fertilizer. As the scientists put it, "Healthy turfgrass systems absorb the majority of nutrients when applied at recommended rates, thus minimizing leaching and runoff from landscape surfaces." (Brown et al., 1977; Easton and Petrovic, 2004; Frank 2008; Hull and Liu, 2005; Shuman, 2001). It's worth emphasizing that the key is **proper fertilization** because "excessive amounts or the wrong type of fertilizer will not provide an effective treatment for your lawn and **may increase the risk of groundwater contamination."** Pub. No. 426-059 "Groundwater Quality and the Use of Lawn and Garden Chemicals by Homeowners," http://pubs.ext.vt.edu/426/426-059/426-059.html.

So I'm keeping an eye on my own personal "freedom lawn" — no thin cover for me! As Dr. Goatley says, whatever is covering the ground must be healthy in order to do its job of absorbing leaching nutrients. Excuse me while I go spread some compost on my lawn.

By the way, you can watch a video about composting your lawn at http://www.ext.vt.edu/topics/lawn-garden/turfgrass/turfandgardentips/pete-dye/index.html

New Varieties of Grass

Could there be other ways to make our urban turf areas healthier and more environmentally sustainable? This is an area of some very exciting research. Some scientists are developing and experimenting with new types of grass cultivars that require **less mowing**, as well as less fertilizing, watering and pesticides. To learn more about this effort, read about Dr. Thomas Turner's new fescue varieties at the University of Maryland, "Report from the Transition Zone: Sustainable Turfgrasses Tested at U.Md." at http://lawnreform.org.

Thomas Christopher is a Connecticut horticulturist with 40 years of experience, and his goal is to develop a biodiverse lawn that includes turf but is more environmentally sound than the turf grass in use today. To that end, he has been experimenting with new grass cultivars developed by Rutgers, Cornell and the University of Connecticut — sheep fescue (*Festuca ovina*) and hard fescue cultivars — which are very slow growing — and get this — **require mowing only 2 or 3 times per year**! Christopher is combining these low-growing grasses with turf-compatible plants such as white clover and strawberry clover. He discovered that lawn guides from the pre-chemical era were extremely helpful and that "one such book from the 1920's, for example, included more than two dozen flowers it recommended including in the lawn." Find Mr. Christopher's article posted at http://lawnreform.org, (2013).

If you're intrigued by these lawn alternatives and want to try the least radical approach, start by allowing **clove**r into your lawn. It fixes nitrogen in the soil, and that cuts the need for fertilizer. There's a lot of hopeful research on clover, although the jury is still out on whether an all-clover lawn will be viable in the Mid-Atlantic region.

And then there's **MICROCLOVER**! That's right, the University of Maryland is creating new lower-growing clovers that will be more compatible with fescues, but apparently it's a work in progress. Read about it in http://lawnreform.org Over in England, Lionel Smith has been breeding new varieties of clover that will be more suitable for lawns. Take a look — there are some real beauties. http://blogs.reading.ac.uk/grass-free-lawns/clover/ Clover is looking better and better to me! I'm eagerly awaiting more research on microclover.

According to Ben Kessler, a mostly-clover lawn can be created by a cycle of mowing and seeding. Here's Ben's method:

- First, cut the grass as low as your mower will go
- Then sow clover seed (white clover — *Trifolium repens* — is the usual choice because it stays lower and can tolerate heavy foot traffic)
- Wait one season
- Crop the grass again, and sow clover seed again
- Wait another season
- Crop & sow one more time. That's three mowing/sowing sessions, and that should do it.

You may not be ready for a lawn composed of clover, chickweed and creeping charlie, but exploring the wide variety of lawn alternatives out there has been an eye-opener for me. Take a look — you just might gain an entirely new perspective on your own lawn.

Butternut Squash Soup

By Cleve Campbell | January 2015 - Vol.1 No. 1

Butternut squash is a winter squash, which stores for months in a cool, dark ventilated room. Squash and apples complement each other naturally. Here is a quick, easy, and delicious hearty winter recipe

Butternut Squash Soup

Serves 12

4 lbs Butternut squash

6 Tbsp butter

1 ½ cup chopped onions

Several cloves of garlic, finely chopped

Few carrots and celery stalks

1 potato, finely chopped

2 medium Granny Smith apples, cored and cut into 1” chunks

1 inch fresh ginger, finely chopped or 1 tsp. ground ginger

½ tsp Nutmeg

1 tsp Garam Masala or curry powder (optional, more or less to taste)

2/3 cup orange juice

3 ½ cups chicken or vegetable stock

1 ½ cups heavy cream

1 Tbsp brandy

Halve and remove seeds from squash. Baste with olive oil and turn upside down on baking sheet. Bake @ 350 for approx. 1 hr until soft. Cool. Scoop out squash.

Sauté onion, garlic, celery, carrots and fresh ginger in butter for approx. 5 min., then add potato, apple, orange juice and chicken stock and simmer for 25-30 minutes.

Add squash and cool the mixture slightly. Puree in food processor in batches.

Heat again just to a low simmer and add brandy, nutmeg, and Garam Masala or curry powder.

Stir in heavy cream just before serving. Keep warm but not boiling.

For garnish, try a dollop of sour cream, toasted pecans, crystallized ginger and/or grated apple.